

Countywide Vulnerability Assessment Phase II

PROJECT OUTLINE

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RESILIENT FLORIDA PLANNING GRANT



PROJECT PURPOSE

The project will incorporate the necessary steps to meet the full requirements of a vulnerability assessment, including adding all critical assets outlined in 380.093 (F.S.) and modeling Intermediate-High sea level rise, rainfall-induced, and compound flooding scenarios. The project will also expand the exposure analysis completed in Phase I to include more public and private assets, study impacts to infrastructure, identify fiscal risks, and identify policy and regulatory actions to assist in updating the comprehensive plan.

PROJECT COMPONENTS & OUTCOMES

TASK 1: Outreach & Stakeholder Input

Inform and seek input from the community and BOCC (including internal staff) on the data collection efforts, modeling approach, modeling output, findings, and recommendations.

- Kick-Off Meetings
- General Workshops/Meetings
- Meetings with Elected Officials
- Other Updated online communications tools, including Storymap development

TASK 2: Peril of Flood Comprehensive Plan Amendments

The goal of this task will be to bring the County more fully into policy compliance with the Peril of Flood mandate.

- Draft resolution to update the County's Comprehensive Plan to create a redevelopment component of the Comprehensive Plan that addresses the requirements of the Peril of Flood mandate
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- Draft ordinance amending land development code as required to ensure consistency with updated comprehensive plan.
- Draft resolution and presentation to deliver to Pinellas County BOCC.

TASK 3: Critical Asset Inventory

The goal of this Task is to compile an inventory of all critical assets, including regionally significant assets, owned or maintained by the County, as outlined in s. 380.093, F.S.

- GIS files with locations of critical assets owned or maintained by the county/municipality and appropriate metadata identifying the asset class as defined in 380.093(2) 1-4

TASK 4: Exposure Analysis

The goal of this task is to identify the depth of water caused by various flooding and sea-level rise across Pinellas County and illustrate the spatial extent of flooding using scenarios and standards outlined in s. 380.093, F.S. Updated modeling effort will be performed focusing primarily on the Peril of Flood requirements that have not yet been included within the County's previous vulnerability work.

- A summary report of the process and methodology of the map development.
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- A digital GIS version of the bathymetry and topography data for the Pinellas County domain.
- Other Historical storm data, SLR data, precipitation data, and river flow data will be presented in tabular form.
- GIS shapefiles, file geodatabase, or ArcGIS Pro package format of the nuisance tide flood maps (spatial information on the number of expected flood days).
- GIS shapefiles, file geodatabase, or ArcGIS Pro package format of the 100 year coastal flood maps including still water level, wave crest and wave characteristics.

TASK 5: Vulnerability Assessment

Prepare the Updated Vulnerability Assessment to include new modeling, list of critical and regional assets, recommendations, and map series.

- Map Series
- Draft Vulnerability Assessment Update Document
- Final Vulnerability Assessment Document

TASK 6: Project Management and Coordination Meetings

Coordinate with Project Lead staff and other project participants as necessary on data collection, BOCC briefings and Public Workshops.

- Agendas and meeting minutes for 4 meetings

TASK 7: Preparation of Metadata

The goal of this task is to prepare the metadata for the project to meet DEP specifications.

- Delivery of metadata files

TASK 8: Adaptation Action Plan

Based on the exposure and sensitivity analysis completed in previous tasks as part of the vulnerability assessment, the main goal of this task is to develop a set of strategic protection,

accommodation and retreat tools that will present the County with a dashboard of adaptation alternatives to be analyzed and prioritized for the critical assets.

Under this task, the County will develop a set of conceptual adaptations strategies, in compliance with the Peril of Flood requirements and aligned with FDEP's Sea Level Impact Tool's adaptation strategies , which will serve the County as a strategic guidance document for planning. This plan will integrate natural as well as engineered alternatives and will serve as strategic guidance to stakeholders to understand and prioritize these alternatives for the County to move forward.

- A list of recommended projects, policies, and practices with the order of magnitude costs to be considered for funding and implementation
- Suggested updates to Pinellas County's SLR Tool for Capital Planning