

Quick Guide - Area of Interest Tool Resilience Report

OVERVIEW

The Resilience Report is an online tool that summarizes analyses of flood exposure for a user-specified area of interest (AOI). The report serves as a screening tool to evaluate for potential impacts from multiple flood types.

The tool currently focuses primarily on coastal flooding, with the exception of the FEMA flood hazard area data, which extends across the entire State.

REQUESTING THE RESILIENCE REPORT

The Resilience Report is requested from the Area of Interest (AOI) Tool in the Environmental Screening Tool (EST) Map Viewer.

1. **Log into the EST and open map viewer:**
<https://www.fla-etat.org/est/secure/>
2. **Open AOI Editor** > click “Create” to draw a new AOI.
3. **Enter Project Information:** project name, type, description, and keep until date (how long to save the results). For Type, choose “Other Area of Interest”.
4. **Draw Feature(s).** Click “Add Feature” to begin drawing the desired feature to be analyzed. Draw a point, line, or polygon on the map, and indicate a buffer amount (optional) around each feature.
 - a. Draw one or more features. By default, each feature is analyzed separately. Optionally, features can be grouped into an “analysis area” to analyze together as a single analysis area.

Note: Currently, inland flood data is limited, so inland areas will show less results.
 - b. **Request Resilience Report.** When done drawing, select checkbox for “Resilience Report” under “Report Options” and then click “Run”.
 - c. **Wait for the Results.** Analyses will take about 1-3 minutes to run, depending on the number and size of features drawn. Features covering larger geographic areas will take longer to run.

Need help drawing an AOI? See the:
[AOI Editor Tool Quick Guide](#)

ACCESSING THE REPORT

Two main ways to access the results report webpage:

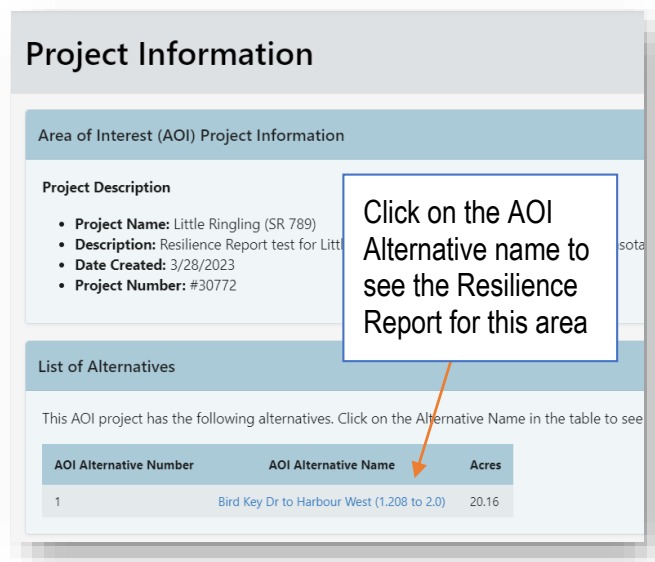
- In AOI Tool Editor → a link will appear when the analyses are complete.
- In [EST AOI Dashboard](#) → Click on AOI Project > Choose AOI Details > Link under “Resilience Report”

There are three main pages in the Resilience Report, described below:

PROJECT INFORMATION PAGE

This is the default landing page for the AOI Project. This page includes information the user submitted about the project and a list of AOI alternatives (or features) associated with the project.

The resilience report display results for one alternative at a time, unless they are grouped into an analysis area.



PROJECTS LIST PAGE

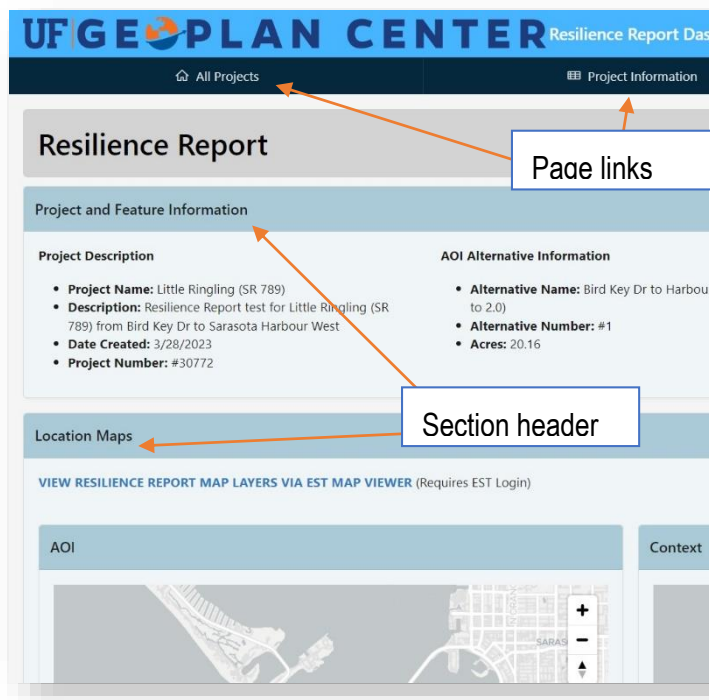
Includes a list of all projects for your organization that have requested a resilience report. A link to this page is available from the Resilience Report page. There is a search function to find the project of interest.

For help with EST Map Viewer or AOI Tool, contact the FDOT OEM Help Desk at help@fla-etat.org or 850-414-5334.

For questions about the Resilience Report data, please contact sls@geoplan.ufl.edu

RESILIENCE REPORT PAGE & DATA SOURCES

Contains the results of overlay analyses for the AOI:



Project and Feature Information

- **Project Description:** project name and description (submitted by user), date created and project number.
- **AOI Alternative Information:** alternative information (name, number, and size in acres).
- **Region and Location Information:** county, MPO, WMD, and FDOT District where the project is located.

Location Maps

Contains an embedded map zoomed into the AOI alternative and a context map showing the overview location. Also contains a link to the EST Map Viewer, where the user can view and interact with the Resilience Report data layers.

Coastal Region Information

Indicates whether the AOI alternative intersects with:

- Coastal Building Zone (CBZ): number of acres located in CBZ.
- Coastal Construction Line (CCCL): number of linear feet intersecting CCCL.

For projects in the CBZ, a Sea Level Impact Projection (SLIP) Study may be required (Section 161.053, F.S.).

Sea Level Rise – Tide Station Information

Displays the tide station located closest to the AOI alternative, along with the current MSL and MHHW datum values, referenced to NAVD88 and the current National Tidal Datum Epoch (NTDE 1983-2001).

Sea Level Rise Scenarios

Includes SLR values from two sources:

1. NOAA 2022 SLR Scenarios – Feet (NAVD88) by Decade

- Table of SLR values, representing median future MSL in feet (referenced to NAVD88) for each decade between 2040 – 2100 and for each NOAA 2022 SLR scenarios (Low, Intermediate-Low, Intermediate, Intermediate-High, and High). Baseline year is 1992.
- Data obtained from [NOAA](#).
- For full documentation, see [2022 Technical Report](#)

2. NOAA 2017 SLR Values – Feet (NAVD88) by Decade

- Table of SLR values, representing future MSL in feet (referenced to NAVD88) for each decade between 2040 – 2100 and for each of the six NOAA 2017 SLR scenarios (Low, Intermediate-Low, Intermediate, Intermediate-High, High, and Extreme). Baseline year is 1992.
- Data obtained from [U.S. Army Corps of Engineers Sea Level Change Calculator](#)
- For full documentation, see [2017 Technical Report](#)

Sea Level Rise Scenarios (Charts)

Visual representation of SLR values in previous tables. The NOAA 2022 SLR Scenarios (feet by decade) are shown on the left, while the NOAA 2017 SLR Scenarios (feet by decade) are shown on the right. These values are referenced to NAVD88 and represent future MSL values.

Sea Level Rise Exposure analysis (NOAA 2017 only)

Exposure analysis using the NOAA 2017 SLR inundation layers from the [Sea Level Scenario Sketch Planning Tool](#).

Summary of AOI Exposure to NOAA 2017 Scenarios
Acres and percentage of AOI alternative exposed to SLR inundation under three scenarios and decades:

- NOAA2017 Intermediate-Low: 2040, 2070, 2100
- NOAA2017 Intermediate: 2040, 2070, 2100
- NOAA 2017 Intermediate-High: 2040, 2070, 2100

Below the table are three charts showing the depth of permanent flooding under the intermediate-high scenario at

2040, 2070, and 2100. *Note:* Only NOAA 2017 scenarios are included, due to current data availability.

Current High Tide Flooding

Contains data on high tide flooding (HTF), also known as nuisance, tidal, or sunny-day flooding. HTF is recurrent, temporary flooding that occurs during high tides and is expected to increase in frequency with rising sea levels.

NOAA delineates three HTF levels: minor, moderate, and major, using standard thresholds above the daily average high tide (mean higher high water):

- Minor HTF includes when tides exceed approximately 0.55m (1.8ft),
- Moderate HTF when tides exceed 0.85m (2.8ft)
- Major HTF when tides exceed 1.2m (3.9ft).

Summary of AOI Exposure to Current High Tide Flooding

Table showing acres and percent of each AOI flooded under each HTF level. Data downloaded from [NOAA](#).

High Tide Flood Days per Year

Table showing the number of observed HTF days for each level during the prior year.

Acres Flooded – All Levels

Bar chart showing acres flooded under each HTF level.

Percent of Area Impacted by Current High Tide Flooding

Pie charts displaying percent of AOI alternative exposed to each HTF level. The percent flooded is shown in blue and percent not flooded is shown in green. Open the EST Map Viewer link (in “Location Maps” section) to see where the AOI will be impacted by each HTF level.

Projected Annual Days of Minor High Tide Flooding by Decade and NOAA 2022 SLR Scenario

Projected annual days of *minor* HTF per decade and under each NOAA 2022 SLR scenarios. Projections can be used to understand how SLR will increase the frequency of tidal flooding events. Used in combination with percent of area impacted by current minor HTF, users can see what areas will be impacted by temporary minor HTF flooding and how often the flooding will recur. Only includes projections of minor HTF (not moderate and major).

Data from: [NOAA CO-OPS Derived Product API](#) v0.1.

Storm Surge Zones

Contains an overlay analysis of storm surge zones by hurricane category (1-5). Zones obtained from the Florida Division of Emergency Management and developed by

[Florida's Regional Planning Councils](#) (August 2021). The data was derived from National Hurricane Center SLOSH model runs and provides a worst case snapshot of surge for each hurricane category (1-5).

Note: this data represents current storm surge and does not account for surge under future SLR conditions.

FEMA Flood Zones

Results of an overlay analysis of the 1% annual chance flood event (“100-year”) and 0.2% annual chance flood event (“500-year”), as defined by the Federal Emergency Management Agency (FEMA). Data from FEMA’s National Flood Hazard Layer and downloaded from [Florida Geographic Data Library DFIRM_FLDHAZ](#) layer.

Note: this data represents current flood hazard areas and does not account for future climate conditions.

SAVING THE REPORT

Option to download a PDF version of the report. Download button located in top right corner of Resilience Report page. Clicking the button will first create a “PDF Preview” (*may take up to 10-30 seconds).

REQUESTING ACCESS TO THE TOOL

FDOT staff or consultants with FDOT IT accounts

- District users request access through your FDOT District ETDM Coordinator
- Central Office users request through Statewide ETDM Coordinator or contacting ETDM Help Desk
- Once approved by the ETDM Coordinator, submit an AARF selecting the EST – AOI Only application

MPO and FDOT consultants without FDOT IT accounts

- Request access through your MPO or FDOT Project Manager
- Your Project Manager can then request through the appropriate ETDM Coordinator
- The ETDM Coordinator can then email authorization to the ETDM Help Desk

MPO staff

- Request access through MPO ETDM Coordinator
- If MPO ETDM Coordinator position is vacant, contact the FDOT District ETDM Coordinator
- The ETDM Coordinator can then email authorization to the ETDM Help Desk

ETDM Contacts List:

<https://etdmpub.fla-etat.org/est/index.jsp?url=contacts.jsp>