

**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.)

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Prepared By: The Professional Staff of the Committee on Environment and Natural Resources

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BILL: CS/SB 78

INTRODUCER: Environment and Natural Resources Committee and Senator Rodriguez

SUBJECT: Public Financing of Construction Projects

DATE: April 8, 2019

REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Schreiber</u>	<u>Rogers</u>	<u>EN</u>	<b>Fav/CS</b>
2.	<u>Price</u>	<u>Miller</u>	<u>IS</u>	<b>Pre-meeting</b>
3.	_____	_____	<u>AEG</u>	_____
4.	_____	_____	<u>AP</u>	_____

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**Please see Section IX. for Additional Information:**

COMMITTEE SUBSTITUTE - Substantial Changes

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**I. Summary:**

CS/SB 78 requires a public entity that commissions or manages a construction project within the coastal building zone using funds appropriated from the state to conduct a sea level impact projection study prior to commencing construction. The study must be conducted and submitted to the Department of Environmental Protection before construction can commence.

The bill requires the Department of Environmental Protection to adopt rules establishing standards for the studies, and the standards must include certain requirements for how the studies will be conducted and the information they must contain. The department must publish and maintain copies of the studies for ten years after receipt. The bill requires the department to adopt rules as necessary to administer the section. The bill authorizes the department to enforce the requirements of the section.

The bill authorizes the Department of Environmental Protection to bring a civil action in order to seek injunctive relief to cease construction, enforce the section or rules adopted pursuant thereto, or seek recovery of state funds expended on a coastal structure. The bill states that the section may not be construed to create a cause of action for damages.

The bill may have a positive but indeterminate fiscal impact on the private sector, and may have both negative and positive fiscal impacts on the government sector in indeterminate amounts. See the Fiscal Impact Statement heading for additional information. The bill takes effect July 1, 2019.

## II. Present Situation:

### Sea Level Rise

Sea level rise is an observed increase in the average local sea level or global sea level trend, and it is an effect of climate change.<sup>1</sup> The two major causes of global sea level rise are thermal expansion caused by the warming of the oceans (water expands as it warms) and the loss of land-based ice (such as glaciers and ice sheets) due to melting.<sup>2</sup> Between 1993 and 2017, the global mean sea level rose 3 inches.<sup>3</sup> A regional working group in southeastern Florida found that, when compared to the sea level in 1992, sea level is projected to rise: 6 to 10 inches by 2030, 14 to 34 inches by 2060, and 31 to 81 inches by 2100.<sup>4</sup> However, due to unpredictable factors such as Antarctic ice sheet instabilities, more extreme scenarios are possible.<sup>5</sup>

Rising sea levels result in flooding, as properties in coastal areas face inundation with salt water. In Florida, the area at risk from one foot of projected sea level rise contains more than 65,000 homes and 121,909 people.<sup>6</sup> The state's 35 coastal counties contain 76% of Florida's population and contribute 79% of the state's total economy as of 2012.<sup>7</sup> Coastal communities must find ways to adapt to sea level rise, so residents can protect themselves and their property. This adaptation will require careful planning and investment based on scientific projections of sea level rise and its impacts.<sup>8</sup>

Another related issue that threatens Florida's coastal areas is severe weather events, particularly hurricanes. Rising sea levels are expected to increase the threat of storm surge flooding during

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<sup>1</sup> DEP, *Florida Adaptation Planning Guidebook*, Glossary (2018), available at <https://floridadep.gov/sites/default/files/AdaptationPlanningGuidebook.pdf> (last visited Mar. 9, 2019); Intergovernmental Panel on Climate Change, *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 5, 16, 42, 48 (2015), available at [https://www.ipcc.ch/site/assets/uploads/2018/02/SYR\\_AR5\\_FINAL\\_full.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf) (last visited Mar. 10, 2019); U.S. Global Change Research Program, *Fourth National Climate Assessment, Volume II: Impacts, Risks, and Adaptation in the United States*, 25, 30-31, 43 (2018), available at [https://nca2018.globalchange.gov/downloads/NCA4\\_2018\\_FullReport.pdf](https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf) (last visited Mar. 10, 2019); Southeast Florida Regional Climate Change Compact, *Unified Sea Level Rise Projection, Southeast Florida*, 13, 33 (2015), <http://www.southeastfloridaclimatecompact.org/wp-content/uploads/2015/10/2015-Compact-Unified-Sea-Level-Rise-Projection.pdf> (last visited Mar. 10, 2019).

<sup>2</sup> DEP, *Florida Adaptation Planning Guidebook*, Glossary (2018); NOAA, *Is Sea Level Rising?*, <https://oceanservice.noaa.gov/facts/sealevel.html> (last visited Mar. 10, 2019).

<sup>3</sup> NOAA, *Climate Change: Global Sea Level*, <https://www.climate.gov/news-features/understanding-climate/climate-change-global-sea-level> (last visited Mar. 10, 2019).

<sup>4</sup> Southeast Florida Regional Climate Change Compact, *Unified Sea Level Rise Projection, Southeast Florida*, 4 (2015).

<sup>5</sup> U.S. Global Change Research Program, *Fourth National Climate Assessment, Volume II: Impacts, Risks, and Adaptation in the United States*, 74 (2018).

<sup>6</sup> DEP, *Florida Adaptation Planning Guidebook*, iii (2018).

<sup>7</sup> *Id.*

<sup>8</sup> See Broward County, *Climate Toolbox, Sea Level Rise*, <http://www.broward.org/Climate/Toolbox/Pages/SeaLevelRise.aspx> (last visited Mar. 10, 2019).

hurricanes.<sup>9</sup> Furthermore, warmer waters yield stronger hurricanes with heavier rainfall, and scientists are studying how warming sea surface temperatures and related factors may increase the average intensity and rainfall rates of future hurricanes in the Atlantic Ocean.<sup>10</sup> Storms cause coastal erosion that removes sediment from the shore, causing sandy beaches to become narrower and lower in elevation.<sup>11</sup>

### Coastal Construction

The “mean high-water line” (MHWL) is the point on the shore marking the average height of the high waters over a 19-year period.<sup>12</sup> Above the mean high-water line is the “seasonal high-water line,” (SHWL) which accounts for variations in the local mean high water.<sup>13</sup> The seasonal high-water line is at a higher elevation than the mean high water line, and it is used to create 30-year erosion projections (30-YEP).<sup>14</sup>

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<sup>9</sup> U.S. Global Change Research Program, *Fourth National Climate Assessment, Volume II: Impacts, Risks, and Adaptation in the United States*, 1482 (2018).

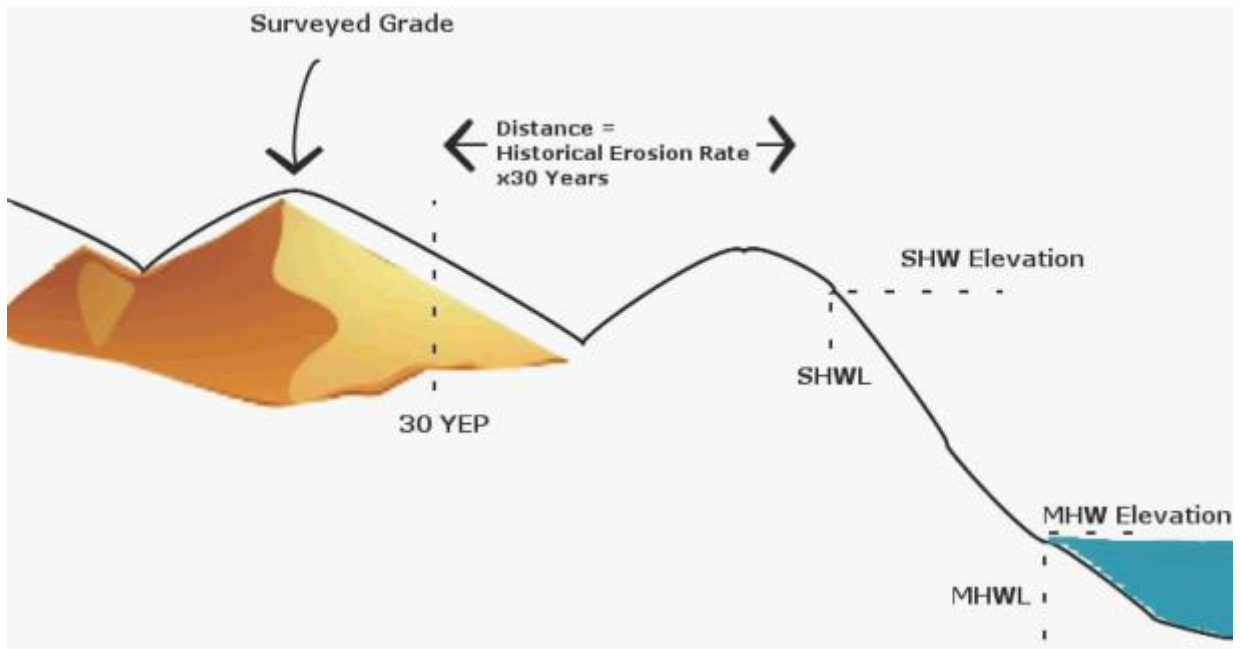
<sup>10</sup> U.S. Global Change Research Program, *Fourth National Climate Assessment, Volume II: Impacts, Risks, and Adaptation in the United States*, 66, 74, 1482 (2018); see NOAA, Geophysical Fluid Dynamics Laboratory, *Global Warming and Hurricanes*, <https://www.gfdl.noaa.gov/global-warming-and-hurricanes/> (last visited Mar. 10, 2019).

<sup>11</sup> U.S. Geological Survey, Coastal Change Hazards: Hurricanes and Extreme Storms, *Beach Erosion*, <https://coastal.er.usgs.gov/hurricanes/coastal-change/beach-erosion.php> (last visited Mar. 10, 2019).

<sup>12</sup> Section 177.27(14), (15), F.S. “Mean high water” is defined as “the average height of the high waters over a 19-year period.” “Mean high-water line” is defined as “the intersection of the tidal plane of mean high water with the shore.”

<sup>13</sup> Section 161.053(5)(a)2, F.S. “Seasonal high-water line” is defined as “the line formed by the intersection of the rising shore and the elevation of 150 percent of the local mean tidal range above local mean high water”; DEP, *The Homeowner’s Guide to the Coastal Construction Control Line Program*, 6 (2017), available at [https://floridadep.gov/sites/default/files/Homeowner%27s%20Guide%20to%20the%20CCCL%20Program%206\\_2012%20%28002%29\\_0.pdf](https://floridadep.gov/sites/default/files/Homeowner%27s%20Guide%20to%20the%20CCCL%20Program%206_2012%20%28002%29_0.pdf) (last visited Mar. 9, 2019). DEP describes the seasonal high-water line as “essentially a ‘spring tide’ line”; NOAA, *What Are Spring and Neap Tides?*, <https://oceanservice.noaa.gov/facts/springtide.html>, (last visited Mar. 9, 2019). Spring tide, or King Tide, refers to the times during full or new moons when average tidal ranges are slightly larger.

<sup>14</sup> Fla. Admin. Code R. 62B-33.024. Figure 3 from DEP’s regulation is provided above. The MHWL is the mean high-water line. The SHWL is the seasonal high-water line. 30 YEP is the 30-year erosion projection.



A 30-year erosion projection is a projection of long-term shoreline recession occurring over a period of 30 years based on shoreline change information obtained from historical measurements.<sup>15</sup> The Department of Environmental Protection (DEP) makes 30-year erosion projections of the location of the seasonal high-water line on a site-specific basis, when applications are submitted for certain coastal construction projects.<sup>16</sup> With certain exceptions, DEP or local governments may not issue permits for structures that, based on DEP's projections, will be seaward of the seasonal high-water line within 30 years after the date of application for the permit.<sup>17</sup>

### ***Coastal Construction Control Line***

DEP is the beach and shore preservation authority for the state.<sup>18</sup> Coastal construction projects may require permits from DEP depending on the location of the project.<sup>19</sup> The coastal construction control line is meant to define the portion of the beach-dune system that is subject to severe fluctuations caused by a 100-year storm surge, storm waves, or other forces such as wind, wave, or water level changes.<sup>20</sup> Seaward of the coastal construction control line, new construction and improvements to existing structures require a coastal construction control line permit from DEP.<sup>21</sup> The line defines the landward limit of DEP's authority to regulate

<sup>15</sup> Fla. Admin. Code R. 62B-33.024(1).

<sup>16</sup> *Id.* Applicants may submit a proposed 30-year erosion projection for a property, certified by a professional engineer licensed in the state of Florida.

<sup>17</sup> Section 161.053(5), F.S.

<sup>18</sup> Section 161.101(2), F.S.

<sup>19</sup> See sections 161.041 and 161.053, F.S.

<sup>20</sup> Section 161.053, F.S.; Fla. Admin. Code R. 62B-33.005(1); DEP, *The Homeowner's Guide to the Coastal Construction Control Line Program*, 3 (2017), available at

[https://floridadep.gov/sites/default/files/Homeowner%27s%20Guide%20to%20the%20CCCL%20Program%206\\_2012%20%28002%29\\_0.pdf](https://floridadep.gov/sites/default/files/Homeowner%27s%20Guide%20to%20the%20CCCL%20Program%206_2012%20%28002%29_0.pdf) (last visited Mar. 9, 2019).

<sup>21</sup> DEP, *The Homeowner's Guide to the Coastal Construction Control Line Program*, 2 (2017).

construction.<sup>22</sup> DEP's Coastal Construction Control Line Program regulates structures and activities which can cause beach erosion, destabilize dunes, damage upland properties, or interfere with public access.<sup>23</sup>

Due to the potential environmental impacts and greater risk of hazards from wind and flood, the standards for construction seaward of the coastal construction control line are often more stringent than those applied in the rest of the coastal building zone.<sup>24</sup> Approval or denial of a permit application is based upon a review of factors such as the location of structures and their potential impacts on the surrounding area.<sup>25</sup> Coastal construction control lines are established by DEP on a county basis, but only after such a line has been determined necessary for protecting upland structures and controlling beach erosion, and after a public hearing has been held in the affected county.<sup>26</sup> Coastal construction control lines currently exist for large portions of Florida's coast.<sup>27</sup>

The Florida Building Code applies to structures seaward of a coastal construction control line.<sup>28</sup> The code's section relating to the coastal construction control line contains various standards for withstanding flooding and storm surges. The Florida Building Code also contains other standards for flood resistant construction that can be applied to increase coastal resiliency and contribute to sea level rise adaptation strategies.<sup>29</sup>

### ***Coastal Zone Protection***

The Coastal Zone Protection Act of 1985 (Act) was created to minimize the impacts that activities or construction near the coast have on Florida's coastal areas.<sup>30</sup> The Legislature intended the Act to impose strict construction standards in Florida's coastal areas to protect the natural environment, private property, and life.<sup>31</sup> The Act covers activities and construction within the "coastal building zone:" an area stretching landward from the seasonal high-water line, to a line 1,500 feet landward from the coastal construction control line.<sup>32</sup> The Act uses the term "construction" to mean both the act of construction and the result of construction, and defines construction as "the carrying out of any building, clearing, filling, excavation, or substantial improvement in the size or use of any structure or the appearance of any land."<sup>33</sup>

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<sup>22</sup> *Id.*

<sup>23</sup> DEP, *Coastal Construction Control Line Program*, <https://floridadep.gov/water/coastal-construction-control-line> (last visited Mar. 9, 2019).

<sup>24</sup> Fla. Admin. Code Ch. 62B-33.

<sup>25</sup> Fla. Admin. Code Ch. 62B-33.005.

<sup>26</sup> Section 161.053(2), F.S.

<sup>27</sup> DEP Geospatial Open Data, *Coastal Construction Control Lines (CCCL)*, [http://geodata.dep.state.fl.us/datasets/4674ee6d93894168933e99aa2f14b923\\_2?geometry=-102.41%2C25.011%2C-60.596%2C31.77](http://geodata.dep.state.fl.us/datasets/4674ee6d93894168933e99aa2f14b923_2?geometry=-102.41%2C25.011%2C-60.596%2C31.77) (last visited Mar. 9, 2019).

<sup>28</sup> Florida Building Code, *Section 3109 Structures Seaward of a Coastal Constructional Line*, <https://codes.iccsafe.org/content/FBC2017/chapter-31-special-construction> (last visited Mar. 9, 2019).

<sup>29</sup> South Florida Regional Planning Council, *Adaptation Action Areas, A Planning Guidebook for Florida's Local Governments*, 54 (2014) available at [https://floridadep.gov/sites/default/files/AAA-Planning-Guide\\_1.pdf](https://floridadep.gov/sites/default/files/AAA-Planning-Guide_1.pdf) (last visited Mar. 9, 2019).

<sup>30</sup> Sections 161.52-161.58, F.S.

<sup>31</sup> Section 161.53(1),(4), and (5), F.S.

<sup>32</sup> Section 161.54(1), F.S.

<sup>33</sup> Section 161.54(5), F.S.

The Act defines certain types of structures regulated within coastal building zones.<sup>34</sup> “Major structure[s]” are residential, commercial, or public buildings, and other construction having the potential for substantial impact on coastal zones.<sup>35</sup> “Nonhabitable major structure[s]” are structures that people would generally not reside in, such as parking garages, drainage structures, electrical power plants, transmission lines, and underground storage tanks.<sup>36</sup> “Minor structure[s]” are structures that are considered to be expendable under wind, wave, or storm forces, and examples include walkways, bathhouses, fences, and uncovered paved areas.<sup>37</sup>

The Act generally requires construction to be located a sufficient distance landward of the beach to permit natural shoreline fluctuations and preserve dune stability.<sup>38</sup> Nonhabitable major structures and minor structures must be designed to produce the minimum adverse impact on the beach and dune system.<sup>39</sup> Minor structures must be designed to produce the minimum adverse impact to adjacent properties and reduce the potential for water or wind-blown material.<sup>40</sup> The Act states that both DEP and local governments have the authority to adopt or enforce requirements that are as restrictive or more restrictive than these standards.<sup>41</sup>

The Act requires that, at or before the sale of real property located partially or totally seaward of the coastal construction control line, the seller must give prospective purchasers a certain written disclosure statement, which states that the property may be subject to coastal erosion and to federal, state, and local regulations that govern coastal property.<sup>42</sup> The disclosure statement indicates that DEP can provide additional information on whether significant erosion conditions are associated with the shoreline of the property being purchased.<sup>43</sup> The Legislature found it necessary to ensure that purchasers of interests in real property located in coastal areas are fully aware that such lands are subject to frequent and severe fluctuation.<sup>44</sup>

### ***State Programs***

DEP’s Florida Resilient Coastlines Program prepares coastal communities and habitats for the effects of climate change and sea level rise by offering technical assistance and funding to communities dealing with coastal flooding, erosion, and ecosystem changes.<sup>45</sup> In 2018, the program was awarded funding for numerous projects providing assistance for coastal Florida communities.

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<sup>34</sup> Section 161.54(6), F.S.

<sup>35</sup> Section 161.54(6)(a), F.S.

<sup>36</sup> Section 161.54(6)(c), F.S.

<sup>37</sup> Section 161.54(6)(b), F.S.

<sup>38</sup> Section 161.55(3), F.S. The Act makes exceptions for certain structures such as piers, beach access ramps, or shore protection structures.

<sup>39</sup> Section 161.55(1), (2), F.S. Special requirements for flood proofing exist for sewage treatment plants, public water supply systems, and underground utilities. These are intended to prevent infiltration of surface water from a 100-year storm event, or else loss of function during submersion.

<sup>40</sup> Section 161.55(1), F.S.

<sup>41</sup> Section 161.56(1), F.S.

<sup>42</sup> Section 161.57(2), F.S.

<sup>43</sup> *Id.*

<sup>44</sup> Section 161.57(1), F.S.

<sup>45</sup> DEP, *Florida Resilient Coastlines Program*, <https://floridadep.gov/rcp/florida-resilient-coastlines-program> (last visited Mar. 9, 2019).

The program has published the Florida Adaptation Planning Guidebook to be used by local governments to develop and update adaptation plans for sea level rise.<sup>46</sup> The guidebook breaks down the sea level rise adaptation planning process into four steps:

- **Context:** delineating the geographic boundaries of the planning area, including the assets and structures contained therein, and engaging stakeholders.
- **Vulnerability Assessment:** an exposure analysis to determine how much sea level rise will occur and where, a sensitivity analysis to provide an inventory of community assets and features located in areas at risk, and assigning focus areas that will receive attention in adaptation strategies.
- **Adaptation Strategies:** assess adaptive capacities such as planning capabilities and fiscal capacity, prioritize adaptation needs, and identify adaptation strategies, which may include strategies in the following categories:
  - “Protection” strategies that are structurally defensive measures;
  - “Accommodation” strategies that alter the design of vulnerable structures so they can stay in place;
  - “Retreat” strategies; and
  - “Avoidance” strategies, which guide development away from areas subject to coastal hazards, by implementing policies or offering incentives.
- **Implementation:** survey funding options, create a schedule of activities, actions and actors, and monitor and evaluate adaptation strategies.<sup>47</sup>

Between 2011 and 2017, the Department of Economic Opportunity (DEO) led the Community Resiliency Initiative.<sup>48</sup> DEO is another agency that provides services and resources on adaptation planning related to sea level rise and coastal resiliency.<sup>49</sup> DEO emphasizes that adaptation strategies for coastal flooding and sea level rise are complimentary of each other, and should be applied based on a community’s particular needs and vulnerabilities.<sup>50</sup>

Florida’s water management districts must also evaluate and adjust to sea-level rise and increased flood risk. For example, the South Florida Water Management District is conducting studies and projects on sea level rise and evaluating strategies for flood protection.<sup>51</sup> In evaluating its flood protection services for the future, the district will identify at-risk structures and make improvements to infrastructure.<sup>52</sup>

### ***Local Governments***

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<sup>46</sup> DEP, *Florida Adaptation Planning Guidebook* (2018), available at <https://floridadep.gov/sites/default/files/AdaptationPlanningGuidebook.pdf> (last visited Mar. 11, 2019).

<sup>47</sup> *Id.* at 1-61.

<sup>48</sup> DEP, *Community Resilience Initiative Documents*, <https://floridadep.gov/rcp/florida-resilient-coastlines-program/content/community-resilience-initiative-documents> (last visited Mar. 9, 2019).

<sup>49</sup> DEO, *Adaptation Planning*, <http://www.floridajobs.org/community-planning-and-development/programs/community-planning-table-of-contents/adaptation-planning> (last visited Mar. 9, 2019).

<sup>50</sup> *Id.*

<sup>51</sup> See Akintunde Owosina, South Florida Water Management District, Chief, Hydrology and Hydraulics Bureau, *Sea Level Rise Update Flood Protection Level of Service Program* (Nov. 8, 2018) available at <https://apps.sfwmd.gov/webapps/publicMeetings/viewFile/18672> (last visited Mar. 10, 2019).

<sup>52</sup> *Id.* at 12.

Florida's coastal local governments are required to have a coastal management element in their comprehensive plans.<sup>53</sup> These coastal management elements must have redevelopment components that accomplish the following:

- Include development and redevelopment principles, strategies, and engineering solutions that reduce the flood risk in coastal areas which results from high-tide events, storm surge, flash floods, stormwater runoff, and the related impacts of sea-level rise.
- Encourage the use of best practices development and redevelopment principles, strategies, and engineering solutions that will result in the removal of coastal real property from flood zone designations established by the Federal Emergency Management Agency.
- Identify site development techniques and best practices that may reduce losses due to flooding and claims made under flood insurance policies issued in Florida.
- Be consistent with, or more stringent than, the flood-resistant construction requirements in the Florida Building Code and applicable flood plain management regulations set forth in 44 C.F.R. part 60.
- Require that any construction activities seaward of the coastal construction control lines established pursuant to s. 161.053, F.S., be consistent with ch. 161, F.S.
- Encourage local governments to participate in the National Flood Insurance Program Community Rating System administered by the Federal Emergency Management Agency to achieve flood insurance premium discounts for their residents.<sup>54</sup>

Florida's Community Planning Act authorizes local governments to establish an "adaptation action area" designation in their comprehensive plan, enabling them to develop policies to improve resilience and plan for sea level rise in coastal zones.<sup>55</sup> An adaptation action area is defined as "a designation in the coastal management element of a local government's comprehensive plan which identifies one or more areas that experience coastal flooding due to extreme high tides and storm surge, and that are vulnerable to the related impacts of rising sea levels for the purpose of prioritizing funding for infrastructure needs and adaptation planning."<sup>56</sup> Using this designation as a planning tool, local governments may improve coastal resiliency through new standards for activities and construction.

Some of Florida's local governments have begun integrating scientific sea level rise projections into their planning documents and policies.<sup>57</sup> As of 2015, over 15 local governments consider certain sea level rise projections in local plans such as comprehensive plans, local hazard mitigation strategies, and climate action plans.<sup>58</sup> Comprehensive plans of coastal local governments may include construction standards designed to adapt to future sea level rise: Monroe County uses setbacks for coastal construction that protect structures from long-term sea level rise; Key West considers increased heights for new construction in coastal hazard areas;

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<sup>53</sup> Section 380.24, F.S.; Section 163.3177(6)(g), F.S.

<sup>54</sup> Section 163.3178(2)(f), F.S.; *See* Ch. 2015-69, Laws of Fla.

<sup>55</sup> Section 163.3177(6)(g)(10), F.S.; *See* Ch. 2011-139, Laws of Fla.

<sup>56</sup> Section 163.3164(1), F.S.

<sup>57</sup> Southeast Florida Regional Climate Change Compact, *Integrating the Unified Sea Level Rise Projection into Local Plans*, 4, 6 (2016), available at <http://www.southeastfloridaclimatecompact.org/wp-content/uploads/2017/01/SLRGuidance-Doc.pdf> (last visited Mar. 10, 2019).

<sup>58</sup> *Id.* at 18-20.



and Broward County incorporates adaptation to sea level rise in the planning and construction of public infrastructure, which maximizes its use throughout its expected life span.<sup>59</sup>

### ***Flood Insurance***

The National Flood Insurance Program (NFIP) was created to offer federally subsidized flood insurance to property owners and to encourage land-use controls in floodplains.<sup>60</sup> The Federal Emergency Management Agency administers the NFIP.<sup>61</sup> The federal government will make flood insurance available within a community, if that community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains.<sup>62</sup> Communities that participate in the NFIP's community rating system receive discounts on flood insurance premiums.<sup>63</sup>

### **III. Effect of Proposed Changes:**

**Section 1** creates s. 161.551, F.S., establishing requirements for construction projects using state-appropriated funds within the coastal building zone.

The bill creates definitions for five terms, defining them as they are used in the section.

- “Coastal structure” is defined as “a major structure or nonhabitable major structure within the coastal building zone.” As used within the section, the term “coastal structure” would include structures located landward of the seasonal high-water line to a line 1,500 feet landward from the coastal construction control line, and would include residential, commercial, and public buildings that could substantially impact coastal zones, as well as major uninhabited structures such as parking garages, drainage structures, electrical power plants, transmission lines, and underground storage tanks.
- “Public entity” means “the state or any of its political subdivisions, or any municipality, county, agency, special district, authority, or other public body corporate of the state which is demonstrated to perform a public function or to serve a governmental purpose that could properly be performed or served by an appropriate governmental unit.”
- “SLIP study” is defined as “a sea level impact project study” as established by the Department of Environmental Protection (DEP) pursuant to requirements specified in the bill.
- “State-financed constructor” is defined as “a public entity that commissions or manages a construction project using funds appropriated from the state.”

<sup>59</sup> Thomas Ruppert and Alexander Stewart, *Summary and Commentary on Sea-Level Rise Adaptation Language in Florida Local Government Comprehensive Plans and Ordinances*, 10, 17, 19, 30 (2015), available at [https://www.flseagrant.org/wp-content/uploads/Ruppert-Updated-Sea-Level-Language\\_7.2.15.pdf](https://www.flseagrant.org/wp-content/uploads/Ruppert-Updated-Sea-Level-Language_7.2.15.pdf) (last visited Mar. 10, 2019).

<sup>60</sup> 42 U.S.C. § 4001 *et seq.*; FEMA, *The National Flood Insurance Program*, <https://www.fema.gov/national-flood-insurance-program> (last visited Mar. 8, 2019).

<sup>61</sup> 44 C.F.R. §§ 59-80; see FEMA, *National Flood Insurance Program: Laws and Regulations*, <https://www.fema.gov/national-flood-insurance-program-laws-regulations> (last visited Mar. 8, 2019).

<sup>62</sup> FEMA, *National Flood Insurance Program, Program Description*, (Aug. 1, 2002), available at [https://www.fema.gov/media-library-data/20130726-1447-20490-2156/nfipdescrip\\_1\\_.pdf](https://www.fema.gov/media-library-data/20130726-1447-20490-2156/nfipdescrip_1_.pdf) (last visited Mar. 8, 2019).

<sup>63</sup> FEMA, *Fact Sheet: Community Rating System* (2017), available at [https://www.fema.gov/media-library-data/1507029324530-082938e6607d4d9eba4004890dbad39c/NFIP\\_CRS\\_Fact\\_Sheet\\_2017\\_508OK.pdf](https://www.fema.gov/media-library-data/1507029324530-082938e6607d4d9eba4004890dbad39c/NFIP_CRS_Fact_Sheet_2017_508OK.pdf) (last visited Mar. 9, 2019).

- “Substantial flood damage” is defined to mean “flood, inundation, or wave action damage resulting from a single event, such as a flood or tropical weather system, where such damage exceeds 25 percent of the market value of the coastal structure at the time of the event.”

The bill requires DEP to create regulations establishing the standards for a sea level impact projection study (SLIP study). DEP’s standards must require state-financed constructors, at a minimum, to do all of the following for conducting a SLIP study:

- Utilize a systematic, interdisciplinary, and scientifically accepted approach in the natural sciences and construction design in conducting the study;
- Assess the flooding, inundation, and wave action damage risks relating to the coastal structure over its expected life or 50 years, whichever is less. The assessment must:
  - Take into account potential sea level rise and increased storm risk during the expected life of the coastal structure or 50 years, whichever is less;
  - Provide scientific and engineering evidence of the risk to the coastal structure and methods used to mitigate, adapt to, or reduce this risk;
  - Use and consider available scientific research and generally accepted industry practices;
  - Provide the mean average annual chance of substantial flood damage over the expected life of the coastal structure or 50 years, whichever is less; and
  - Analyze potential public safety and environmental impacts resulting from damage to the coastal structure including, but not limited to, leakage of pollutants, electrocution and explosion hazards, and hazards resulting from floating or flying structural debris.
- Provide alternatives for the coastal structure’s design and siting, including discussion of how such alternatives would affect the potential public safety and environmental impacts assessed in the study, as well as the risks and costs associated with maintaining, repairing, and constructing the coastal structure.

DEP is authorized to require in its standards for a SLIP study that a professional engineer sign off on the study.

The bill requires DEP to publish and maintain a copy of all SLIP studies it receives. The SLIP studies must be published on DEP’s website for a period of at least 10 years following receipt. However, the bill requires DEP to redact, prior to publication, any portion of a SLIP study containing information that is exempt from Art. I, s. 24(a) of the State Constitution and s. 119.07(1), F.S., which provide for access to public records.

The bill’s definition of “state-financed constructor” applies only to government entities that are commissioning or managing a construction project. The bill requires state-financed constructors to conduct a SLIP study pursuant to DEP’s standards. The state-financed constructor is solely responsible for ensuring that the study meets the standards established by DEP. The bill prohibits a state-financed constructor from commencing construction without:

- Conducting a SLIP study meeting the standards established by DEP.
- Submitting the SLIP study to DEP. If a project is building multiple coastal structures, the state-financed constructor may conduct and submit one SLIP study for the entire project.
- Receiving notification from DEP that the study was received by DEP and published on DEP’s website for at least 30 days.

If a state-financed constructor begins construction of a coastal structure without first submitting a SLIP study and receiving notification of DEP's approval of the study, then DEP is authorized to institute a civil action. Such civil action may be brought to: seek injunctive relief to cease further construction of the coastal structure; enforce compliance with s. 161.551, F.S., or rules adopted pursuant to it; or, if the coastal structure has been completed or substantially completed, seek recovery of all or a portion of state funds expended on the coastal structure. The bill states that s. 161.551, F.S. may not be construed to create a cause of action for damages.

DEP is required to adopt rules as necessary to administer the section. DEP is authorized to enforce the requirements of the section.

**Section 2** states that the act shall take effect on July 1, 2019.

#### **IV. Constitutional Issues:**

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

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 requires procedures that identify long-term risks to coastal structures, and potentially avoid some of the large costs of mitigating and dealing with future damage to, or even loss of, coastal structures. These coastal structures may be used or owned by residents or private businesses. Therefore, the bill may have a positive, indeterminate impact on the private sector.

**C. Government Sector Impact:**

The bill would require DEP to promulgate and administer new regulations. Implementing the requirements in the bill may cause DEP to incur additional costs.

Requiring public entities to provide additional studies when conducting construction projects may result in an indeterminate, negative fiscal impact in the short-term for the cost of the required studies and any associated delays in project construction. However, the bill requires procedures that identify risks and potentially avoid damage and loss of coastal structures that are constructed, at least in part, using funds appropriated from the state. This may result in state funds being used for coastal structures that have less risk of damage over time, or coastal structures that may remain undamaged for a longer period of time. Therefore, the bill may result in a positive, indeterminate impact on the government sector in the long-term.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Statutes Affected:**

This bill creates section 161.551 of the Florida Statutes.

**IX. Additional Information:****A. Committee Substitute – Statement of Substantial Changes:**

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

**CS by Environment and Natural Resources Committee on March 12, 2019:**

- Adds the definition of “public entity”.
- Changes the definition of “state-financed constructor” to mean “a public entity that commissions or manages” a construction project using state-appropriated funds.
- Removes the requirement that DEP approve the SLIP study as properly conducted.
- Specifies that the state-financed constructor is solely responsible for ensuring that the SLIP study meets DEP’s standards.
- Authorizes DEP to require in its standards for a SLIP study that a professional engineer must sign off on the study.
- Specifies that s. 161.551 may not be construed to create a cause of action for damages.
- Changes the requirement that DEP enforce the requirements of the section to an authorization that DEP may enforce the requirements of the section.

B. Amendments:

None.

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

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