# The Florida Senate BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

|             | Prepa   | red By: The Professional S | Staff of the Committee | e on Appropriations  |  |  |
|-------------|---|----------------------------|------------------------|----------------------|--|--|
| BILL:       | SB 446  |                            |                        |                      |  |  |
| INTRODUCER: | Senators Mayfield, Hutson, Wright, and others |                            |                        |                      |  |  |
| SUBJECT:    | Coastal Management                            |                            |                        |                      |  |  |
| DATE:       | April 17, 2                                   | 2019 REVISED:              |                        |                      |  |  |
| ANALYST     |   | STAFF DIRECTOR             | REFERENCE              | ACTION               |  |  |
| . Schreiber |   | Rogers                     | EN                     | Favorable            |  |  |
| 2. Reagan   |   | Betta                      | AEG                    | Recommend: Favorable |  |  |
| Reagan      |   | Kynoch                     | AP                     | Favorable            |  |  |

# I. Summary:

SB 446 revises the criteria the Department of Environmental Protection uses to determine annual funding priorities for beach erosion control projects and inlet management projects. The bill also revises related requirements for the Department of Environmental Protection regarding reporting and oversight, and the use of surplus funds for beach erosion control projects or inlet management projects. The bill revises requirements regarding funding and reporting on inlet management projects.

The bill revises the requirements for the Department of Environmental Protection to develop and submit the components of the comprehensive long-term management plan for the restoration and maintenance of Florida's critically eroded beaches.

The bill has an indeterminate fiscal impact. The DEP can absorb any costs within existing resources. Funding for beach erosion projects and inlet management projects is subject to legislative appropriations.

The bill takes effect July 1, 2019, except for changes to the scoring system for beach erosion control projects amended in s. 161.101, F.S., and changes to the comprehensive long-term beach management plan amended in s. 161.161, F.S., which will both take effect July 1, 2020.

#### II. Present Situation:

Florida has 825 miles of sandy coastline.<sup>1</sup> Beaches are one of Florida's most valuable resources as they serve multiple important functions including providing habitat and protection for many plant and animal species, attracting millions of tourists to the state each year, and providing a

<sup>&</sup>lt;sup>1</sup> DEP, Beaches, <a href="https://floridadep.gov/water/beaches">https://floridadep.gov/water/beaches</a> (last visited Feb. 26, 2019).

line of defense against major storms.<sup>2</sup> Beaches are the most important feature of Florida's brand, accounting for 25.5 percent of the state's attractiveness to visitors.<sup>3</sup>

The American Society of Civil Engineers rated Florida's coastal areas infrastructure as a D+ in its 2016 report card, due to the fact that in the ten preceding years the average difference between requested and state appropriated funds exceeded \$40 million per year.<sup>4</sup> An evaluation by the Office of Economic and Demographic Research determined that the state's investment in beach management and restoration generated a positive rate of return on investment of 5.4.<sup>5</sup> A return greater than one means that the tax revenues generated by tourists visiting the state more than cover the state's expenditures on beaches.<sup>6</sup>

#### **Beach Erosion and Beach Nourishment**

Coastal erosion is the loss of coastal lands due to the net removal of sediment, and it causes beaches to become narrower and lower in elevation. This erosion is both natural and human-caused. Sand naturally drifts along the shore due to waves, currents, and tides. Storms can cause dramatic changes in a beach, including significant loss of sand. An "inlet" is a coastal waterway separating two stretches of beach, and is defined as "a coastal barrier waterway connecting a bay, lagoon, or similar body of water with" the ocean. There are 66 coastal barrier inlets in Florida, and many of them are used for navigating vessels. Human-induced erosion is often caused by the creation and maintenance of inlets, where sand has historically been removed from the shore by dredging, and the natural drift of the sand is blocked by jetties, trapped in channels, or moved

 $<sup>^{2}</sup>$  Id.

<sup>&</sup>lt;sup>3</sup> Office of Economic & Demographic Research, Economic Evaluation of Florida's Investment in Beaches: Identifying the State's Brand, Calculating the Return on Investment of Beach Restoration and Assessing the Risk of Disasters, 1 (Jan. 2015), available at <a href="http://edr.state.fl.us/Content/returnoninvestment/BeachReport.pdf">http://edr.state.fl.us/Content/returnoninvestment/BeachReport.pdf</a> (last visited Feb. 26, 2019).

<sup>&</sup>lt;sup>4</sup> American Society of Civil Engineers, 2016 Report Card for Florida's Infrastructure, 2 (2016), available at <a href="http://www.infrastructurereportcard.org/wp-content/uploads/2017/01/2016">http://www.infrastructurereportcard.org/wp-content/uploads/2017/01/2016</a> RC Final screen.pdf (last visited Feb. 24, 2019). <sup>5</sup> Office of Economic & Demographic Research, Economic Evaluation of Florida's Investment in Beaches: Identifying the State's Brand, Calculating the Return on Investment of Beach Restoration and Assessing the Risk of Disasters, 1 (Jan. 2015), available at <a href="http://edr.state.fl.us/Content/returnoninvestment/BeachReport.pdf">http://edr.state.fl.us/Content/returnoninvestment/BeachReport.pdf</a> (last visited Feb. 26, 2019).

<sup>&</sup>lt;sup>7</sup> U.S. Geological Survey, Coastal Change Hazards: Hurricanes and Extreme Storms, *Beach Erosion*, <a href="https://coastal.er.usgs.gov/hurricanes/coastal-change/beach-erosion.php">https://coastal.er.usgs.gov/hurricanes/coastal-change/beach-erosion.php</a> (last visited Feb. 26, 2019); Australian Government, Geoscience Australia, *Coastal Erosion*, <a href="http://www.ga.gov.au/scientific-topics/hazards/coastalerosion">http://www.ga.gov.au/scientific-topics/hazards/coastalerosion</a> (last visited Feb. 25, 2019).

<sup>&</sup>lt;sup>8</sup> DEP, Strategic Beach Management Plan: Introduction, 1 (May 2018), available at <a href="https://floridadep.gov/sites/default/files/SBMP-Introduction\_0.pdf">https://floridadep.gov/sites/default/files/SBMP-Introduction\_0.pdf</a> (last visited Feb. 25, 2019); see U.S. Geological Survey, Longshore Current, <a href="https://pubs.usgs.gov/circ/c1075/longshore.html">https://pubs.usgs.gov/circ/c1075/longshore.html</a> (last visited Feb. 27, 2019); see University of South Florida, Florida Center for Instructional Technology, Changing Coastlines, <a href="https://fcit.usf.edu/florida/teacher/science/mod2/changing.coastlines.html">https://fcit.usf.edu/florida/teacher/science/mod2/changing.coastlines.html</a> (last visited Feb. 28, 2019). Longshore transport is the movement of sand along the shore, parallel to the coast, caused by longshore currents.

<sup>&</sup>lt;sup>9</sup> DEP, Strategic Beach Management Plan: Introduction, 1 (May 2018).

<sup>&</sup>lt;sup>10</sup> Fla. Admin. Code R. 62B-36.002(7). The complete definition of "inlet" is "a coastal barrier waterway connecting a bay, lagoon, or similar body of water with the Gulf of Mexico, the Straits of Florida, or the Atlantic Ocean and all related flood and ebb tidal shoals and the inlet shorelines. Improved, altered or modified inlets are those where stabilizing rigid coastal structures have been constructed, or where inlet related structures or features such as channels have been constructed or are actively maintained and the channel depth is greater than the inlet system would support in a natural state."

<sup>&</sup>lt;sup>11</sup> DEP, Strategic Beach Management Plan: Introduction, 10 (May 2018).

into shallow tidal areas. 12 Developing and placing infrastructure near the shore can also contribute to coastal erosion by limiting the amount of sand stored in dunes. 13

"Beach nourishment" is the practice of maintaining a beach by the replacement of sand. <sup>14</sup> In a typical beach nourishment project, sand is collected from an offshore location by a dredge and piped onto the beach. <sup>15</sup> Bulldozers are then used to move the new sand on the beach until the beach matches the project design profile. <sup>16</sup> The DEP is authorized to review innovative technologies for beach nourishment and, on a limited basis, authorize alternatives to traditional dredge and fill projects to determine the most cost-effective techniques for beach nourishment. <sup>17</sup>

The Legislature has recognized that beach-quality sand for the nourishment of the state's critically eroded beaches is an exhaustible resource, in ever-decreasing supply, which must be carefully managed for the benefit of Florida's beaches. <sup>18</sup> The Legislature has also recognized that inlets interrupt or alter the natural drift of beach-quality sand resources, which often results in these sand resources being deposited in nearshore areas or in the inlet channel, or in the inland waterway adjacent to the inlet, instead of providing natural nourishment to the adjacent eroding beaches. <sup>19</sup>

The DEP is required to determine which beaches are critically eroded and in need of restoration and nourishment. According to the DEP, as of 2017, there are 420.9 miles of critically eroded beach, 8.7 miles of critically eroded inlet shoreline, 92.2 miles of non-critically eroded beach, and 3.2 miles of non-critically eroded inlet shoreline statewide. Erosion is termed "critical" if there is a threat to or loss of one of four specific interests: upland development, recreation, wildlife habitat, or important cultural resources. 22

<sup>&</sup>lt;sup>12</sup> *Id.* at 1.

<sup>&</sup>lt;sup>13</sup> *Id*.

<sup>&</sup>lt;sup>14</sup> Section 161.021(3), (4), F.S.; see DEP, Strategic Beach Management Plan: Introduction, 14 (May 2018). The first time sand is added to a beach it is called "beach restoration," and any subsequent project adding sand to the beach after the beach restoration is called "beach nourishment."

<sup>&</sup>lt;sup>15</sup> DEP, Why Beach Restoration: Why Restore Eroded Beaches?, <a href="https://floridadep.gov/water/beaches-funding-program/content/why-beach-restoration">https://floridadep.gov/water/beaches-funding-program/content/why-beach-restoration</a> (last visited Feb. 25, 2019).

<sup>&</sup>lt;sup>16</sup> *Id*.

<sup>&</sup>lt;sup>17</sup> Section 161.082, F.S.

<sup>&</sup>lt;sup>18</sup> Section 161.144, F.S.

<sup>&</sup>lt;sup>19</sup> Section 161.142, F.S.

<sup>&</sup>lt;sup>20</sup> Section 161.101(1), F.S.

<sup>&</sup>lt;sup>21</sup> DEP, Division of Water Resource Management, *Critically Eroded Beaches in Florida*, 5, 20 (June 2018), *available at* <a href="https://floridadep.gov/sites/default/files/CriticallyErodedBeaches.pdf">https://floridadep.gov/sites/default/files/CriticallyErodedBeaches.pdf</a> (last visited Feb. 25, 2019); Fla. Admin. Code R. 62B-36.002(5). The term "critically eroded shoreline" is defined as "a segment of shoreline where natural processes or human activities have caused, or contributed to, erosion and recession of the beach and dune system to such a degree that upland development, recreational interests, wildlife habitat or important cultural resources are threatened or lost. Critically eroded shoreline may also include adjacent segments or gaps between identified critical erosion areas which, although they may be stable or slightly erosional now, their inclusion is necessary for continuity of management of the coastal system or for the design integrity of adjacent beach management projects."

<sup>&</sup>lt;sup>22</sup> Fla. Admin. Code R. 62B-36.002(5).

#### **Beach and Shore Preservation**

Beach and inlet management in Florida are governed by Chapter 161, F.S., Beach and Shore Preservation. The DEP is the beach and shore preservation authority for the state.<sup>23</sup> The DEP's programs for beach and shore preservation are implemented through its Division of Water Resource Management.<sup>24</sup> Under the Beaches, Inlets and Ports Program, the DEP updates and maintains the components of the Strategic Beach Management Plan (SBMP).<sup>25</sup> The SBMP consists of multiple plans developed at the regional level, identifies Florida's critically eroded beaches, and discusses strategies for beach and inlet management.<sup>26</sup> Under the Beach Management Funding Assistance Program, the DEP receives funding requests from local governments for cost sharing of beach and inlet management projects.<sup>27</sup> The DEP applies certain criteria to these projects to determine funding priorities, creates lists that numerically rank the projects based on the criteria, and then submits the ranked lists of projects to the Legislature in annual funding requests.<sup>28</sup>

## Strategic Beach Management Plan

The DEP is required to develop and maintain a comprehensive long-term management plan for the restoration and maintenance of the state's critically eroded beaches.<sup>29</sup> The beach management plan is required, in part, to accomplish the following:

- Address long-term solutions to the problem of critically eroded beaches.
- 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.
- 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.
- Study dune and vegetation conditions.
- Establish a list of beach restoration and beach nourishment projects, arranged in order of priority, and the funding levels needed for such projects.<sup>30</sup>

The SBMP is a set of beach management plans and a key component of the DEP's comprehensive long-term management plan.<sup>31</sup> It is a dynamic management tool for use by

<sup>&</sup>lt;sup>23</sup> Section 161.101(2), F.S.

<sup>&</sup>lt;sup>24</sup> DEP, Division of Water Resource Management, https://floridadep.gov/Water (last visited Feb. 25, 2019).

<sup>&</sup>lt;sup>25</sup> Section 161.161(1), F.S.; DEP, *Strategic Planning and Coordination*, <a href="https://floridadep.gov/water/beaches-inlets-ports/content/strategic-planning-and-coordination#IMP">https://floridadep.gov/water/beaches-inlets-ports/content/strategic-planning-and-coordination#IMP</a> (last visited Feb. 25, 2019).

<sup>&</sup>lt;sup>26</sup> DEP also creates separate Inlet Management Plans.

<sup>&</sup>lt;sup>27</sup> Sections 161.101 and 161.143, F.S.; Fla. Admin. Code R. 62B-36; DEP, *Beaches Funding Program*, https://floridadep.gov/water/beaches-funding-program (last visited Feb. 25, 2019).

<sup>&</sup>lt;sup>28</sup> Sections 161.101(14) and 161.161(2), F.S.; DEP, Division of Water Resource Management, *Beach Management Funding Assistance Program Fixed Capital Outlay Local Government Funding Request, Fiscal Year 2019-2020* (Feb. 2019), *available at* <a href="https://floridadep.gov/sites/default/files/FY%2019-20%20LGFR\_2.pdf">https://floridadep.gov/sites/default/files/FY%2019-20%20LGFR\_2.pdf</a> (last visited Feb. 25, 2019). The funding request document states: "[t]he prioritized list of beach erosion control projects is organized in two sections: (1) Beach Restoration and Nourishment Projects (Beach Projects); and (2) Inlet Sand Bypassing/Inlet Management Plan Implementation Projects (Inlet Projects)."

<sup>&</sup>lt;sup>29</sup> Section 161.161(1), F.S.

<sup>30</sup> Id.

<sup>&</sup>lt;sup>31</sup> DEP, *Strategic Planning and Coordination*, <a href="https://floridadep.gov/water/beaches-inlets-ports/content/strategic-planning-and-coordination#Strategic%20Beach%20Management%20Plan%20-%20SBMP">https://floridadep.gov/water/beaches-inlets-ports/content/strategic-planning-and-coordination#Strategic%20Beach%20Management%20Plan%20-%20SBMP</a> (last visited Feb. 25, 2019); Fla. Admin.

private individuals and local, state, and federal government officials.<sup>32</sup> The SBMP is updated periodically as specific strategies are implemented, new resources and opportunities are identified, and proposed strategies are developed by the DEP and federal or local government sponsors.<sup>33</sup> The DEP prepares the SBMP at the regional level.<sup>34</sup> The regional plans include recommendations of appropriate funding mechanisms for implementing projects in the beach management plan that describe historical and present beach restoration activities.<sup>35</sup>

## Long Range Budget Plan

The statewide long range budget plan projects the ten-year planning needs for federal, state, and local governments necessary to implement the SBMP.<sup>36</sup> The budget plan is subdivided by the same seven regions as the SBMP and provides a statewide survey of many individual project efforts.<sup>37</sup> The plan is developed in coordination with local sponsors, and submitted to the Legislature annually as a companion document to the funding requests.<sup>38</sup>

#### Beach Management Funding Assistance Program

The DEP established the Beach Management Funding Assistance Program for the purpose of working together with local sponsors to achieve the protection, preservation, and restoration of Florida's sandy beaches, and the management of inlets to replicate the natural drift of sand.<sup>39</sup> Pursuant to state public policy, the Legislature is required to fund beach restoration and nourishment projects, including inlet management projects that cost-effectively provide beach-quality material for adjacent critically eroded beaches.<sup>40</sup> To be eligible for funding under the program, a project must: be in an area designated as critically eroded shoreline, or benefit an adjacent critically eroded shoreline; have a clearly identifiable beach management benefit consistent with the state's beach management plan; and be designed to reduce potential upland damage or mitigate adverse impacts caused by improved, modified, or altered inlets, coastal armoring, or existing upland development.<sup>41</sup>

The state is authorized to pay up to 75 percent of the actual costs for restoring and nourishing critically eroded beaches, recognizing that local beach communities derive the primary benefits from the presence of adequate beaches.<sup>42</sup> The local government in which the beach is located is

Code R. 62B-36.002(1), (18). Only projects consistent with the SBMP will be considered for funding under the Beach Management Funding Assistance Program.

<sup>&</sup>lt;sup>32</sup> DEP, Strategic Beach Management Plan: Introduction, 3 (May 2018), available at <a href="https://floridadep.gov/sites/default/files/SBMP-Introduction\_0.pdf">https://floridadep.gov/sites/default/files/SBMP-Introduction\_0.pdf</a> (last visited Feb. 26, 2019).

<sup>&</sup>lt;sup>33</sup> *Id*.

<sup>&</sup>lt;sup>34</sup> DEP, *Strategic Planning and Coordination*, <a href="https://floridadep.gov/water/beaches-inlets-ports/content/strategic-planning-and-coordination#Strategic%20Beach%20Management%20Plan%20-%20SBMP">https://floridadep.gov/water/beaches-inlets-ports/content/strategic-planning-and-coordination#Strategic%20Beach%20Management%20Plan%20-%20SBMP</a> (last visited Feb. 25, 2019). This page shows all of the regional plans that are components of the SBMP.

<sup>&</sup>lt;sup>35</sup> Section 161.161(1), F.S.

<sup>&</sup>lt;sup>36</sup> DEP, *Florida Beach Management Program, Long Range Budget Plan for 2019-2029*, 1 (Feb. 2019), *available at* <a href="https://floridadep.gov/sites/default/files/FY%201929%20LRBP%20Report\_0.pdf">https://floridadep.gov/sites/default/files/FY%201929%20LRBP%20Report\_0.pdf</a> (last visited Feb. 25, 2019).

<sup>37</sup> *Id.* at 2.

<sup>&</sup>lt;sup>38</sup> Fla. Admin. Code R. 62B-36.002(17).

<sup>&</sup>lt;sup>39</sup> Fla. Admin. Code R. 62B-36.001.

<sup>&</sup>lt;sup>40</sup> Section 161.088, F.S.

<sup>&</sup>lt;sup>41</sup> *Id*.

<sup>&</sup>lt;sup>42</sup> Section 161.101(1), F.S.

responsible for funding the balance of such costs.<sup>43</sup> However, the law states "until the unmet demand for repairing Florida's damaged beaches and dunes is satisfied, it is the further intent of the Legislature to cost-share such projects equally between state and local sponsors."<sup>44</sup>

The Beach Management Funding Assistance Program accepts funding requests from local governments in Florida each year. Local Government Funding Request Applications are available for both beach projects and inlet projects. 46

For a beach erosion control project to receive state funding, the project must provide adequate public access, protect natural resources, and protect endangered and threatened species.<sup>47</sup> The DEP is required to consider the following criteria in determining annual funding priorities:

- The severity of erosion conditions, the threat to existing upland development, and recreational or economic benefits.
- The availability of federal matching dollars.
- The extent of the local government sponsor's financial and administrative commitment to the project, including its long-term financial plan with a designated funding source for initial construction and periodic maintenance.
- Previous state commitment and involvement in the project.
- The anticipated physical performance of the project, including the frequency of periodic planned nourishment.
- The extent to which the project mitigates the adverse impact of improved, modified, or altered inlets on adjacent beaches.
- Innovative, cost-effective, and environmentally sensitive applications to reduce erosion.
- Projects that provide enhanced habitat within or adjacent to designated refuges of nesting sea turtles.
- The extent to which local or regional sponsors of beach erosion control projects agree to coordinate the planning, design, and construction of their projects to take advantage of identifiable cost savings.
- The degree to which the project addresses the state's most significant beach erosion problems. 48

The DEP uses other ranking criteria, in addition to the criteria for all beach erosion control projects (when applicable), to establish funding priorities for inlet management projects.<sup>49</sup> Those criteria are required to include consideration of the following:

- An estimate of the annual quantity of beach-quality sand reaching the updrift boundary of the improved jetty or inlet channel.
- The severity of the erosion to the adjacent beaches caused by the inlet and the extent to which the proposed project mitigates the erosive effects of the inlet.

<sup>&</sup>lt;sup>43</sup> *Id*.

<sup>&</sup>lt;sup>44</sup> Section 161.101(15), F.S.

<sup>&</sup>lt;sup>45</sup> DEP, Beaches Funding Assistance Information, *How To Apply*, <a href="https://floridadep.gov/water/beaches-funding-program/content/beaches-funding-assistance-information">https://floridadep.gov/water/beaches-funding-program/content/beaches-funding-assistance-information</a> (last visited Feb. 26, 2019).

<sup>&</sup>lt;sup>47</sup> Section 161.101(12), F.S.

<sup>&</sup>lt;sup>48</sup> Section 161.101(14), F.S. If multiple projects qualify equally under the criteria, DEP assigns priority to projects that are ready to proceed.

<sup>&</sup>lt;sup>49</sup> Section 161.143(2), F.S.

• The overall significance and anticipated success of the proposed project in balancing the sediment budget of the inlet and adjacent beaches and addressing the sand deficit along the inlet-affected shorelines.

- The extent to which existing bypassing activities at an inlet would benefit from modest, cost-effective improvements when considering the volumetric increases from the proposed project, the availability of beach-quality sand currently not being bypassed to adjacent eroding beaches, and the ease with which such beach-quality sand may be obtained.
- The interest and commitment of local governments as demonstrated by their willingness to coordinate the planning, design, construction, and maintenance of an inlet management project and their financial plan for funding the local cost share for initial construction, ongoing sand bypassing, channel dredging, and maintenance.
- The previous completion or approval of a state-sponsored inlet management plan or local-government-sponsored inlet study concerning the inlet addressed by the proposed project, the ease of updating and revising any such plan or study, and the adequacy and specificity of the plan's or study's recommendations concerning the mitigation of an inlet's erosive effects on adjacent beaches.
- The degree to which the proposed project will enhance the performance and longevity of proximate beach nourishment projects, thereby reducing the frequency of such periodic nourishment projects.
- The project-ranking criteria in s. 161.101(14), F.S., to the extent such criteria are applicable to inlet management studies, projects, and activities.<sup>50</sup>

The DEP established a point-based priority ranking system in order to implement the statutory criteria for beach and inlet management projects for funding assistance.<sup>51</sup> Under the system, a project receives a total point score based on the established project ranking criteria. The total amount of points available for beach management projects is 115 points and the total for inlet management projects is 90 points.<sup>52</sup> The charts below indicate the number of component criteria under each statutory criteria as developed by the DEP.<sup>53</sup>

<sup>&</sup>lt;sup>50</sup> Section 161.143(2)(a)-(h), F.S.; see DEP, Strategic Beach Management Plan: Introduction, 10, 14 (May 2018), available at <a href="https://floridadep.gov/sites/default/files/SBMP-Introduction\_0.pdf">https://floridadep.gov/sites/default/files/SBMP-Introduction\_0.pdf</a> (last visited Feb. 26, 2019). Inlet bypassing projects take sand from one side of the inlet, or from within the inlet, and place it along the shorelines adjacent to the inlet, to mitigate the erosive effects of the inlet. Beach restoration, beach nourishment, and inlet bypassing are collectively referred to as "active management." As of 2017, 229.1 miles of Florida's critically eroded sandy beaches are under active management. 
<sup>51</sup> Fla. Admin. Code R. 62B-36.006.

<sup>&</sup>lt;sup>52</sup> Office of Program Policy Analysis & Government Accountability (OPPAGA), *The Beach Management Funding Assistance Program Was Recently Improved, but Some Stakeholder Concerns Persist*, 4 (Dec. 2014), *available at* <a href="http://www.oppaga.state.fl.us/MonitorDocs/Reports/pdf/1412rpt.pdf">http://www.oppaga.state.fl.us/MonitorDocs/Reports/pdf/1412rpt.pdf</a> (last visited Feb. 25, 2019). <sup>53</sup> *Id*.

| Statutory Criteria                                       | Number of<br>Component Criteria | Available<br>Points |
|--|---------------------------------|---------------------|
| Beach Management   |                                 |                     |
| Significance   | 6                               | 20                  |
| Local Sponsor Financial and<br>Administrative Commitment | 6                               | 10                  |
| Previous State Commitment                                | 4                               | 10                  |
| Availability of Federal Funds                            | 3                               | 10                  |
| Project Performance                                      | 2                               | 10                  |
| Recreational and Economic Benefits                       | 1                               | 10                  |
| Severity of Erosion                                      | 1                               | 10                  |
| Mitigation of Inlet Effects                              | 1                               | 10                  |
| Threat to Upland Structures                              | 1                               | 10                  |
| Innovative Technologies                                  | 2                               | 5                   |
| Regionalization  | 1                               | 5                   |
| Enhance Refuges of Nesting<br>Sea Turtle                 | 1                               | 5                   |
| Total  | 29                              | 115                 |

| Statutory Criteria                                       | Number of<br>Component Criteria | Available<br>Points |
|--|---------------------------------|---------------------|
| Inlet Management   |                                 |                     |
| Balancing the Sediment Budget                            | 1                               | 20                  |
| Inlet Management Plan                                    | 3                               | 15                  |
| Local Sponsor Financial and<br>Administrative Commitment | 6                               | 10                  |
| Previous State Commitment                                | 4                               | 10                  |
| Availability of Federal Funding                          | 3                               | 10                  |
| Sand Reaching the Inlet                                  | 1                               | 10                  |
| Cost Effectiveness                                       | 1                               | 10                  |
| Enhanced Project Performance                             | 1                               | 5                   |
| Total  | 20                              | 90                  |

The DEP is prohibited from funding projects that provide only recreational benefits.<sup>54</sup> All funded projects are required to have an identifiable beach erosion control or beach preservation benefit directed toward maintaining or enhancing the sand in the system.<sup>55</sup> The following is a list of activities that are ineligible for cost sharing:

- Recreational structures, such as piers, decks, and boardwalks.
- Park activities and facilities, except for erosion control.
- Aesthetic vegetation.
- Water quality components of stormwater management systems.
- Experimental or demonstration projects, unless favorably peer-reviewed or scientifically documented.
- Hard structures, unless designed for erosion control or to enhance beach nourishment project longevity or bypassing performance.
- Operations and maintenance, with the exception of nourishment.
- Maintenance and repair of over-walks.
- Navigation construction, operation, and maintenance activities, except those elements whose purpose is to place or keep sand on adjacent beaches.<sup>56</sup>

In December 2014, the Office of Program Policy Analysis and Government Accountability (OPPAGA) released a report evaluating the DEP's process for selecting and prioritizing beach

<sup>&</sup>lt;sup>54</sup> Section 161.101(13), F.S.

<sup>&</sup>lt;sup>55</sup> Id

<sup>&</sup>lt;sup>56</sup> *Id*.

management and inlet management projects.<sup>57</sup> The review considered the current statutory criteria and related administrative rules, as well as the funding request application process, information requirements, and timeline.<sup>58</sup> The OPPAGA also reviewed how the DEP uses each ranking criteria for establishing the annual priority order for beach management and restoration projects.<sup>59</sup>

The report made several findings, including, but not limited to, finding that:

- A limited number of factors account for a majority of the points awarded.
- The criteria do not account for statewide differences in beach conditions, such as regional differences in erosion patterns and variations in project costs.
- The criteria do not adequately take into account the economic impact of beach projects, particularly the value of tourism.
- The criteria do not adequately account for a project's cost effectiveness or performance.
- The criteria do not take into account the impacts of recent storms or the current conditions of the shoreline.
- Stakeholders found the application requirements for funding to be too complicated and time consuming.
- Stakeholders perceived a bias for projects that received federal funding.
- Stakeholders found that the criteria do not adequately provide for endangered and threatened species. 60

## III. Effect of Proposed Changes:

## **Beach Erosion Control Projects**

**Section 1** amends s. 161.101, F.S., to require the Department of Environmental Protection (DEP) to adopt by rule a scoring system to use when determining the annual funding priorities for beach erosion control projects. The scoring system must consist of four tiers, and use equally weighted criteria within each tier. If multiple projects qualify equally under the scoring system, priority will be assigned to the projects shown to be most ready to proceed. The new scoring system will go into effect on July 1, 2020.

#### Tier 1 (20 percent of the total project score)

Under Tier 1, the DEP will consider the tourism-related return on investment and the economic impact of the project, using county tax data to individually assess each county with jurisdiction over the project area. The return on investment is the ratio of the tourism-related tax revenues in the most recent year to the state funding requested for the project. The economic impact is the ratio of the tourism-related tax revenues in the most recent year to all the county's tax revenues in the most recent year.

<sup>&</sup>lt;sup>57</sup> OPPAGA, The Beach Management Funding Assistance Program Was Recently Improved, but Some Stakeholder Concerns Persist (Dec. 2014), available at <a href="http://www.oppaga.state.fl.us/MonitorDocs/Reports/pdf/1412rpt.pdf">http://www.oppaga.state.fl.us/MonitorDocs/Reports/pdf/1412rpt.pdf</a> (last visited Feb. 26, 2019).

<sup>&</sup>lt;sup>58</sup> *Id*. at 1.

<sup>&</sup>lt;sup>59</sup> *Id*.

<sup>&</sup>lt;sup>60</sup> *Id.* at 6-12.

## Tier 2 (45 percent of the total project score)

Under Tier 2, the DEP will consider all of the following criteria relating to federal funding, storm damage reduction, and cost-effectiveness:

- The availability of federal matching dollars, considering federal authorization, the federal cost-share percentage, and the status of the funding award.
- The storm damage reduction benefits of the project based on the following considerations:
  - The current conditions of the project area, including any recent storm damage impact, as a percentage of volume of sand lost since the most recent beach nourishment event or most recent beach surveys. If the project area has not been previously restored, the DEP must use the historical background erosion rate;
  - The overall potential threat to existing upland development, including public and private structures and infrastructure, based on the percentage of vulnerable shoreline within the project boundaries; and
  - The value of upland property benefiting from the protection provided by the project and its subsequent maintenance. A property must be within one-quarter mile of the project boundaries to be considered.
- The cost-effectiveness of the project based on the yearly cost per volume per mile of proposed beach fill placement. Cost-effectiveness is also assessed using the following criteria:
  - The existence of projects with proposed structural or design components to extend the beach nourishment interval;
  - Existing beach nourishment projects that reduce upland storm damage costs by incorporating new or enhanced dune structures or new or existing dune restoration and revegetation projects;
  - o Proposed innovative technologies designed to reduce project costs; and
  - Regional sediment management strategies and coordination to conserve sand source resources and reduce project costs.

#### Tier 3 (20 percent of the total project score)

Under Tier 3, the DEP will consider all of the following criteria relating to previous state involvement in the project, recreational benefits, mitigation of the impact of inlets, and the state's most significant beach erosion problems:

- Previous state commitment and involvement in the project, considering previously funded phases, the total amount of previous state funding, and previous partial appropriations for the proposed project.
- The recreational benefits of the projects based on:
  - o The accessible beach area added by the project; and
  - o The percentage of linear footage within the project boundaries which is zoned:
    - As recreational or open space;
    - For commercial use; or
    - To otherwise allow for public lodging establishments.
- The extent to which the project mitigates the adverse impact of improved, modified, or altered inlets on adjacent beaches.
- The degree to which the project addresses the state's most significant beach erosion problems as a function of the linear footage of the project shoreline and the cubic yards of sand placed per mile per year.

#### Tier 4 (15 percent of the total project score)

Under Tier 4, the DEP will consider all of the following criteria relating to projects that have not received funding after successive years, habitat enhancement, and a project's overall readiness:

- Increased prioritization of projects that have been on the DEP's ranked project list for successive years and have not previously secured state funding for project implementation.
- Environmental habitat enhancement, recognizing state or federal critical habitat areas for threatened or endangered species that may be subject to extensive shoreline armoring, or recognizing areas where extensive shoreline armoring threatens the availability or quality of habitat for such species. Turtle-friendly designs, dune and vegetation projects for areas with redesigned or reduced fill templates, proposed incorporation of best management practices and adaptive management strategies to protect resources, and innovative technologies designed to benefit critical habitat preservation may also be considered.
- The overall readiness of the project to proceed in a timely manner, considering the project's readiness for the construction phase of development, the status of required permits, the status of any needed easement acquisition, the availability of local funding sources, and the establishment of an erosion control line. If the DEP identifies specific reasonable and documented concerns that the project will not proceed in a timely manner, the DEP may choose not to include the project in the annual funding priorities submitted to the Legislature.

**Section 2** amends s. 161.101(20), F.S., to revise provisions relating to project lists, reporting requirements, and surplus funding.

#### Project Lists, Notification, and Summary Reports

The bill requires the DEP to update the active project lists quarterly. The DEP is already required to maintain the lists on its website organized by fiscal year.

The bill redefines the term "significant change" to mean a project-specific change or cumulative changes that either exceed the project's original allocation by \$500,000 or exceed 25 percent of the project's original allocation. The DEP is required to notify the Governor and the Legislature when a significant change occurs in the funding levels of a given project, as compared to the originally approved allocation.

The bill requires the DEP to provide a summary of project activities, funding statuses, and changes to annual project lists for both the current and preceding year. Currently, the DEP is not required to include information for the preceding fiscal year in its summary. The DEP submits the summary along with its annual legislative budget request.

The bill requires that funding approved by the Legislature for specific projects on the annual project lists must remain available for such projects for 18 months. The bill requires that, when a local project sponsor releases appropriated project dollars, the DEP will notify the Governor and the Legislature of such release and indicate in the notification how the project dollars are recommended to be used following the release.

## Surplus Funding

The bill requires the DEP to provide supporting justification when notifying the Governor and Legislature to indicate whether the DEP intends to use surplus dollars. The bill adds beach restoration and beach nourishment projects to the various project types the DEP is authorized to use surplus funds for.

The bill authorizes the DEP to use surplus funds for projects that do not have a significant change. The DEP will be authorized to use surplus funds for the following purposes, as long as they do not have a significant change: inlet management projects or beach restoration and beach nourishment projects; to be offered for reversion for the next appropriations process; or to be used for other priority projects on active project lists. The DEP must post such uses of surplus funds on its website, on the project listing web page. The bill states that no other notice or supporting justification is required before using surplus funds for a project that does not have a significant change.

#### **Inlet Management Projects**

**Section 3** amends s. 161.143, F.S., to revise the required considerations for the ranking criteria used to establish funding priorities for inlet management projects.

The bill states that inlet management projects are the intended scope of the section, and of s. 161.142, F.S., which establishes policies for inlet management. The scope of inlet management projects considered for annual funding priority is expanded to include the "improvement of infrastructure to facilitate sand bypassing."

The bill requires the inlet management projects considered for funding under s. 161.143, F.S., to be considered separate and apart from the beach erosion control projects reviewed and prioritized under s. 161.101, F.S.

The bill requires the DEP to give equal consideration to the ranking criteria in s. 161.143(2)(a)-(h), F.S., and revises such criteria by:

- Removing the term "existing" from the provision requiring the DEP to consider the extent to
  which bypassing activities at an inlet would benefit from modest, cost-effective
  improvements.
- Requiring the DEP to consider the cost-effectiveness of sand made available by a proposed inlet management project or activity relative to other sand source opportunities that could be used to address inlet-caused beach erosion.
- Removing the requirement that the DEP consider the interest and commitment of local
  governments as demonstrated by their willingness to coordinate the planning, design,
  construction, and maintenance of an inlet management project and their financial plan for
  funding the local cost share for initial construction, ongoing sand bypassing, channel
  dredging, and maintenance.
- Requiring the DEP to consider the existence of a proposed or recently updated inlet
  management plan or a local-government-sponsored inlet study addressing the mitigation of
  an inlet's erosive effects on adjacent beaches.

• Clarifying that the DEP is to consider the criteria in s. 161.101(14), F.S., when establishing funding priorities for inlet management projects, but only to the extent the beach erosion control project criteria are distinct from and not duplicative of the inlet management project criteria.

The bill authorizes the DEP to pay from legislative appropriations up to 75 percent of the construction costs of an initial major inlet management project and requires that the remaining balance be paid from other funding sources, such as local sponsors. The bill requires that costs not associated with the initial major inlet management project be shared equally by state and local sponsors.

The bill deletes authorization for the DEP to use a legislative appropriation to contract for studies on sediment transport volumes and responsibilities of inlet beneficiaries for beach erosion. In the subsection requiring the DEP to annually provide an inlet management project list, the bill deletes the requirement for the DEP to include information on the management of ten separate inlets.

The bill deletes the current requirement that at least ten percent of annual legislative appropriations for statewide beach management be made available for the three highest-ranked projects on the current year's inlet management project list. Instead, the bill requires the DEP to designate for projects on the current year's inlet management project list an amount that is at least equal to the greater of:

- Ten percent of the total amount of legislative appropriations for statewide beach management in a given year; or
- The percentage of inlet management funding requests from local sponsors as a proportion of the total amount of statewide beach management dollars requested in a given year.

The bill deletes a requirement that the DEP make certain funds available for the study, design, or development of inlet management projects, and adds a requirement that the DEP include inlet monitoring activities as an aggregated subcategory on the overall project list. The bill deletes a requirement that the DEP make available all statewide beach management funds which are unencumbered or are allocated to non-project-specific activities for projects on legislatively approved lists of inlet management projects.

The bill requires the DEP to update and maintain an annual report on its website concerning the extent to which each inlet project has succeeded in balancing the local sediment budget and inlet's erosive effects on adjacent beaches. The report must provide an estimate of the quantity of sediment bypassed, transferred, or otherwise placed on adjacent eroding beaches, or in such beaches' nearshore area, for the purpose of offsetting the erosive effects of inlets.

#### Comprehensive Long-Term Beach Management Plan

**Section 4** amends s. 161.161, F.S., which establishes requirements for the DEP's comprehensive long-term beach management plan. The changes in section 4 will go into effect on July 1, 2020.

In developing and maintaining the comprehensive long-term beach management plan, the bill requires the DEP to do the following:

• Include recommendations for improvement of infrastructure to facilitate sand bypassing to mitigate the erosive impact of an inlet that is a significant cause of beach erosion.

- Consider the establishment of regional sediment management alternatives for one or more individual beach and inlet sand bypassing projects as an alternative to beach restoration when appropriate and cost-effective, and recommend the location of such regional sediment management alternatives and the source of beach-compatible sand.
- Maintain an updated list of critically eroded sandy beaches based on data, analyses, and investigations of shoreline conditions.
- Identify existing beach projects without dune features or with dunes without adequate elevations, and encourage dune restoration and revegetation to be incorporated as part of storm damage recovery projects or future dune maintenance.
- Document procedures and policies for preparing post-storm damage assessments and corresponding recovery plans, including repair cost estimates.
- Identify and assess appropriate management measures for all of the state's critically eroded beaches.

The bill also deletes the following requirements for the DEP in developing and maintaining the comprehensive long-term beach management plan:

- Include cost estimates necessary to take inlet corrective measures and recommendations regarding cost sharing among the beneficiaries of such inlet.
- Evaluate the establishment of feeder beaches as an alternative to direct beach restoration and recommend the location of such feeder beaches.
- Project long-term erosion for all major beach and dune systems by surveys and profiles;
- Identify shoreline development and degree of density.
- In identifying short-and long-term economic costs and benefits of beaches, include recreational value to user groups, tax base, revenues generated, and beach acquisition and maintenance costs.
- Identify alternative management responses in order to prevent inappropriate development and redevelopment on migrating beaches.
- Consider abandonment as an alternative management response.
- Establish criteria, including costs and specific implementation actions, for alternative management techniques.
- Establish a list of restoration and beach nourishment projects arranged in order of priority, and the funding levels needed for such projects.
- Submit regional plans on a set schedule and in accordance with specified requirements.

The bill requires that the comprehensive long-term beach management plan, at a minimum, include: a strategic beach management plan; a critically eroded beaches report; and a statewide long-range budget plan.

## Strategic Beach Management Plan

The bill requires the strategic beach management plan (SBMP) to identify and recommend appropriate measures for the state's critically eroded sandy beaches. The DEP is authorized to incorporate regional plans and take into account areas of greatest need and probable federal or local funding when creating the SBMP. The bill requires that, before finalizing a SBMP, the

DEP must hold a public meeting or a public webinar in the region for which the plan is prepared. The bill's revisions to the requirements for the comprehensive long-term beach management plan may significantly change what the DEP includes in the SBMP.

#### Critically Eroded Beaches Report

The bill requires that the DEP develop and maintain the critically eroded beaches report based primarily on data, analyses, and investigations of shoreline conditions.

## Long-Range Budget Plan

The bill requires the long range budget plan to include at least five years of planned beach restoration, beach nourishment, and inlet management project funding needs, as identified and refined by local governments. The plan must consist of two components:

- A "three-year work plan" identifying and prioritizing beach restoration, beach nourishment, and inlet management projects viable for implementation during the next three fiscal years. In developing and submitting the three year work plan, the bill requires the DEP to:
  - Use the following criteria for determining the viability of projects:
    - Available cost-sharing,
    - Local sponsor support,
    - Regulatory considerations, and
    - The ability for the project to proceed as scheduled;
  - o Identify, for each of the three fiscal years, proposed projects and their current development status, and list the projects in priority order based on the criteria in ss. 161.101(14) and 161.143(2), F.S.; and
  - Submit the three-year work plan to the Legislature annually, accompanied by a three-year financial forecast of available funding for the projects, and any modifications of specific funding requests or criteria ranking that are warranted in each successive fiscal year.
- A "long-range plan" identifying projects for inclusion into the three-year work plan in the fourth and fifth ensuing fiscal years, which includes issues that may prevent successful completion and recommended solutions that will allow projects to progress into the three-year work plan.

Upon approval of the plans, the bill requires the DEP to use regional plans and three-year work plans to serve as the basis for state funding decisions.

**Section 5** states that, unless otherwise expressly provided in the act, the bill takes effect July 1, 2019.

## IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

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None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

# V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

#### B. Private Sector Impact:

The bill includes tourism-related return on investment in the criteria considered when establishing funding priorities for beach erosion control projects. Increased tourism could result in economic benefits to businesses and residents in beach communities. Therefore, the bill may have an indeterminate, positive fiscal impact on the private sector.

# C. Government Sector Impact:

The bill may have a positive, indeterminate impact on local governments that receive funding for beach erosion control projects or inlet management projects.

The bill may have a positive, indeterminate impact on local governments that receive increased tax revenues due to increasing rates of tourism at or around their beaches.

The bill may have a negative, indeterminate impact on the DEP, because the DEP may incur additional costs by implementing the bill. Implementation may require adopting new rules, developing new agency procedures, and producing new deliverables on an ongoing basis. The DEP can absorb these costs within existing resources.

#### VI. Technical Deficiencies:

None.

#### VII. Related Issues:

None.

## VIII. Statutes Affected:

This bill substantially amends the following sections of the Florida Statutes: 161.101, 161.143, and 161.161.

## IX. Additional Information:

A. Committee Substitute – Statement of Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.