

Delivering Information and Tools for Increasing Resilience and Adaptation of Communities and Priority Coastal Resources across the Network of Coastal LCCs (Activity Area II)

General Project Goal/Purpose:

Coordinate, synthesize and deliver coastal resilience information, ideas, activities and lessons learned across the coastal portion of the Landscape Conservation Cooperative (LCC) network with an initial focus on synthesizing and delivering existing coastal resilience and adaptation information to communities and, where feasible, prioritizing conservation actions to increase the resilience of both coastal communities and natural resources. The ultimate goal for LCCs is to have decision makers informed about the potential impacts, adaptation strategies and management approaches that incorporate both coastal ecological and human communities in their decisions as well as provide a range of ecosystem services through natural and nature-based approaches. An Atlantic/Gulf coast resilience team/working group drawing from LCCs and CSCs will be established to provide guidance.

Specific Objectives:

Relate existing projections of sea level rise and storms to impacts to habitats and populations of priority fish and wildlife species across their range. Assess restoration and management alternatives for increasing persistence and resiliency of these habitats and species and how these alternatives relate to use of natural and nature-based approaches (aka green infrastructure) to community resilience. Actions could delay or preclude listing of species that are sensitive to sea level rise, help sustain and recover listed species, and maintain economically important fish and wildlife populations.

Geographic Scope: Atlantic and Gulf Coasts of LCCs from Atlantic Canada to Mexico

Available or Expected Products & Tools:

Compilation and synthesis of existing Gulf and Atlantic Coast vulnerability/resiliency information on priority coastal species and models that quantitatively link sea level rise and increased storm severity and frequency with system response, impacts to habitats and species, and restoration and management alternatives.

1. Identification of thresholds of viability for these species under different rates of sea level rise.
 - a. E.g., rare dune plant and animal species, marsh nesting birds, tidal marsh vegetation.
2. Assessment of restoration and management alternatives to increase persistence/resilience of these species and their habitats as well as evaluation of their effectiveness.
 - a. E.g., assessment of beach restoration activities and their effects on rare dune biota, beach nesting birds, etc.
 - b. E.g., assessment of particular types of nature based approaches (e.g. shellfish living shorelines) and their effects on non-target and/or rare species.
3. Compilation of existing efforts to relate to use of natural and nature-based approaches to community resilience.
4. Assessment of how these alternatives relate to use of natural and nature-based approaches for community resilience (i.e. whether approaches to increasing community resilience will also increase persistence/resilience of priority coastal resources).
 - a. May need to reduce scope to selected types of natural and nature-based approaches
5. Pilot effort(s) to incorporate species and habitat information into community resilience planning.
 - a. Drawing from #3 with studies from each region representing its major coastal ecosystem types.
6. Final results compiled and made available in report, website(s), data portal(s).
7. Identification of additional science needs and approaches to address information gaps.

Completion Date (or anticipated completion date): September 15, 2016

Primary Target Audience/User Groups: Federal, state and local decision-makers and conservationists

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