Nature-based solutions to support flood mitigation in low-lying and disadvantaged coastal areas in southeastern North Carolina

About the project

In this co-designed project, we will develop a green infrastructure suitability model in consultation with community groups to prioritize areas of implementation of nature-based solutions (NbSs) in a highly urbanized tidally influenced coastal county of the US Atlantic Coastal Plain region that is home to multiple disadvantaged communities at recurrent risk from flooding. Our project will develop a replicable methodology that establishes the evidence base for the effectiveness of NbSs and green infrastructure in flood-vulnerable coastal watersheds and determines the feasibility of incorporating cutting-edge community engagement techniques into NbS implementation prioritization.



Project Collaborators and Partners

Partner communities: The Wilmington Metropolitan Planning Organization, the City of Wilmington and the New Hanover County Stormwater Engineering Department, North Carolina

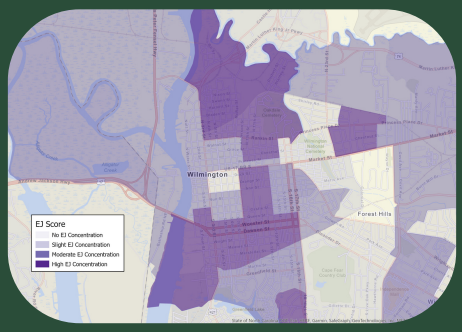
Project Co-Investigators: Joanne Halls and Leah Mayo, UNCW
Trained Community Facilitator: Crystal Dixon
Project Research Assistant: Elijah Dalton

Objective 1



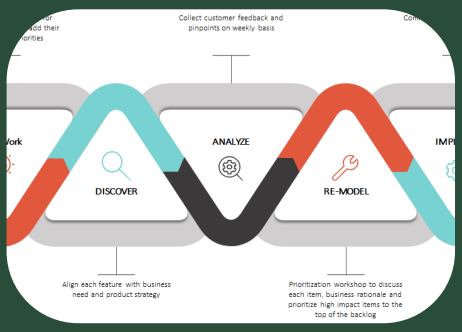
Green infrastructure suitable locations

Objective 2



Environmental justice chronic vulnerability areas

Objective 3



Green infrastructure prioritization workshops

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