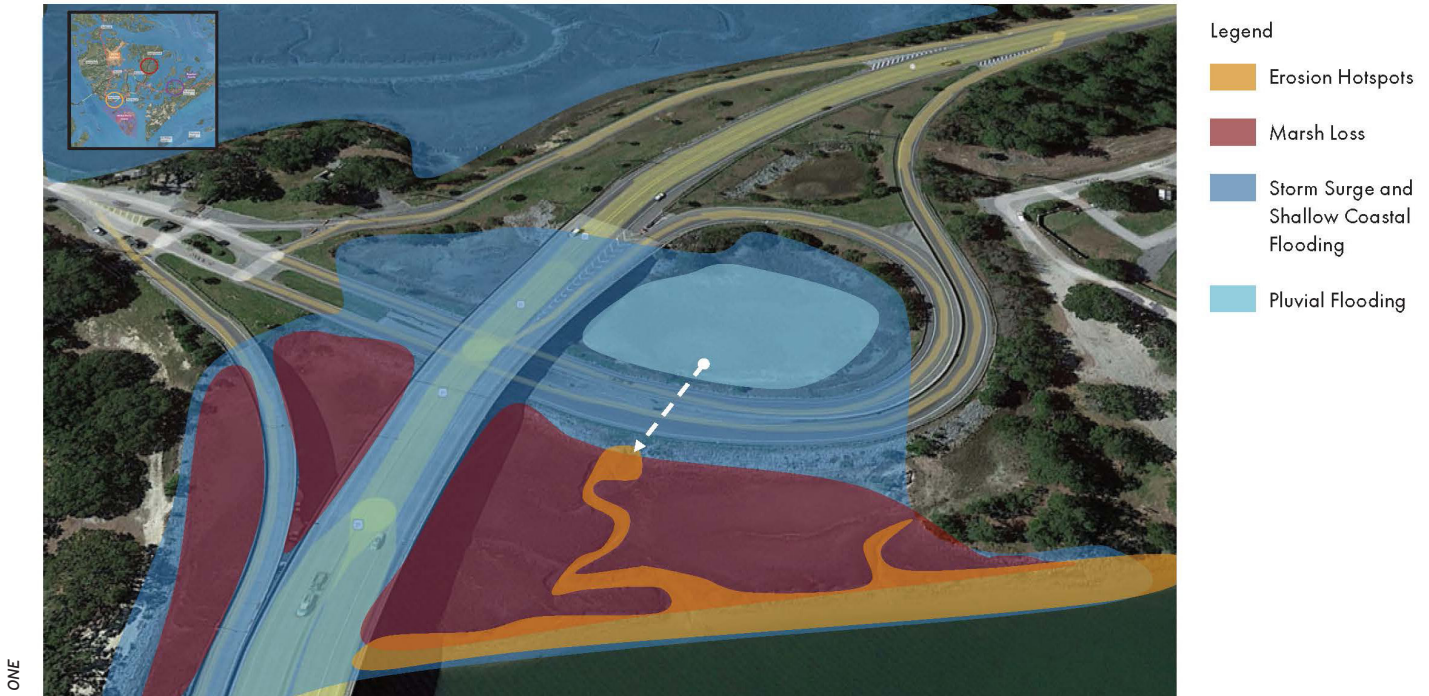


Lowcountry Military Installation Resilience Review

Paris Island, South Carolina



A resilience review that placed natural systems on a level with economic and grey infrastructure elements.

SERVICES

Climate Adaptation & Resilience
Nature Based Solutions

The Military Installation Resilience Review (MIRR) is a program designed to help communities partner with local commands to make informed decisions that respond to hazards to the long-term wellbeing of military installations, their civilian employees, and the surrounding community. As ecological experts on a team led by Sherwood Design Engineers, Biohabitats helped the Lowcountry Council of Governments develop an MIRR for two installations: Marine Corps Air Station Beaufort and Marine Corps Recruit Depot Parris Island. This region of coastal Carolina is at risk from sea level rise and coastal and inland storm events that are increasing in frequency and intensity.

The team developed a resilience framework for the MIRR that treated Natural Infrastructure as a typology alongside Physical, Economic, and Social Infrastructure. Biohabitats led the natural infrastructure portion of the MIRR, first defining the natural assets and the ecosystem services they provide. Biohabitats then worked with the team to develop and map threat scenarios, documenting ongoing shoreline erosion, anticipated inundation regimes, and other effects of sea level rise. Biohabitats helped develop a model to identify areas with overlapping risk categories, where interventions could mitigate multiple forms of insecurity. As the team developed strategies for improving the resilience of those sites, Biohabitats led concept level design for living shorelines and other natural system elements of the selected pilot projects.