

## Resources Related to Sea Level Rise and Climate Change

### **NOAA Sea Level Rise Viewer**

A very easy to use tool that provides an overview of the scope of impacts associated with SLR between 1 and 6 feet. An overview of the tool, support information, and introductory videos can be found at:

<http://coast.noaa.gov/digitalcoast/tools/slr> .

Or, launch the viewer directly at: <http://coast.noaa.gov/slr/> .

### **Surging Seas – Sea Level Rise Analysis by Climate Central**

Of particular interest is their tool called “Mapping Choices” that shows predicted sea level rise as a function of carbon dioxide levels. You can see how much sea level rise is “locked in” for various levels of carbon dioxide reduction (i.e., none, minor, moderate, or extreme carbon cuts).

<http://sealevel.climatecentral.org/>

### **Skeptical Science – A Layman’s Guide to the Peer-Reviewed Science of Climate Change**

An incredible educational resource about climate change that is organized around the most-used climate “myths” you may encounter. Is it the sun? Do scientists disagree? Click through the many arguments against climate change and read basic, intermediate, or advanced explanations (you choose!) of the topic all based on peer-reviewed scientific literature.

<http://skepticalscience.com/>

### **Regional Modeling and Planning Resources**

*SLR Modeling along the Gulf Coast - Gulf Coast Prairie Landscape Conservation Cooperative*

<http://gulfcoastprairiebcc.org/science/science-projects/evaluating-sea-level-rise-modeling-for-the-gulf-of-mexico-coast/>

*Tampa Bay Regional Planning Council - One Bay Resilient Communities*

[http://www.tbrpc.org/onebay/working\\_group.shtml](http://www.tbrpc.org/onebay/working_group.shtml)

*Northeast Florida – Public/Private Regional Resiliency (P2R2)*

<http://www.rcinef.org/P2R2.html>

*SLR Modeling and Planning Efforts for St. Johns County*

[www.planningmatanzas.org](http://www.planningmatanzas.org)

*Southeast Florida Climate Compact*

<http://www.southeastfloridaclimatecompact.org/>

*Summaries of Model SLR Model Results for the National Wildlife Refuge System*

<http://www.fws.gov/refuges/planning/seaLevelRiseLinks.html>

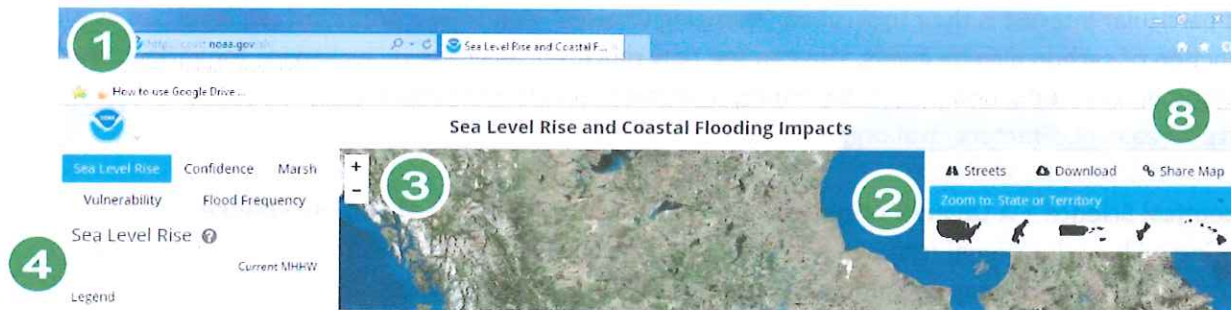
*Florida Sea Grant – Climate Change and Planning Information*

<https://www.flseagrant.org/climatechange/>

## Potential Impacts of Sea Level Rise on Florida's Coasts

Today we are going to learn about a tool that the National Oceanographic and Atmospheric Administration (NOAA) has created that allows us to view the potential impacts of sea level rise on our coasts. It is located on the “Digital Coast,” a NOAA-sponsored website with information and tools to help communities address coastal issues, including sea level rise ( <http://coast.noaa.gov/digitalcoast/> ).

### Sea Level Rise Viewer



1. Open The NOAA Sea Level Rise Viewer by going to <http://coast.noaa.gov/slr/>.
2. In the box on the upper right, click “Zoom to: State or Territory” and select Florida.
3. Left-click (and hold) to drag the map to the area of interest. You can zoom in or out by using the scroll wheel on your mouse or the + / - icons in the upper left corner of the map.
4. In the top of the column on the left side of the screen you should see “Sea Level Rise” written just above a slider. To the right of the slider it should say “Current MHHW.” This is the height of the water using the average of the higher high tides each day based on recent data. You can move the slider to view potential effects of sea level rise at 1-foot increments up to 6 feet.
5. While zoomed into a coastal area you are familiar with (maybe a local nesting area), use the slider to visualize the changes as you go from current conditions to 6 feet of SLR.
6. Make note of significant changes. Things to look for include:
  - a. Loss of nesting habitat
  - b. Loss of foraging habitat
  - c. Loss of roosting habitat
  - d. Islands or spits that lose area or submerge
  - e. Breaches or loss of connectivity between areas
7. Now select one area of interest and move the slider to show 3 feet of SLR.
8. Click the “Share Map” button in the top-right corner, then choose to send your map to your Facebook, Google+, or Twitter account!
9. If you would like to save maps to print, it depends on your operating system. For Windows, a good option is to use the Snipping Tool. Press the Windows key (or click the start button) and type snip – it should be the first item in the list. Click enter to run Snipping Tool, then use the mouse (left-click and hold) to draw a rectangle around your map. Use File → Save as to save your map. On Apple computers, use Shift-Command-4 to grab an image from a portion of your screen.