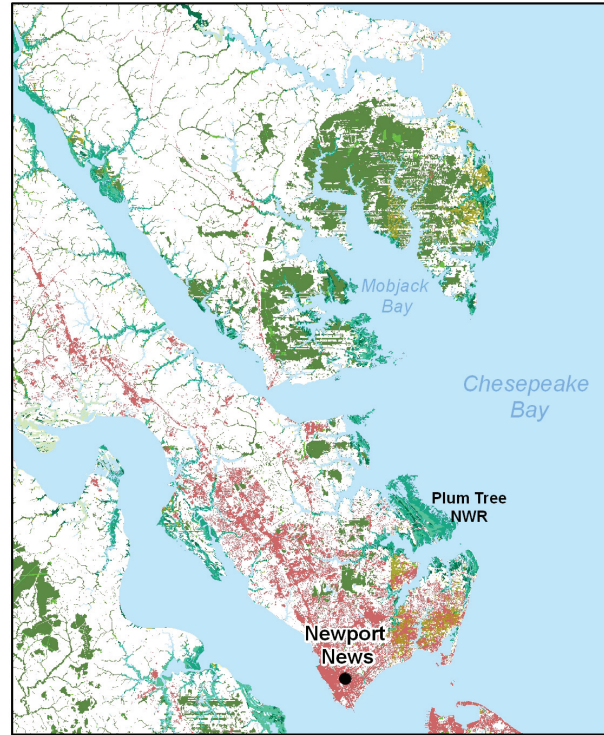
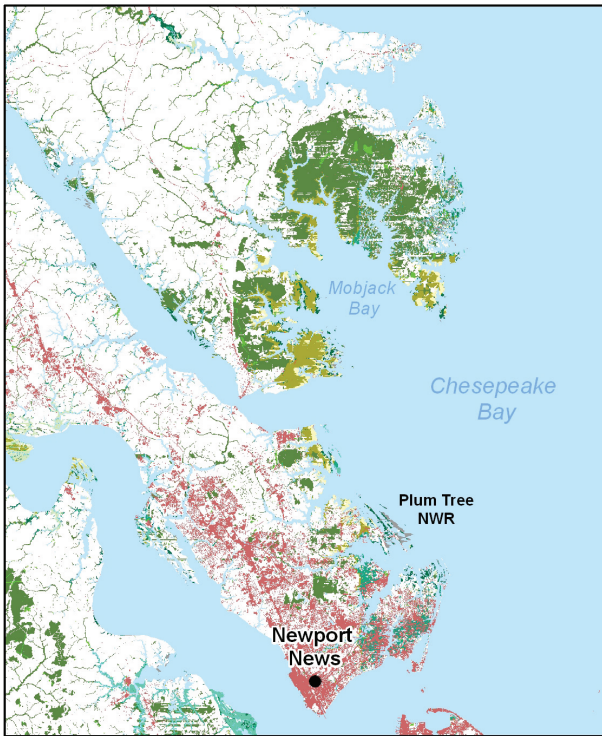




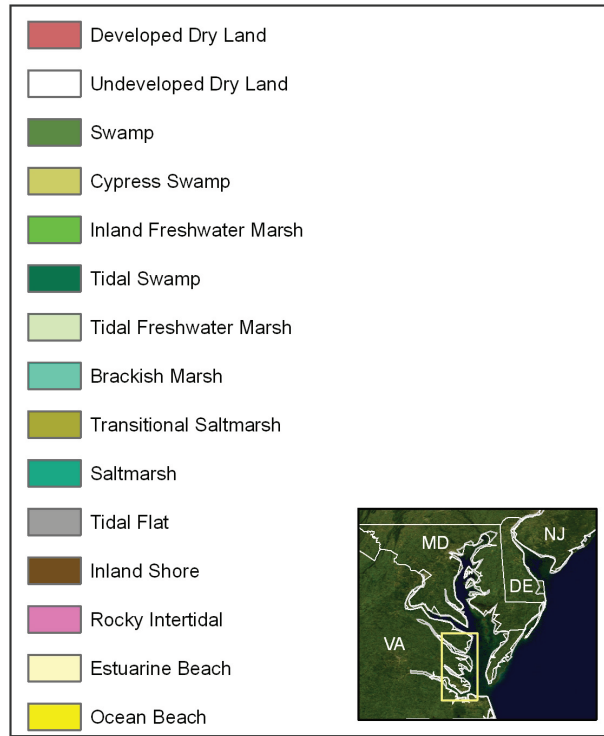
Initial Condition



Year 2050 (11.2 inches)



Year 2100 (27.2 inches)



Upper Tidewater Region

Excerpted from *Sea-Level Rise and Coastal Habitats of the Chesapeake Bay*, a detailed modeling analysis commissioned by the National Wildlife Federation. For the full report, please visit www.nwf.org/sealevelrise.

The extensive tidal swamp, brackish marsh, and tidal flat habitats of the Upper Tidewater region could undergo major shifts if sea level rises 27.2 inches this century. The region faces a 30 percent decline in tidal swamp, an 85 percent decline in the area of brackish marsh, and a 76 percent decline in tidal flats. Plum Tree Island National Wildlife Refuge, home to many species of migratory waterfowl, largely disappears. At the same time, the model projects a 33 percent

expansion of freshwater swamp area, which includes both forested and scrub-shrub habitat, with notable expansion into the undeveloped dry land along Mobjack Bay. Overall, the area of undeveloped dry land across this site declines by 17 percent, or 45,611 acres.