

Planning for Florida's Rising Tides

Project Location

Guana Tolomato Matanzas National Estuarine Research Reserve, Florida

Project Lead

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Targeted End Users and Products

- [Introductory video](#)
- [Project final report](#)
- [Planning for Sea Level Rise in the Matanzas Basin: Opportunities for Adaptation, 2015](#)
- [Matanzas Basin GIS database: to request GIS data, contact the GTM coastal training coordinator, Tina Gordon](#)
- [Matanzas Basin GIS database guide](#)
- [Participatory public outreach games for sea level rise](#)
- [Surveys for role play games](#)

Project Partners

- [Guana Tolomato Matanzas Reserve](#)
- [City of St. Augustine](#)
- [Florida Sea Grant](#)
- [Matanzas Basin Steering Committee](#)
- [Northeast Florida Sea Grant](#)
- [University of Florida](#)
- [University of Oklahoma College of Architecture, Division of Regional and City Planning](#)

About the Science Collaborative

The National Estuarine Research Reserve System's Science Collaborative supports collaborative research that addresses coastal management problems important to the reserves. Learn more at www.nerrs.noaa.gov.

Overview

The beautiful beaches, dramatic landscapes, and ocean-side towns of coastal Florida shine like beacons for millions of sunbirds, snow birds, and “stayers.” As sea levels rise and extreme storms become more frequent it is increasingly challenging for coastal communities to protect the infrastructure and habitats that are the foundation of the state's quality of life. Planning for these challenges requires the engagement of diverse stakeholders who must balance competing needs for water resources now, and in an uncertain future. In response, the Guana Tolomato Matanzas reserve and the University of Florida led a team to pilot an approach for stakeholder-driven planning that communities throughout Florida can use to prepare for sea level rise.

Project Benefits

- The guidebook, modeling results, maps, development scenarios, and adaptation strategies created by this project are being used by Matanzas Basin communities to inform decisions about development, infrastructure, and conservation projects.
- Information from this project has prompted several communities to plan to revise local policies and the Northeast Florida Regional Council to develop a sea level rise planning initiative.
- The team leveraged the national system of the reserves to share the tools it developed; while the technical information may not be directly relevant for other regions, the project's approach serves as a model for communities looking to engage stakeholders in the tough conversations about planning for sea level rise.

Project Approach

The Guana Tolomato Matanzas reserve collaborated with researchers at the University of Florida to engage diverse stakeholders in developing a model process for sea level rise planning.

- **Technical knowledge:** Local scientists provided the technical information needed for adaptation planning, including storm surge modeling, mapping products, and development scenarios.
- **Stakeholder engagement:** Landowners, government officials, business owners, and other stakeholders participated in a steering committee to provide input on the planning scenarios, communication products, and workshop formats.
- **Information sharing:** To share results more broadly, the team surveyed the National Estuarine Research Reserve System and created a guidebook for using the project's results and products.