

# ENHANCING COASTAL RESILIENCE WITH GREEN INFRASTRUCTURE

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The Georgia Coastal Management Program (GCMP) works with coastal communities to foster awareness and understanding of the role of natural resources in protecting communities and citizens from the effects of natural disasters such as tropical storms/hurricanes, riverine flooding events and long-term hazards including sea level rise. The GCMP has developed a 5 year project to demonstrate how Low Impact Development and nature-based infrastructure practices, collectively referred to as “green infrastructure (GI),” can reduce a coastal community’s vulnerability to flooding from major weather events or long-term climate events. This project began in 2017 and will utilize Liberty County as the Pilot Community to demonstrate the practicality and cost-effectiveness of replacing traditional storm water management practices, such as retention ponds and pipes, with GI approaches that utilize or mimic natural land processes. Computer models (HAZUS) will provide risk assessments and damage cost estimates from extreme precipitation-based and coastal storm surge based flooding using present-day stormwater management scenarios and idealized scenarios with GI practices. The results will be used to evaluate GI versus traditional stormwater practices. Workflow guidance for the modeling and analyses will be generated so that other communities in coastal Georgia and beyond can conduct their own evaluations of GI versus traditional designs in the future. Partners with the UGA Carl Vincent Institute of Government will develop model ordinances and a guidance document to accompany the results and training opportunities. Ongoing watershed based tools and resources that will accompany this project will also be discussed.

*Program reference: 2.7.3*