

IMPLEMENTATION OF COMMUNITY ASSET BASED STORMWATER MANAGEMENT TO ENHANCE RESILIENCY AND PRESERVE CHARACTER AND ENVIRONMENT OF COASTAL CITIES

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The South Atlantic Bight is an area of the Atlantic Ocean that stretches from Winyah Bay down to Cape Canaveral. Its center is located near the Altamaha River Delta. The curvature of the coastline funnels tides and surges towards the center of the arc, causing higher tides here than in other areas of the Atlantic coast. The areas affected most range from Brunswick to Beaufort, SC. Greater resilience is required of cities along this portion of Atlantic coastline. On October 8, 2016, Hurricane Matthew made landfall near McClellanville, SC after closely paralleling this entire portion of the coast. At any point, a slight track to the Northwest would have meant a devastating impact. A fortuitous eleventh hour and fifty-ninth minute turn to the North from the North-Northwest spared the Savannah area from a direct impact. The water level at Fort Pulaski still rose to an all-time high of 12.57 feet above normal low tide, even two hours after high tide. This presentation will discuss how coastal cities can prepare themselves to withstand the impact of a major hurricane while creating community assets. Integrated stormwater management allows a city to embrace and integrate water and the natural environment while protecting infrastructure and the built environment from the ocean's inherent dangers. Comprehensive planning allows a city to accommodate future population growth while preserving the area's history and character and enhancing water quality and resiliency. If the environment and scenic beauty of the coast is degraded, quality of life will suffer as one of the most unique, pristine, and important landscapes on Earth will disappear. I will discuss how cities can implement projects and management strategies to protect the environment, preserve green space, promote economic development, improve runoff water quality, enhance wildlife habitat, lower flood insurance premiums, and develop and leverage funding sources.

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