

BREVARD COUNTY VULNERABILITY ASSESSMENT

PROJECT DESCRIPTION

Initiated as an extensive field data collection effort for Brevard County, the project was expanded with a Resilient Florida Planning Grant to complete a comprehensive Vulnerability Assessment (VA) of unincorporated Brevard County and eight cities and towns therein. The initial field effort located and collected elevation data from thousands of stormwater outfalls to the Indian River Lagoon (IRL). With the additional funding, AEI acquired all the critical assets as defined in F.S. Section 380.093 from the County and each of the 8 municipalities and identified appropriate existing flood scenarios to assess their risk to sea level rise, storm surge and rainfall induced flooding. There were gaps in the coverage of existing flood scenario data that are being filled through various modeling efforts, including new H&H modeling for some cities and re-defining and running existing models with modified boundary conditions. The AEI team is implementing community outreach to inform (and engage) the public and facilitating inter-departmental communications to confirm asset inventories and reach consensus on priority assets.

This coordinated approach to municipal and county resiliency planning provides a comprehensive analysis of the critical assets most at risk from flooding throughout the County and 8 municipalities. Since flooding spans jurisdictional boundaries, the process provides a platform for multi-jurisdictional partnerships to seek grants and complete regional projects to mitigate flooding risk. In addition, the flooded areas and assets identified as priority in the VA may be eligible for funding through the Resilient Florida Implementation Grant program to build regional projects.

OUTCOMES

The project produces FDEP-approved VA reports and asset and flood data geodatabases for the county and all eight cities and towns to help guide resilience and capital improvement planning.

PROJECT DETAILS




PROJECT CLIENT:

Brevard County

PROJECT LOCATION:

Brevard County, FL

SERVICE LINE AREAS:

-  Coastal Management & Planning
-  Engineering & Water Resources
-  Geospatial Services

EXPERTISE:

- Flood Risk Exposure Modeling
- Flood Risk Sensitivity Modeling
- H&H Modeling
- Asset Management
- Resilience Planning
- Community Outreach
- Public Engagement