



Project Title: Gulf Coast Vulnerability Assessment and Conservation Framework

Headline Title: Gulf Coast Climate Vulnerability

Brief Summary: The Gulf Coast Vulnerability Assessment (GCVA) will provide information needed to better understand impacts to coastal ecosystems and species from climate change, sea level rise, and land use change. The project will include a regional assessment that lays the foundation for a vulnerability assessment of coastal habitats and species.

Project Location: U.S. Gulf of Mexico coastal regions (TX, LA, MS, AL, and FL)

Partners: The GCVA is a collaborative project led by the four Gulf Landscape Conservation Cooperatives (Gulf Coastal Plains & Ozarks, Gulf Coast Prairie, South Atlantic, and Peninsular Florida) along with the US Fish & Wildlife Service, South Central and Southeast Climate Science Centers, NOAA, and the Gulf of Mexico Alliance.

Background: People in the Gulf Region recognize that coastal ecosystems powerfully influence their vibrant culture by providing benefits such as clean water, fish and wildlife habitat, recreation, storm/flood protection and carbon sequestration. The nation's [third draft National Climate Assessment](#) predicts that virtually the entire Gulf Coast will be vulnerable to sea level rise in the 21st century. Furthermore, unprecedented levels of funding will be directed toward Gulf Coast restoration over the coming decades as a result of the Deepwater Horizon oil spill.

Project Goals: Enhance conservation and restoration planning and implementation by providing a better understanding of the effects of climate change, sea level rise, and land use change on Gulf of Mexico coastal ecosystems and their species.

Strategy Goals Implemented: Goal 4: Support adaptive management in a changing climate through integrated observation and monitoring and use of decision support tools

Climate Impacts Addressed: Impacts on species and habitats, including impacts from sea level rise

Status of Project Implementation: Project is ongoing. Stakeholders across the Gulf, as well as the Gulf LCCs, have been tapped to create a multidisciplinary Core Planning Team, which is guiding the GCVA with assistance from a climate expert and four Ecosystems & Species Expert Teams covering (1) barrier islands and beaches, (2) tidal marsh, (3) oyster reef, and (4) mangroves. Stakeholders have developed and reviewed a detailed work plan; identified products to be developed by the GCVA; and defined and mapped the GCVA project area.

Project Outcomes: Gulf of Mexico resource managers, conservation planners and partnerships will have improved information about the effects of climate change, sea level rise, and land use change on Gulf coastal ecosystems and species. This process will lead to the development of the Gulf Coast portion of a Southeast Conservation Adaptation Strategy. The vulnerability assessment information will complement research of the NOAA RESTORE Act Science Program. It will inform conservation planning and



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implementation by programs such as the Gulf Coast Ecosystem Restoration Council, specifically by identifying opportunities to restore functional ecosystems and create adaptation strategies for people, natural and cultural resources, and natural defenses along the Gulf Coast.

Funding sources: GCPO LCC, GCPLCC, SALCC

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Suggested Photo Caption: Sea level rise and stronger storms are two climate change impacts likely to disproportionately affect the Gulf coast region.