

## **A road map to restoration: community driven watershed planning on a coastal sea island**

Like many coastal watersheds across South Carolina, the waterways on and around Edisto Island are affected by pollution from a variety of sources, with fecal bacteria being the primary pollutant of concern. High levels of bacteria have resulted in the closure of shellfish beds to commercial and recreational harvest, which affects both the economy and the deep historic and cultural traditions of the island. Clemson Extension partnered with South Carolina Sea Grant Extension, SC DNR, and a local land trust to assist the community in developing a watershed plan aimed at reducing bacterial pollution. Creating a community-driven watershed plan for the area was a first step towards reducing pollution and improving water quality for the Edisto community. However, creating a watershed plan was only the initial step; implementing recommendations requires community buy-in, so the project team worked closely with community leaders and sought input from residents at each stage of plan development. We'll share our perspective on how we combined existing water quality data and GIS data layers with local community knowledge of the watershed to pinpoint pollution hotspots. We'll also share our lessons learned and highlight key communication recommendations to keep residents engaged and informed as implementation of the plan begins. The completed plan serves as a framework to address pollution sources and sets the stage for protecting the valuable shellfish resources at the heart of the community.



### **Amy Scaroni**

Dr. Amy Scaroni is an Assistant Professor in Clemson's Department of Forestry and Environmental Conservation, and a Water Resources Specialist with Clemson Extension. Holding a 100% Extension appointment, her aim is to translate University-based research into solutions that work for communities. Dr. Scaroni partners on research to identify interventions that improve water quality and conducts outreach to assist communities with integrating these results into their planning efforts. She earned a Ph.D. in Wildlife and Fisheries from LSU, a master's degree in Environmental Studies from the College of Charleston, and a bachelor's degree in Biology from Penn State.