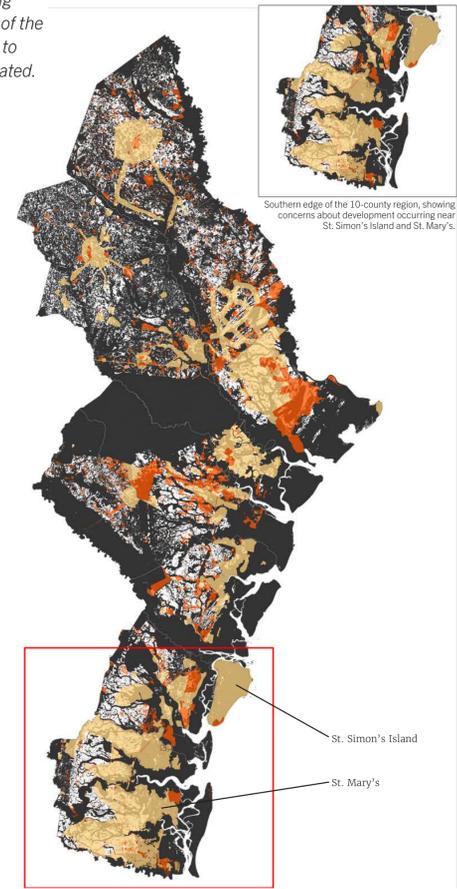
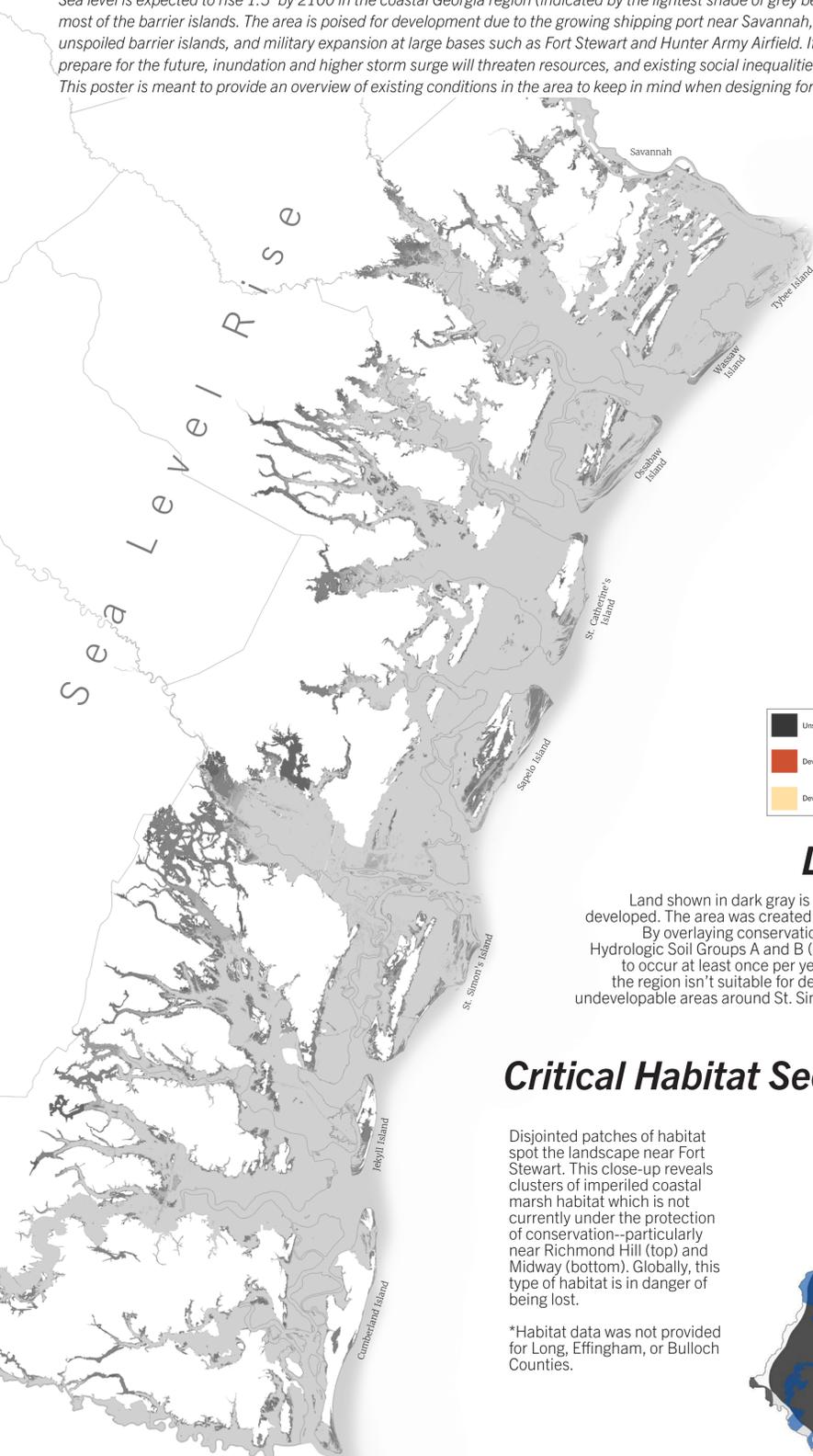


EXISTING CONDITIONS SYNTHESIS: COASTAL GEORGIA 10-COUNTY REGION

Sea level is expected to rise 1.5' by 2100 in the coastal Georgia region (indicated by the lightest shade of grey below), submerging most of the barrier islands. The area is poised for development due to the growing shipping port near Savannah, touristic appeal of the unspoiled barrier islands, and military expansion at large bases such as Fort Stewart and Hunter Army Airfield. If nothing is done to prepare for the future, inundation and higher storm surge will threaten resources, and existing social inequalities will be exacerbated. This poster is meant to provide an overview of existing conditions in the area to keep in mind when designing for resilience.



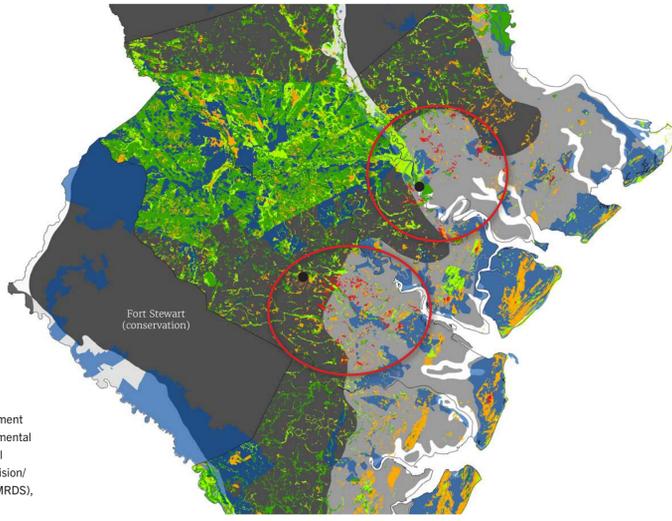
Development Constraints

Land shown in dark gray is classified as unsuitable for development, although much of this area is already developed. The area was created to provide general guidelines for suitability and concentration of development. By overlaying conservation lands, aquifer recharge zones, wetlands, flood zones, land with well-draining Hydrologic Soil Groups A and B (necessary to infiltrate regional stormwater), and storm surge from events likely to occur at least once per year (tropical storms and Category 1 hurricanes), it is evident that the majority of the region isn't suitable for development. This conflicts with their economic goals and projected growth. The undevelopable areas around St. Simon's Island and St. Mary's are of critical habitat value, so the concentration of development in those areas is especially concerning.

Critical Habitat Security by Ecoregion

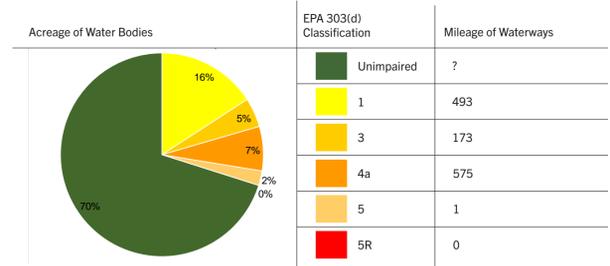
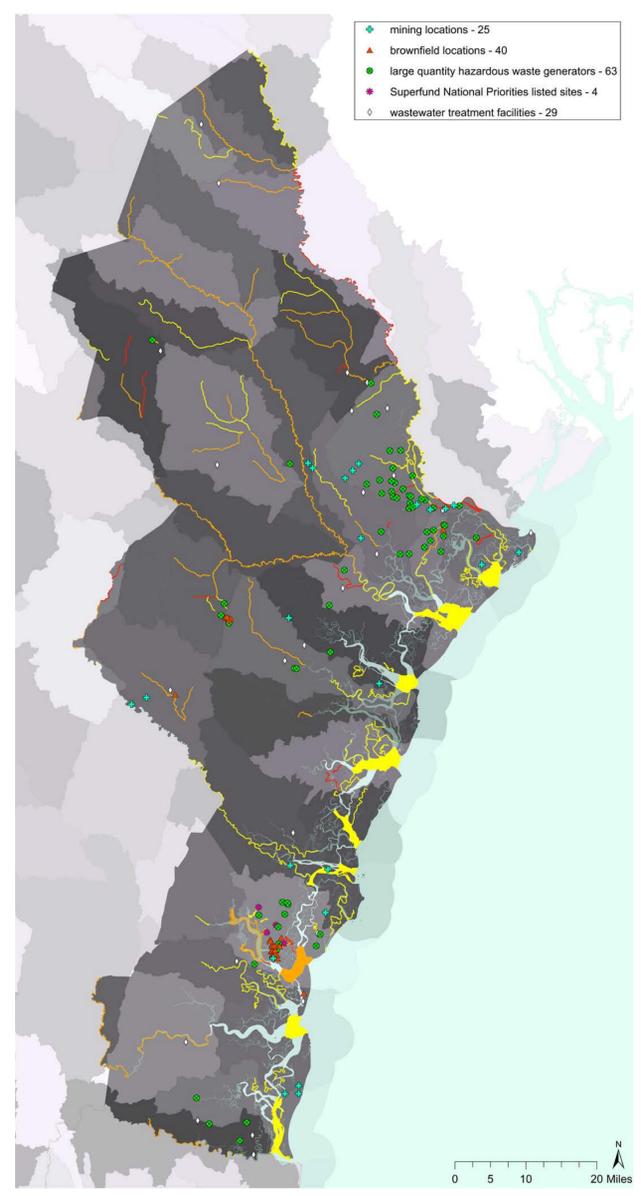
Disjointed patches of habitat spot the landscape near Fort Stewart. This close-up reveals clusters of imperiled coastal marsh habitat which is not currently under the protection of conservation—particularly near Richmond Hill (top) and Midway (bottom). Globally, this type of habitat is in danger of being lost.

*Habitat data was not provided for Long, Effingham, or Bulloch Counties.

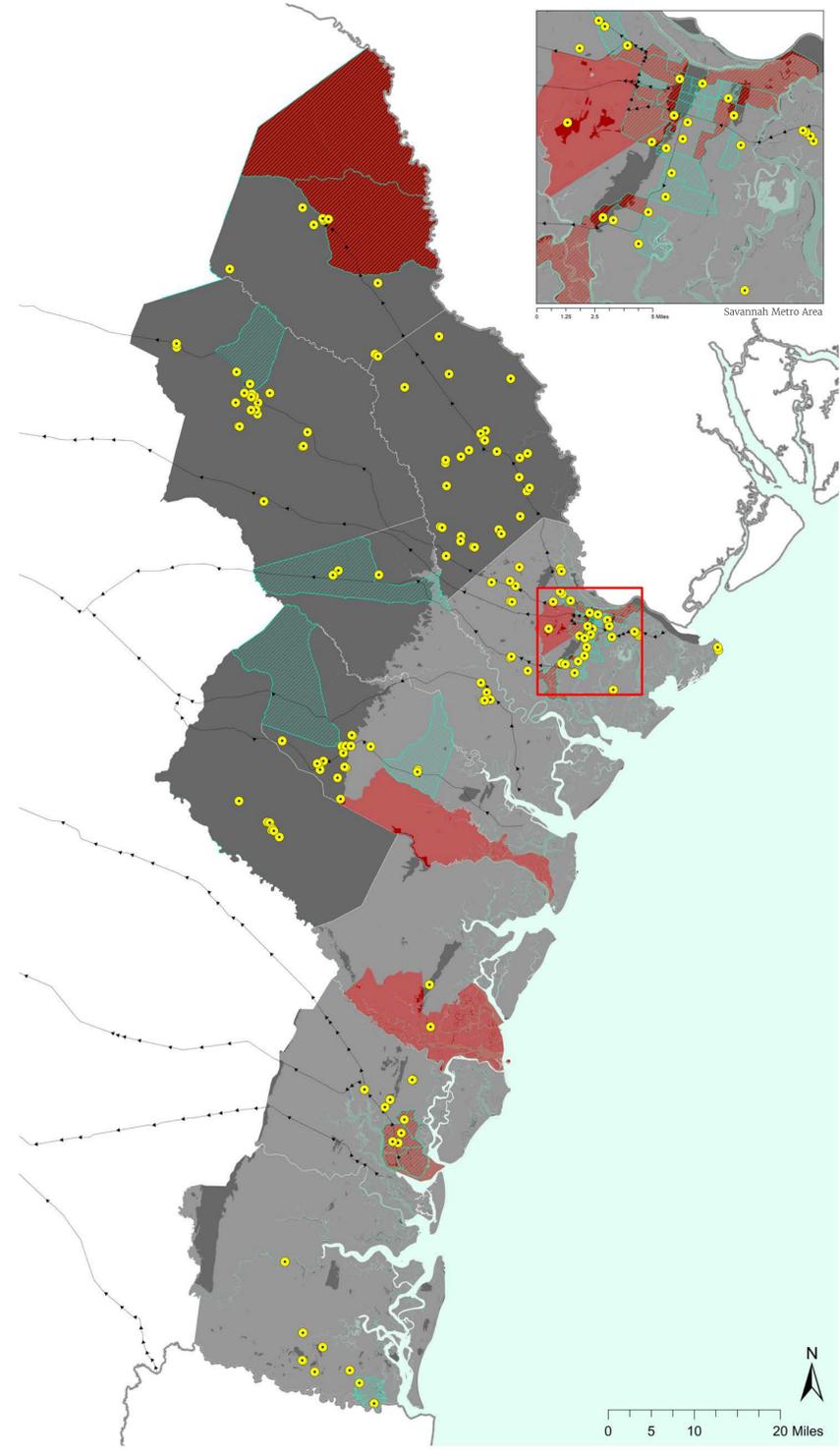


Social Vulnerability & Storm Emergency Preparedness

Pollution & Impaired Waterways



Various shades of grey represent discrete watersheds at the HUC-10 (Hydrologic Unit Codes) level, delineating all watersheds in and adjacent to the 10-county region. Waterways classified as impaired by the EPA are depicted at worsening levels by color. For Superfund and hazardous waste generator sites, only the worst offenders are represented (displaying all would have generated too many points). Brownfields and past/present/future mining operations are also depicted. Wastewater treatment plants have been included as well, because they are significant sources of nitrogen and phosphorus pollution. There is a heavy concentration of all mapped pollution sources near Brunswick, especially brownfields.



This map provides an overview of social justice issues in the context of storms on the Georgia coast. When storm surge from a Tropical Storm or Category 1 hurricane moves upland, it covers many areas that rank high on the census' social vulnerability index. Often, these areas overlap with places where over 10% of constituents do not have a car. Evacuation routes show major roads whereby people can leave the region. Yellow dots represent severe weather shelters. Notably, there are large tracts of land where many socially vulnerable people without cars could become trapped, without shelter, during a storm event.

* Storm surge and social data was not provided for Effingham and Long Counties.