



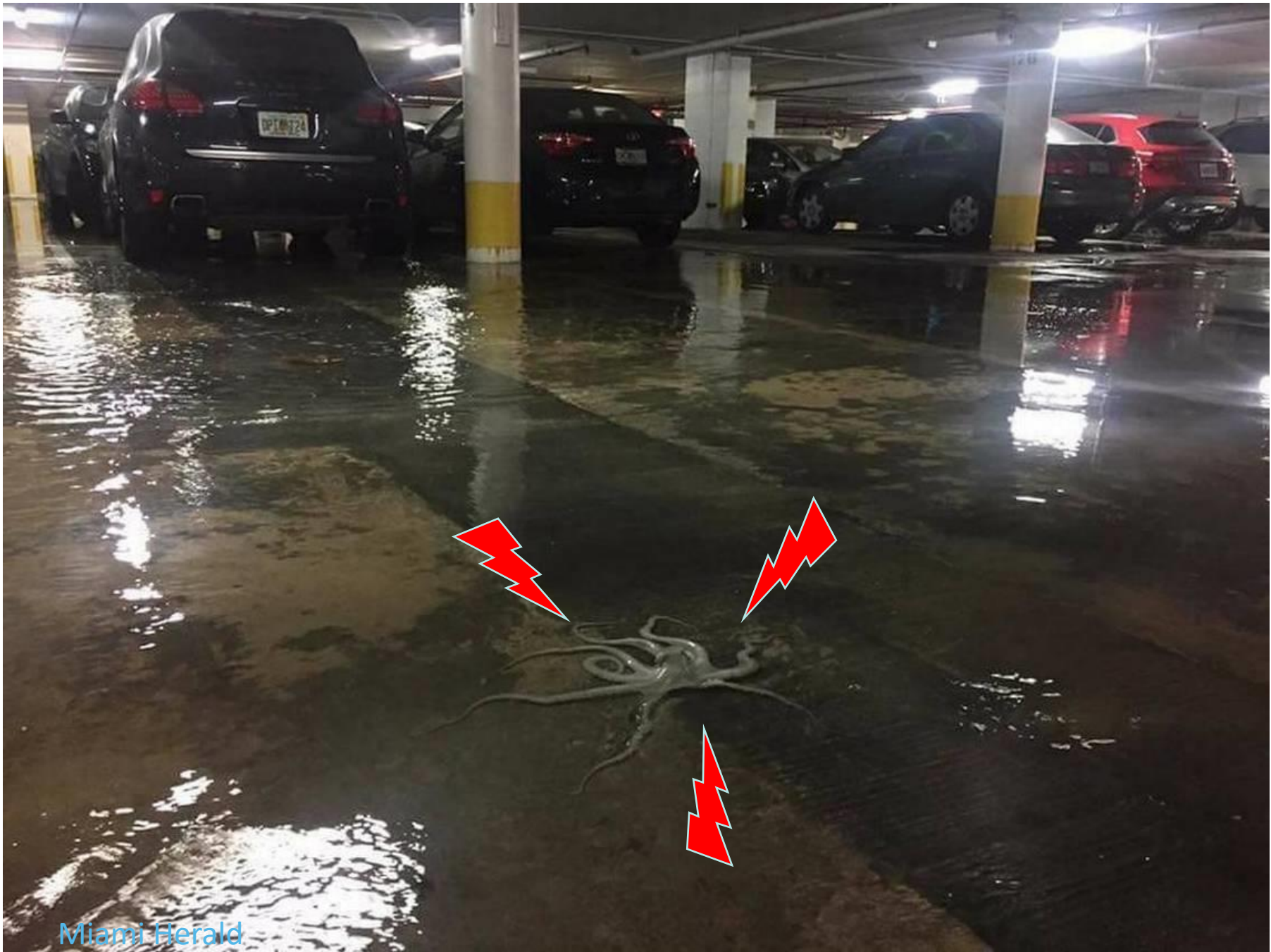
# Working Together to Create More Resilient Florida Communities



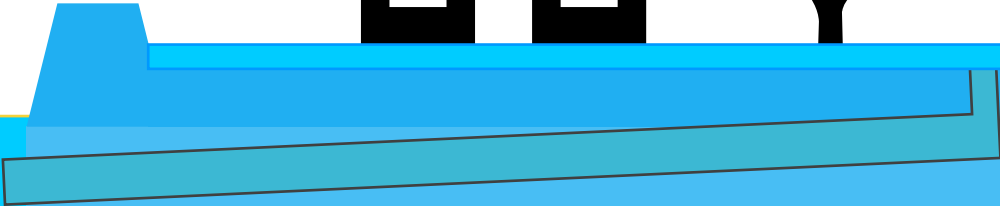
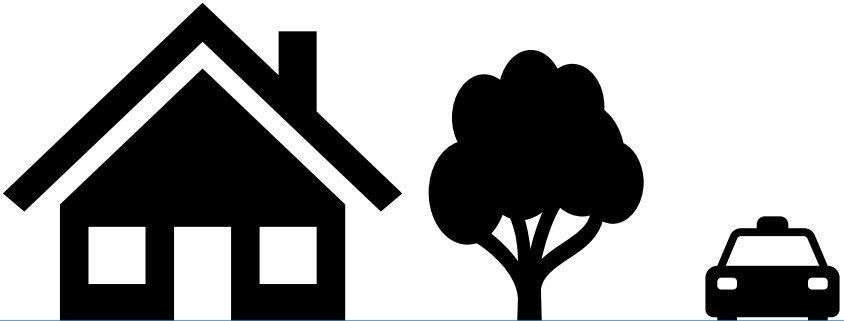
**Whitney Gray, Administrator,**  
**Florida Resilient Coastlines Program**  
850-245-2098 [Whitney.Gray@FloridaDEP.gov](mailto:Whitney.Gray@FloridaDEP.gov)

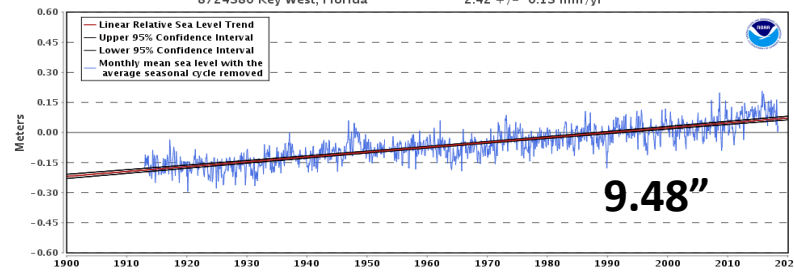
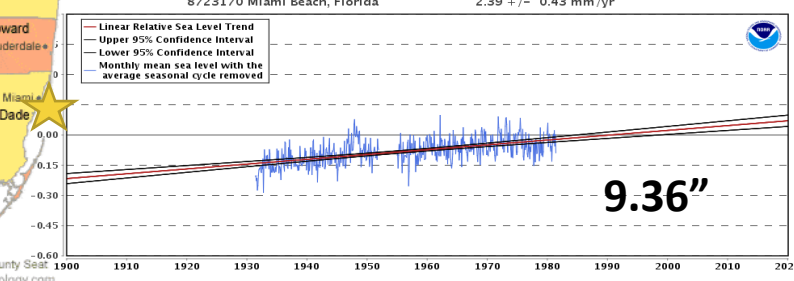
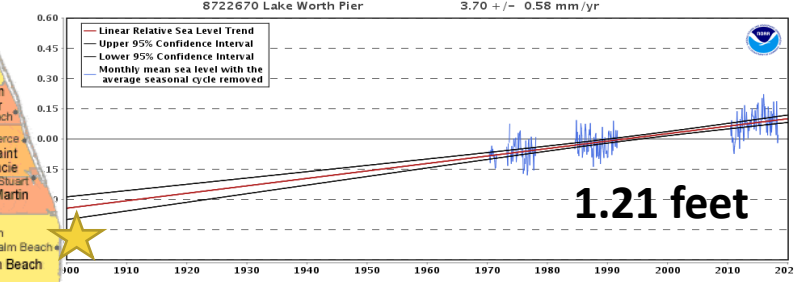
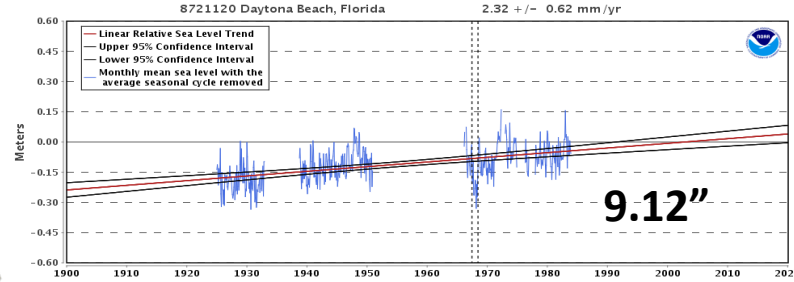
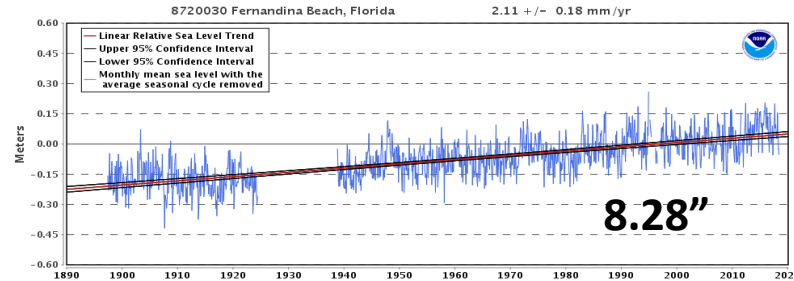
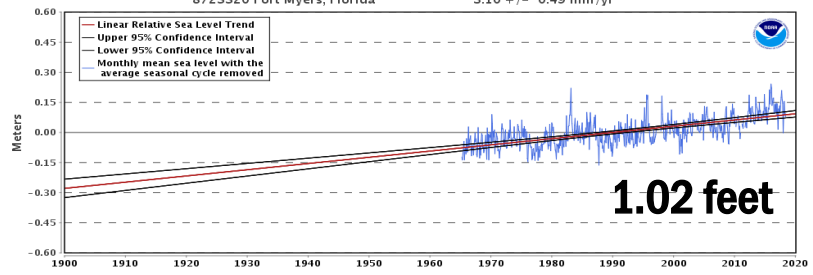
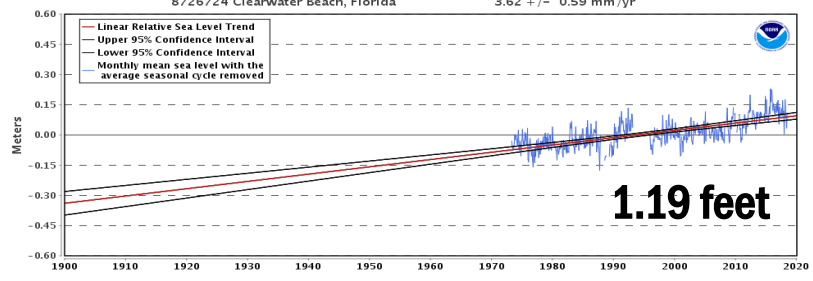
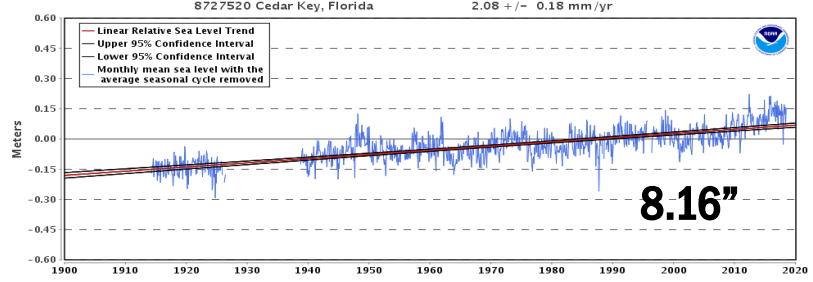
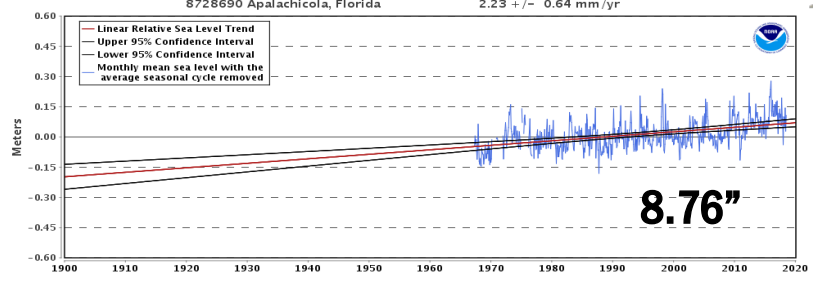
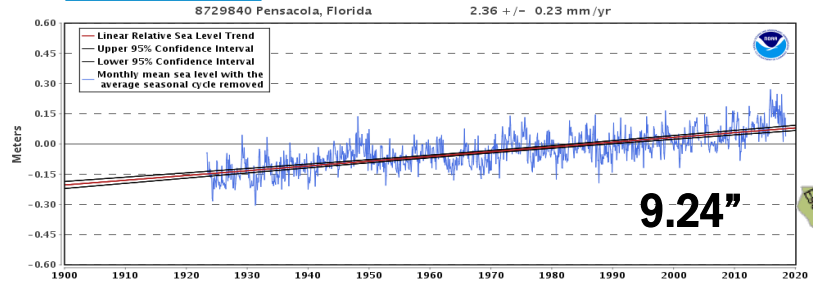






Miami Herald





**~ 100 years of sea level rise**



# Sea Level Rise Projections

- Observations from around the state indicate that sea level has risen about a foot in the last 100 years; 5 inches just since 2000.
- By 2040 that number could increase by 3 to 11 additional inches for a total of 8 to 16 inches since 2000.
- By 2070 sea level could be 14-39 inches higher than in 2000.

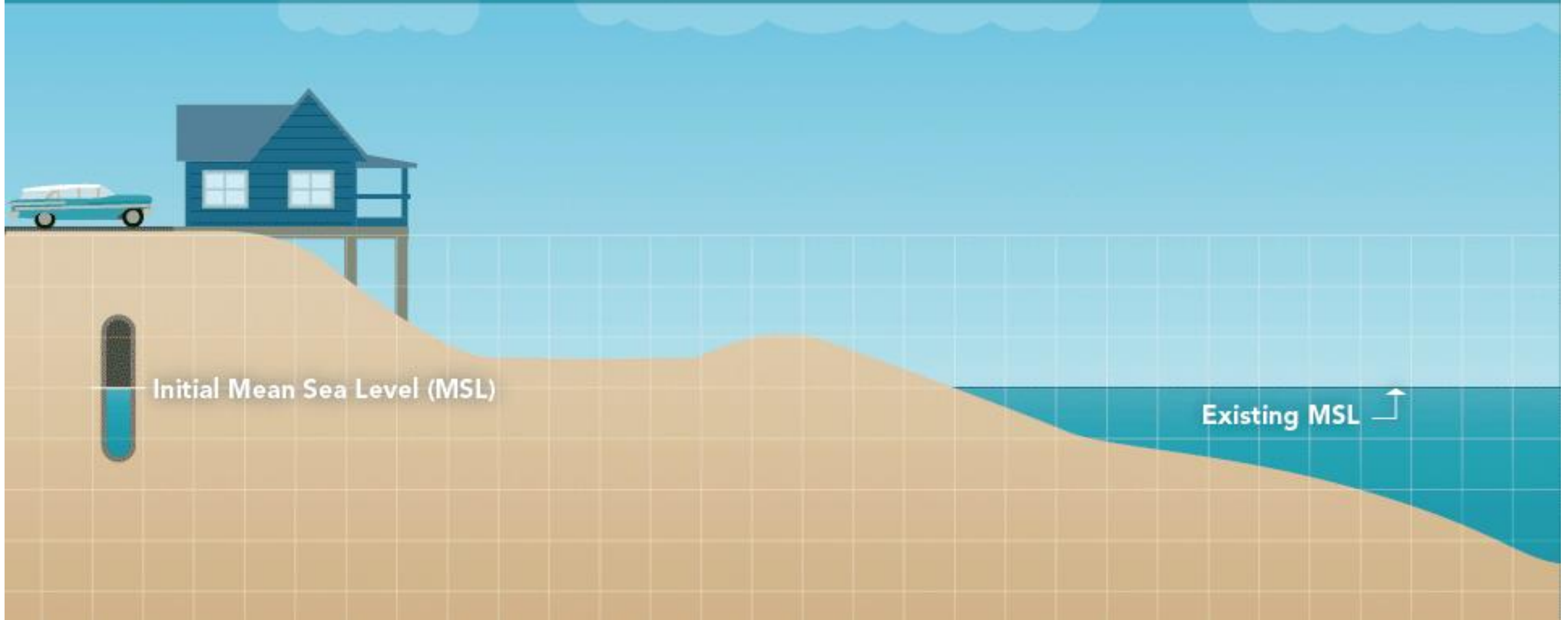






# Small Rise Causes Big Changes...

## Coastal Dynamics of Sea Level Rise (SLR)



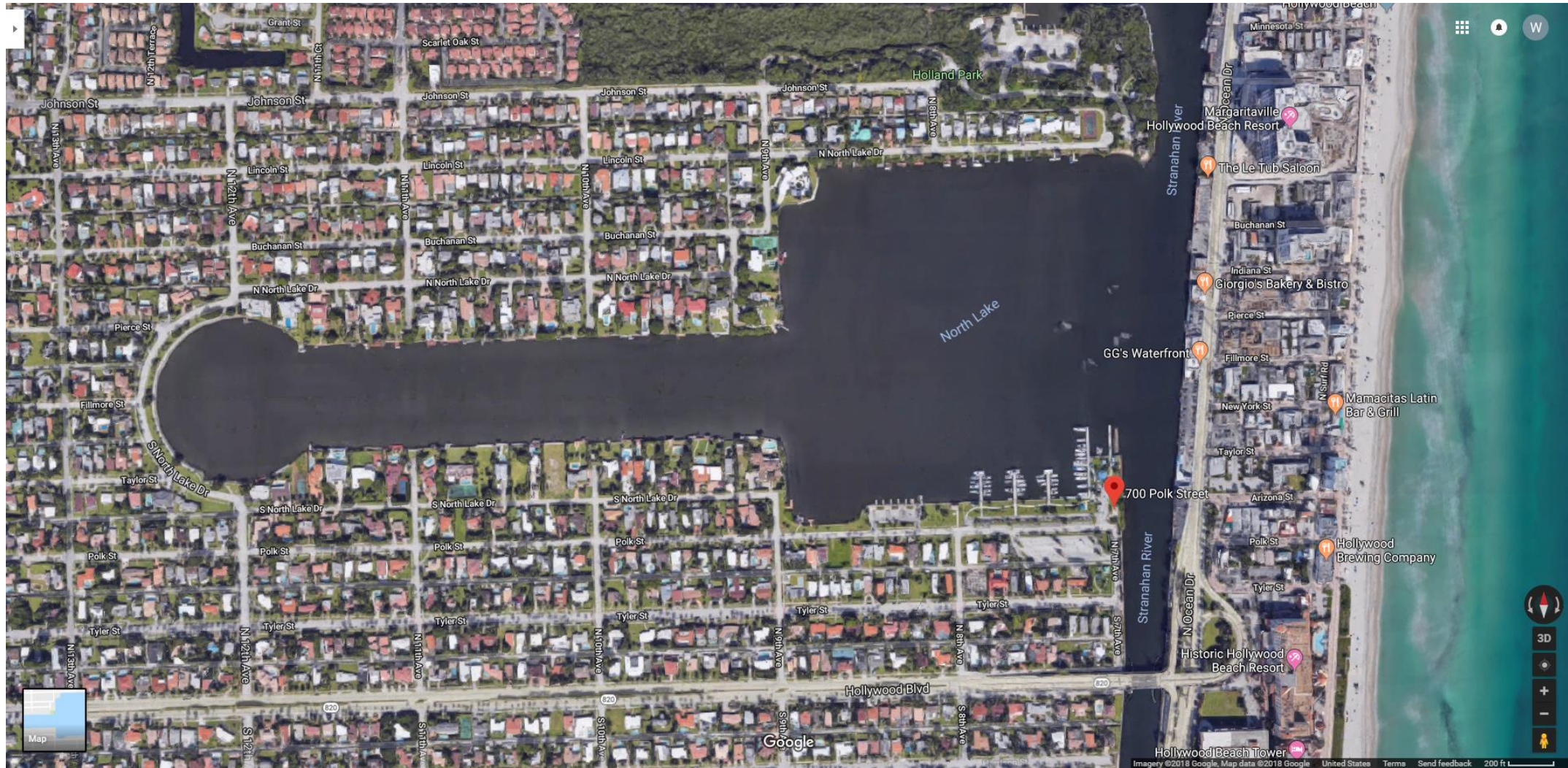


# ...and Exacerbates Existing Risks:

- Storm surge
- Nuisance flooding
- Erosion
- Salt-water intrusion
- Storm water management











# Legislative responses

2015

163.3178(2)(f)  
"Peril of Flood"

Select Year: 2017 Go

The 2017 Florida Statutes

Title XI  
COUNTY ORGANIZATION AND  
INTERGOVERNMENTAL RELATIONS

Chapter 163  
INTERGOVERNMENTAL  
PROGRAMS

[View Entire Chapter](#)

163.3164 Community Planning Act; definitions.—As used in this act:

(1) "Adaptation action area" or "adaptation area" means a designation in the coastal management element of a local government's comprehensive plan which identifies areas that experience coastal flooding due to extreme high tides and storm surge, and is vulnerable to the related impacts of rising sea levels for the purpose of prioritizing infrastructure needs and adaptation planning.

(6) In addition to the requirements of subsections (1)-(5), the comprehensive plan shall contain the following elements:

(g) For those units of local government identified in s. 380.24, a coastal management element appropriately related to the particular requirements of paragraphs (d) and (e) and the requirements of s. 163.3178(2) and (3). The coastal management element shall set forth principles, guidelines, standards, and strategies that shall guide the local government and program implementation with respect to the following objectives:

10. At the option of the local government, develop an adaptation action area designating those low-lying coastal zones that are experiencing coastal flooding due to extreme high tide storm surge and are vulnerable to the impacts of rising sea level. Local governments that develop an adaptation action area may consider policies within the coastal management element that are resilient to coastal flooding resulting from high-tide events, storm surge, flash flooding, storm surge, and related impacts of sea-level rise. Criteria for the adaptation action area may include, but need not be limited to, areas for which the land elevations are below, at, or near mean high water, which have a hydrologic connection to coastal waters, or which are designated as high-risk areas for storm surge.

2011

163.3177(6)(g)(10)  
Adaptation Action  
Areas

Select Year: 2017 Go

The 2017 Florida Statutes

Title XI  
COUNTY ORGANIZATION AND  
INTERGOVERNMENTAL RELATIONS

Chapter 163  
INTERGOVERNMENTAL  
PROGRAMS

[View Entire Chapter](#)

163.3178 Coastal management.—

(1) The Legislature recognizes there is significant interest in the resources of the coastal zone of the state. Further, the Legislature recognizes that, in the event of a natural disaster, the state may provide financial assistance to local governments for the reconstruction of roads, sewer systems, and other public facilities. Therefore, it is the intent of the Legislature that local government comprehensive plans restrict development activities where such activities would damage or destroy coastal resources, and that such plans protect human life and limit public expenditures in areas that are subject to destruction by natural disaster.

(2) Each coastal management element required by s. 163.3177(6)(g) shall be based on studies, surveys, and data; be consistent with coastal resource plans prepared and adopted pursuant to general or special law; and contain:

(f) A redevelopment component that outlines the principles that must be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise. The component must:

1. 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.

2. 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.

3. Identify site development techniques and best practices that may reduce losses due to flooding and claims made under flood insurance policies issued in this state.

4. 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.

5. Require that any construction activities seaward of the coastal construction control lines established pursuant to s. 161.053 be consistent with chapter 161.

6. 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.

(g) A shoreline use component that identifies public access to beach and shoreline areas and addresses the need for water-dependent and water-related facilities, including marinas, along shoreline areas. Such component must include the strategies that will be used to preserve recreational and commercial working waterfronts as defined in s. 342.07.

(h) Designation of coastal high-hazard areas and the criteria for mitigation for a comprehensive plan amendment in a coastal high-hazard area as defined in subsection (8). The coastal high-hazard area is the area below the elevation of the category 1 storm surge line as established by a Sea, Lake, and Overland Surges from Hurricanes (SLOSH) computerized storm surge model. Application of mitigation and the restriction of development and redevelopment activities pursuant to s.

Select Year: 2020 Go

The 2020 Florida Statutes

Title XI  
COUNTY ORGANIZATION AND  
INTERGOVERNMENTAL RELATIONS

Chapter 161  
BEACH AND SHORE  
PRESERVATION

[View Entire Chapter](#)

161.551 Public financing of construction projects within the coastal building zone.—

(1) As used in this section, the term:  
(a) "Coastal structure" means a major structure or nonhabitable major structure within the coastal building zone.

(b) "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.

(c) "SLIP study" means a sea level impact projection study as established by the department pursuant to subsection (3).

(d) "State-financed constructor" means a public entity that commissions or manages a construction project using funds appropriated from the state.

(e) "Substantial flood damage" means 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.

(2) Beginning 1 year after the date the rule developed by the department pursuant to subsection (3) is finalized and is otherwise in effect, a state-financed constructor may not commence construction of a coastal structure without:

(a) Conducting a SLIP study that meets the requirements established by the department;

(b) Submitting the study to the department; and  
(c) Receiving notification from the department that the study was received and that it has been published on the department's website pursuant to paragraph (6)(a) for at least 30 days. The state-financed constructor is solely responsible for ensuring that the study submitted to the department for publication meets the requirements under subsection (3).

(3) The department shall develop by rule a standard by which a state-financed constructor must conduct a SLIP study and may require that a professional engineer sign off on the study. The rule must be effective 1 year after the date it is finalized and applies only to projects not yet commenced as of the date the rule is finalized. The rule may not apply retroactively to projects that commenced before the date the rule is finalized. At a minimum, the standard must require that a state-financed constructor do all of the following:

(a) Use a systematic, interdisciplinary, and scientifically accepted approach in the natural sciences and construction design in conducting the study.

(b) Assess the flooding, inundation, and wave action damage risks relating to the coastal

2019

161.551  
Public financing of  
coastal construction,  
Aka SLIP

2020

380.093 Resilient  
Florida

CHAPTER 2021-28

Committee Substitute for  
Committee Substitute for Senate Bill No. 1954

An act relating to statewide flooding and sea level rise resilience; creating s. 380.093, F.S.; providing legislative intent; providing definitions; establishing the Resilient Florida Grant Program within the Department of Environmental Protection; authorizing the department to provide grants to local governments to fund the costs of community resilience planning, subject to appropriation; providing requirements for certain local government vulnerability assessments; requiring the department to complete a comprehensive statewide flood vulnerability and sea level rise data set and assessment by specified dates; specifying requirements for such data set and assessment; requiring the department to develop an annual Statewide Flooding and Sea Level Rise Resilience Plan and submit the plan to the Governor and Legislature by a specified date; specifying requirements for the plan; authorizing local governments, regional resilience entities, water management districts, and flood control districts to annually submit proposed projects to the department for inclusion in the plan; specifying requirements for such projects; specifying expenses that are ineligible for inclusion in the plan; requiring the department to implement a scoring system for assessing projects eligible for inclusion in the plan; limiting the total amount of funding that may be proposed for each year of the plan; requiring the Legislature, upon review and subject to appropriation, to approve funding for projects as specified in the plan; directing the department to initiate rulemaking by a specified date; authorizing the department to provide funding to regional resilience entities for specified purposes, subject to specified appropriation; creating s. 380.0933, F.S.; establishing the Florida Flood Hub for Applied Research and Innovation within the University of South Florida College of Marine Science for a specified purpose; providing duties of the hub; providing for an executive director; requiring the hub to submit an annual report to the Governor and Legislature by a specified date; amending s. 403.928, F.S.; requiring the Office of Economic and Demographic Research to include specified information relating to inland and coastal flood control in certain assessments; providing an effective date.

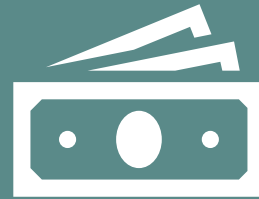


# Florida Resilient Coastlines Program



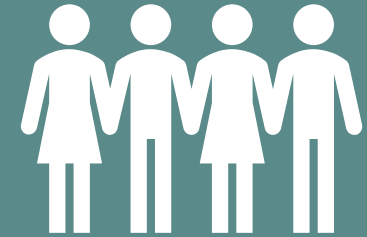
## RESOURCES

Florida Adaptation Planning  
Guidebook & Technical  
Assistance



## FUNDING

Resilience Planning &  
Implementation Grants



## COORDINATION

Quarterly Coastal  
Resilience Forum





# SLIP Study Tool

<https://floridadep-slip.org/Default.aspx>

The screenshot shows the homepage of the SLIP Study Tool website. At the top is a dark blue navigation bar with the Florida Department of Environmental Protection logo on the left, the text "Florida Department of Environmental Protection" in the center, and links for "Home", "Learn", "Contact", and "SLIP Map" on the right. Below the navigation bar is a large hero image of a waterfront residential development with a semi-transparent dark blue rounded rectangle overlaid in the center. The text inside the rectangle reads "Sea Level Impact Projection Study Tool" in white, with the subtitle "Determining risk for Florida coastline construction projects" below it. Underneath the hero image is a paragraph explaining the tool's purpose. At the bottom, there are three circular icons, each followed by a title and a short description, and a "Continue" link.




Florida Department of Environmental Protection

Home Learn Contact SLIP Map

## Sea Level Impact Projection Study Tool

Determining risk for Florida coastline construction projects

The purpose of the Sea Level Impact Projection (SLIP) Study Tool is to facilitate the conduction of SLIP studies for state-funded construction within the coastal building zone in accordance with Section 161.551, F.S.

-  **SLIP Studies**  
Learn how to create a SLIP study report using this website and see published reports.  
[Continue](#)
-  **Section 161.551, F.S.**  
Learn more about the Florida statute that mandates SLIP studies.  
[Continue](#)
-  **Adaptation**  
Learn about adaptation strategies for your construction projects.  
[Continue](#)

	Resilient Florida Grant Program		Comprehensive Statewide Flood Vulnerability Data Set and Assessment		Statewide Flooding and Sea Level Rise Resilience Plan	Regional Resilience Entities	Florida Flood Hub
	<i>Planning Grants</i>	<i>Resilience Projects</i>	<i>Data Set</i>	<i>Assessment</i>			
Activities	Provides funding for comprehensive plan amendments, Peril of Flood, vulnerability assessments, adaptation plans, and projects to adapt critical assets to the effects of flooding and sea level rise. Provides a methodology for completing vulnerability assessments.	“The nonrecurring sum of \$500,000,000 from the Resilient Florida Trust Fund is appropriated in Fixed Capital Outlay for the Resilient Florida Grant Program authorized in Senate Bill 1954.”	Provides for the collection and aggregation of data from vulnerability assessments that are existing , those completed from grant program, and to fill any gaps.	This section provides for the incorporation of the data collected for the data set and other analyses into a statewide sea level rise vulnerability assessment.	Statewide Flooding and Sea Level Rise Resilience Plan will be developed and submitted to the Governor and Legislature. The Plan will work on a 3-year rolling planning horizon and will consist of ranked projects that address the risks of flooding and sea level rise identified in the Statewide Flood and Sea Level Rise Vulnerability Assessment.	Provides funding to regional entities that are established by local governments to provide technical assistance on multijurisdictional projects.	Provides for the establishment of the Florida Flood Hub at USF's College of Marine Science. The Flood Hub will serve as the lead institution and will engage other institutions and partners to coordinate research and innovation around the flooding and sea level rise challenges facing the state.
Deadlines	Application portal opens July 1, 2021 Applications due September 1, 2021		Data Set due July 1, 2022	Assessment due July 1, 2023	Application portal opens July 1, 2021. Applications Due September 1, 2021. Plan due to EOG/Legislature December 1, 2021. Starting December 1, 2023, the Resilience Plan will be based on the Statewide Assessment.	Application portal opens July 1, 2021. Applications due September 1, 2021	Annual Report due July 1, 2022
Annual Funding							
FY 21-22	\$20,000,000	\$500,000,000	\$4,000,000			\$2,000,000	
FY 22-23 (anticipated)	?	?	?		Up to \$100,000,000	?	





# Thank you!

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