From NECAP to GCAP: Transferring Climate Adaptation Knowledge and Tools from New England to Georgetown, South Carolina

Project Location

North Inlet-Winyah Bay National Estuarine Research Reserve, South Carolina

Project Duration

October 1, 2017 to March 31, 2019

Project Lead

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Project Type

Science Transfer – promoting the use of science

Project Partners

- Carolinas Integrated Sciences & Assessments, University of South Carolina
- Coastal Carolina University
- Consensus Building Institute
- North Inlet-Winyah Bay National Estuarine Research Reserve, South Carolina

Overview

From 2015 to 2017, Georgetown County, South Carolina experienced threats to life, ecosystems, infrastructure, housing, schools, and businesses due to a thousand-year rainfall event, Hurricane Matthew, and repeated flooding episodes. The increased frequency and severity of these rainfall events mirrors climate scientists' projections for the region as climate change intensifies. Like many small counties in the United States, Georgetown County is challenged by financial limitations and burgeoning infrastructure needs, creating a difficult decision-making environment for considering climate adaptation and mitigation planning.

This project will develop and implement a novel approach to climate adaptation planning, which was first conducted in New England from 2013 to 2014. Georgetown County will use role-play case studies developed using local climate information and sociopolitical context to engage local citizens and community leaders in exploring climate change impacts and potential decisions in their local context. The goal of the simulations is collective community learning and engagement with the potential for policy and planning recommendations to emerge.

Anticipated Benefits

- Community leaders and local citizens will participate in collective learning and engagement around climate change scenarios within their community, providing opportunities to increase their knowledge and understanding of local climate issues.
- Community leaders will have an opportunity to consider various action areas, such as policy and planning mechanisms, for addressing climate adaptation within Georgetown County, South Carolina.
- Community organizations, including North Inlet-Winyah Bay Research Reserve staff, will receive facilitator training from The Consensus Building Institute for leading role-playing simulations.
- Project team members will share their role-playing simulations and lessons learned with the National Estuarine Research Reserve System.

Project Approach

This project will develop, produce, and implement role-play simulation case studies for Georgetown County citizens and leaders, with the goal of starting community discussions around climate adaptation and mitigation planning. The project team will develop the simulations based on localized climate information and data for temperature and precipitation. This will be combined with information gathered through key stakeholder interviews on their understanding of climate change, the climate-related risk factors that are of the greatest interest to them, and the social and political context in which decisions will be made. This information will then be used to create a scientific fact sheet for each case study, the roles within the case studies, risks that are present, and possible solutions based on sociopolitical context and scientific evidence.

The project seeks to engage 150-200 participants in the role-playing simulations through a minimum of four community participation workshops throughout the county. The role-play will allow for collective community learning and engagement, and the potential for developing policy recommendations. It will help to incorporate climate risk management into local decision-making processes in the public and private sectors.

This climate planning approach is based on the New England Climate Adaptation Project, which was directed by The Consensus Building Institute (CBI). CBI will be involved in this project by training role-play facilitators in Georgetown County to develop and guide the simulation workshops.

Targeted End Users and Anticipated Products

- Georgetown County citizens will gain new climate knowledge and will better understand its impacts on their community, and how they can address it.
- Community decision makers will increase their understanding of climate effects and explore some of the policy and planning mechanisms to address them at the municipal and county level within Georgetown County.