The Northwest River (Stephens) tract is a non-tidal wetland and upland buffer restoration and preservation project located in Chesapeake, VA. Funding approval and acquisition of this site occurred in 2002.

The property is an important contributor to a northern spur corridor connecting the Northwest River and the Great Dismal Swamp National Wildlife Refuge. This site added 366 acres to the Conservations approximately 1,000-acre Green Sea preserve which includes Virginia Aquatic Resources Trust Fund sites Benefits, Hall, and Su tracts. Historically this mineral flat area was connected to the Great Dismal Swamp and sustained non-riverine wet hardwood forest. The Stephens parcel encompasses 226 acres of forested wetland with 142 acres of converted agricultural land, having the objective to restore the cropland to a mixture of forested wetland (122 acres) and forested upland buffer (20 acres).

The primary functions to be restored include wildlife habitat and water quality enhancement. A large portion of the site drains to the Dismal Swamp Canal, tributary to the Elizabeth and Chowan Rivers. Thus this project and the associated wetland mitigation is evenly split between the Lower James River and Chowan River basins, HUCs 02080108 and 03010205, respectively.

In 2003 the site was planted with 50,500 bare root seedlings and 6,000 shrubs. Subsequently in 2004, interior field ditches were plugged and a perimeter berm system was constructed to restore wetlands hydrology. Automatic recording shallow groundwater monitoring wells were installed in 2004 in representative locations. Annual shallow groundwater monitoring indicates that much of the site exceeds the target threshold for hydrology under normal conditions. Survival of planted seedlings is high within much of the site and many species displayed fairly vigorous growth. While red maple and sweet gum are the dominant colonizing, volunteer woody species across the entire site, bald cypress, sycamore and various oak species are also predominant. Based upon the monitoring, the majority of woody species that will comprise the dominant stratum of the site are native wetland plants.

Project funding came from the Virginia Aquatic Resources Trust Fund, a cooperative agreement between The Conservancy and US Army Corps of Engineers. The site continues to be monitored for success, with 2010 being the next scheduled monitoring year.