

# SEA LEVEL SCENARIO SKETCH PLANNING TOOL

**Website:** [sls.geoplan.ufl.edu](http://sls.geoplan.ufl.edu)

## Tool Synopsis:

The University of Florida GeoPlan Center, with funding from the Florida Department of Transportation, developed a planning tool to assist in the identification of transportation infrastructure potentially vulnerable to inundation from sea level rise (SLR). The tool uses the U.S. Army Corps of Engineers (USACE) sea-level change methodology to create projections of future SLR. Regional projections of SLR were generated at three rates (USACE low, intermediate, and high) in 10-year increments (2040 – 2100) using local NOAA tide gauge data. The projections were then mapped using a 5-meter Digital Elevation Model (DEM) compiled from Lidar and best available data. The mapped inundation projections were intersected with transportation GIS layers to identify exposed infrastructure.

## Tool Features:



**Interactive Maps of Sea Level Rise and Affected Infrastructure:** Map Viewers display scenarios of SLR inundation and affected transportation infrastructure for various time periods (2040, 2060, 2080, 2100), three rates of SLR (Low, Intermediate, High), and two tidal datums (Mean Sea Level “MSL” and Mean Higher High Water “MHHW”).



**GIS Data Downloads:** Publicly available GIS Data for download include: Layers of SLR Inundation (every decade between 2040-2100) and Affected Infrastructure (2040, 2060, 2080, and 2100).



**SLR Calculator Add-In for ArcMap:** ArcMap add-in tool for creating custom SLR inundation layers using the USACE sea-level change methodology and NOAA tide gauge data. The SLR calculator can be downloaded with or without a 5-meter DEM dataset. Software Requirements: ESRI ArcGIS Desktop 10.2.2 or 10.3.1 with Spatial Analyst.

## Features in Development (*for public release in early 2017*):

- New Map Viewer Interface
- Addition of NOAA upper curves
- Additional map layers on storm surge

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