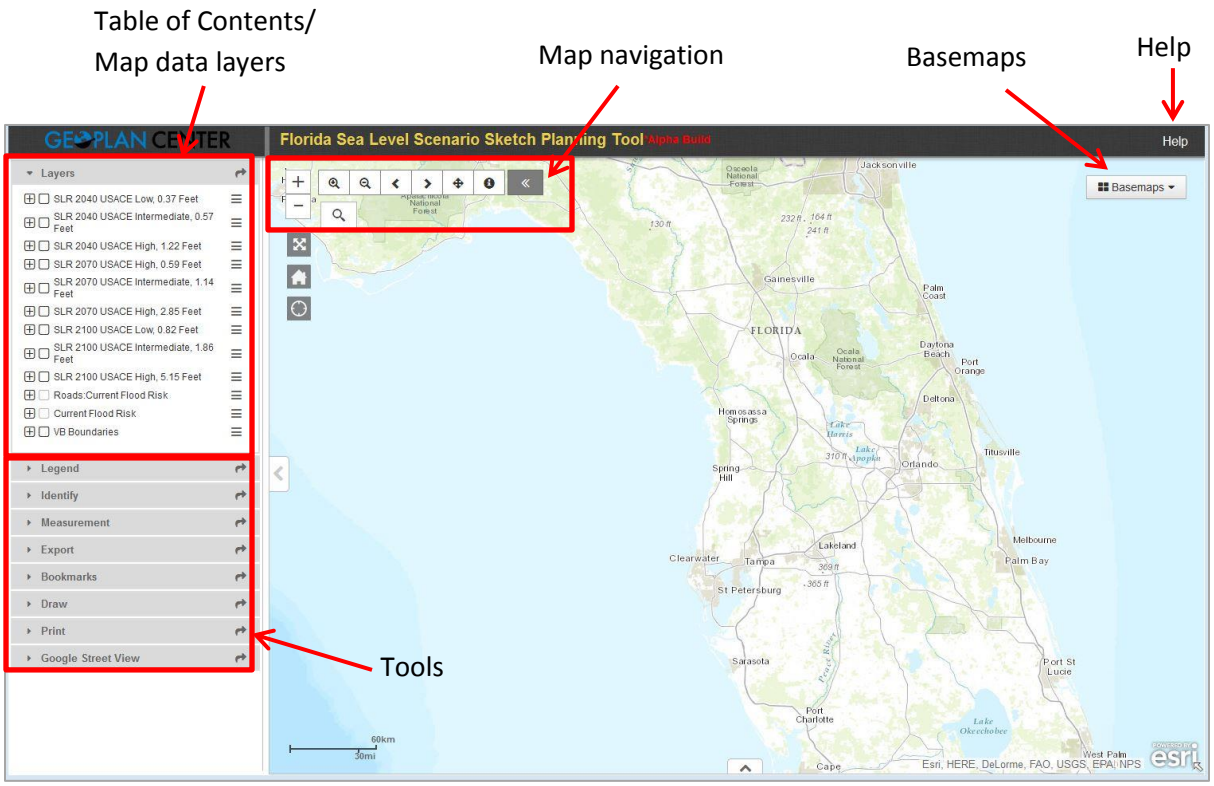
Map Viewer Training Exercises: Sea Level Scenario Sketch Planning Tool

Access Map Viewer from this page:
http://sls.geoplan.ufl.edu/toolsbuffet/

Exercise 1: Get Oriented with the Map



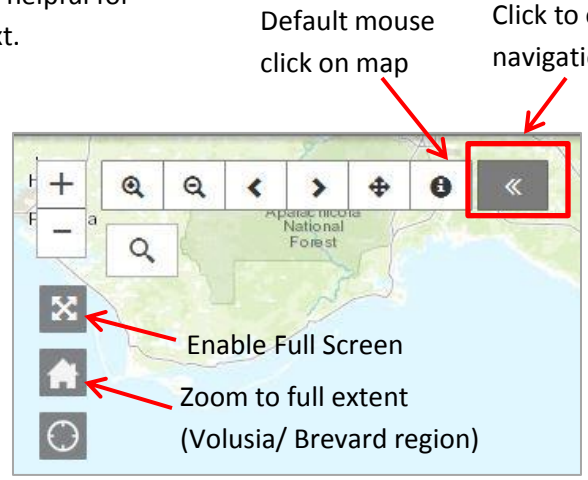
Step 1: Change the basemap

Try a few basemaps. Changing the basemap is helpful for visualization of data and for geographic context.

Step 2. Explore Map Navigation Tools

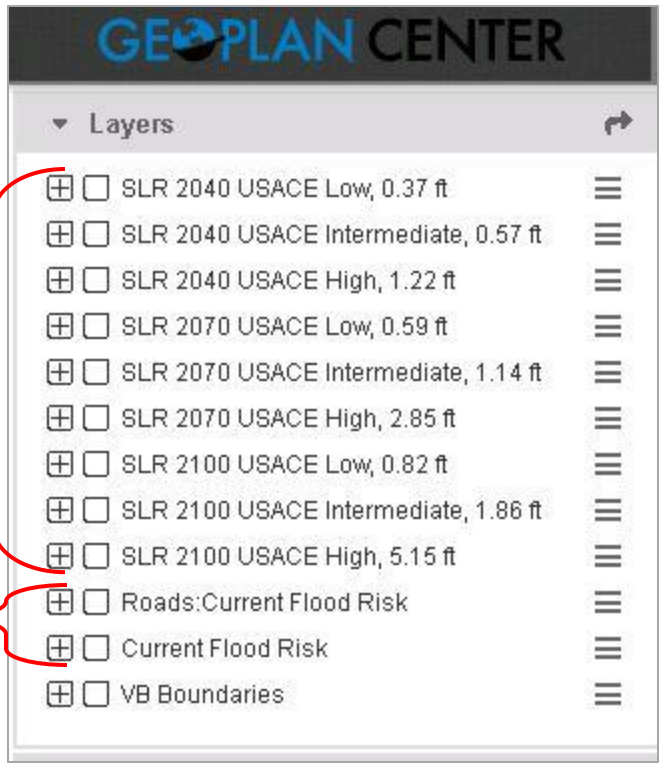
Click on arrows to open navigation.
The default mouse click is Identify.
If you drag the mouse, the map will pan.

The Help link in the top right of the entire map viewer contains help on more map navigation controls.



Exercise 2: Explore the Data

For this exercise, you will need the printed handout– "GIS Data Layers Guide"



SLR scenarios / Future Flood Risk

There are nine SLR scenarios in the map viewer. They cover three time periods (2040, 2070, 2100) and three projections of SLR.

Each scenario folder has 7 map layers, which show potential future flood risk under SLR scenarios.

Current Flood Risk layers

There are two folders of current flood risk layers, including FEMA flood hazard areas, Category 1-5 Storm Surge Zones, and roads currently in these areas.

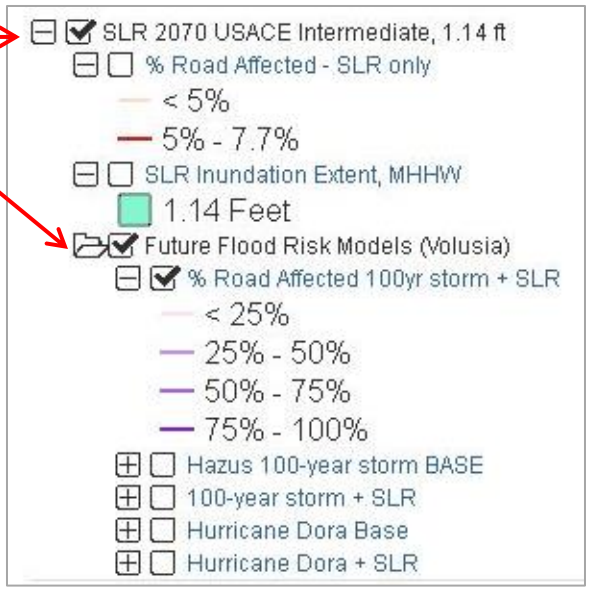
Boundaries

Contains county boundaries and Digital Elevation Models for Volusia & Brevard.

STEP 1. Explore a SLR Scenario

- Choose a scenario: Check the box next to the scenario name to expand the folder.
- First, turn on the affected roads map layer: Check the box next to % Road Affected.
- Zoom to an area of interest or area with affected infrastructure.
- You may need to change the basemap to better see the affected roads.
- Turn on the SLR Inundation Extent to see the geographic extent of flooding from SLR under this scenario.

STEP 2. Explore Future Flood Risk Models (Volusia County only)



- First, turn off the SLR layers from Step 1 (but keep top level scenario checked)
- Next, check the box next to "Future Flood Risk Models" to expand the folder.
- Turn on the affected roads map layer: Check the box next to % Road Affected 100-yr storm + SLR.
- Zoom to an area of interest or area with affected infrastructure.
- You may need to change the basemap to better see the affected roads.
- Hazus 100-year storm surge models:
    - Check on "Hazus 100-year storm BASE" to view the extent and depth of the 100-year storm surge without SLR.
    - Check on "100-year storm + SLR" to view the extent and depth of future 100-year storm surge under this scenario of SLR.
- Hurricane Models
    - Check on "Hurricane Dora Base" to view the modeled historic surge.
    - Check on "Hurricane Dora + SLR" to view the modeled historic surge under this scenario of SLR.

Exercise 3: Compare Two SLR Scenarios

STEP 1. Choose two scenarios to compare.

Suggestions:

- Compare across time periods with the same projection (Ex: 2040 High and 2070 High) OR
- Compare different projections during same time period (Ex: 2100 Low and 2100 High)

STEP 2. Turn on the scenarios.

- Check the box next to the first scenario name to expand the folder.
    - Turn on the affected roads map layer and the SLR Inundation layer
- Check the box next to the second scenario name to expand the folder.
    - Turn on the affected roads map layer and the SLR Inundation layer

- Zoom to an area of interest or area with affected infrastructure. (You may need to change the basemap to better see the affected roads.)
- In this example, we are comparing 2070 Low SLR versus 2070 High SLR.
- Click on the three lines icon to the right of the top scenario.
- Click on "Layer Swipe" → then either "Horizontal" or "Vertical

- You should now see a bar across the map which you can slide up and down to "swipe" in between the two visible scenarios.
- When you are finished comparing, click "Exit Layer Swipe".

Exercise 4: Create a Map of Affected Roads

- Choose a scenario
- Turn on/ display one or more map layers
- Zoom into an area of interest
- Scroll down to the "Print" tool and click once to open
    - Enter a title (suggestions: Place, Time period, Projection)
    - Choose format
    - Choose Layout/ paper size
- Click "Print"
- When the map is complete, it will display it for download/opening.