

Northwest River (Stephens)

Chesapeake, Virginia



Photo: Kate Rooney, 2015

Wetland Restoration in the Chowan and James River Watersheds

The Northwest River (Stephens) tract is a non-tidal wetland restoration and preservation project of the Virginia Aquatic Resources Trust Fund (VARTF) and is located in Chesapeake, VA. The property is an important contributor to a northern spur corridor connecting the Northwest River and the Great Dismal Swamp National Wildlife Refuge, historically referred to as the "Green Sea." This area once contained vast expanses of oak-dominated, mixed hardwood wetlands, as well as Canebrake wetlands, but has been significantly impacted over the previous centuries by deforestation and draining.

Other wetland sites that were restored and preserved by VARTF in this area include Benefits, Hall, and Su tracts, together comprising a complex that supports water quality and wildlife.

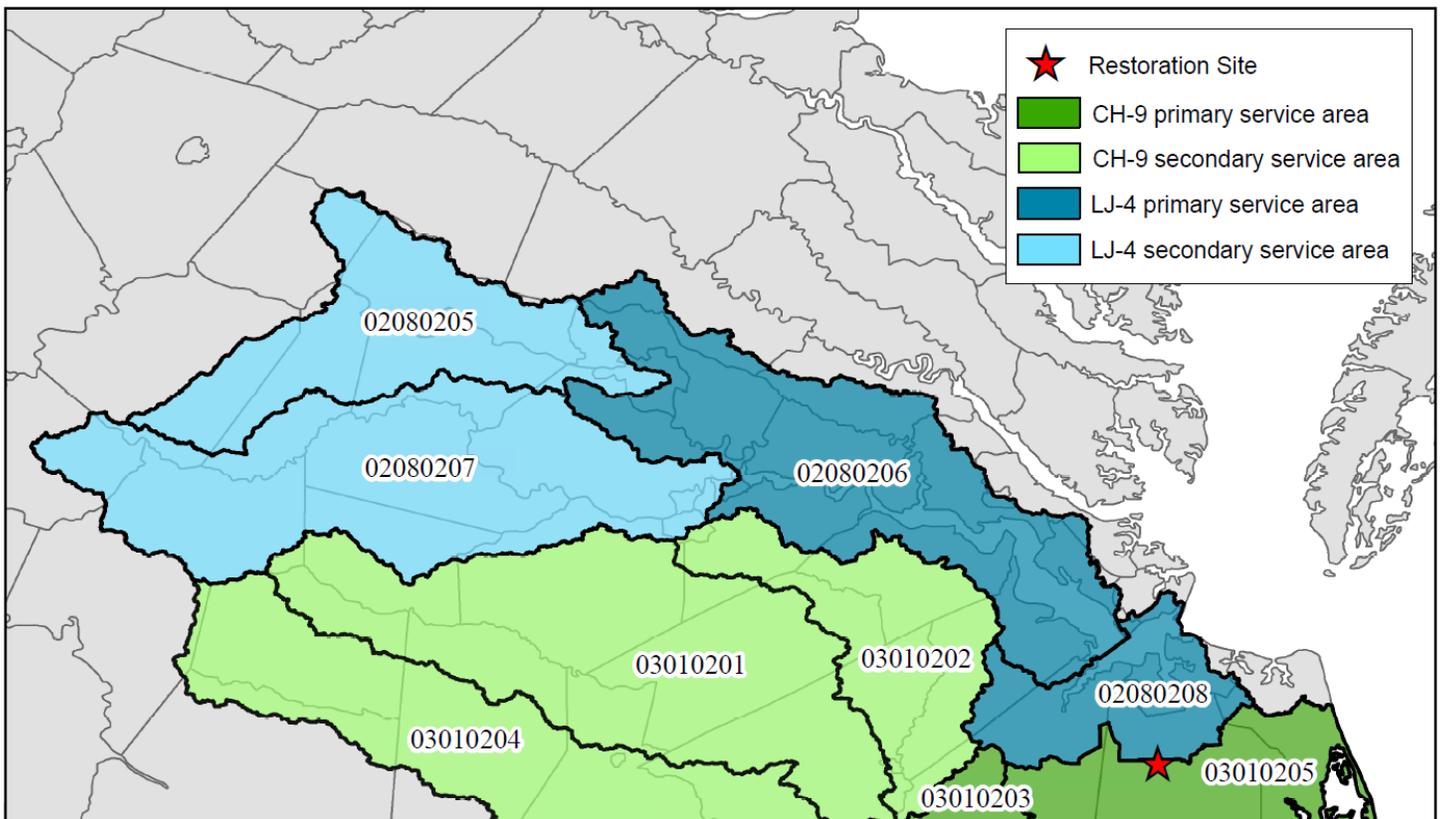
Quick Facts

- Added 372 acres of mineral flatwood wetlands to northern spur corridor connecting Northwest River and Great Dismal Swamp National Wildlife Refuge.
- Preserved 230 acres of high-quality mature forested wetlands.
- Planted over 56,000 native tree and shrub seedlings.
- Plugged interior field ditches and constructed perimeter berm system to restore wetland hydrology.



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LJ-4/CH-9 Northwest River (Stephens) Service Areas

A large portion of the Stephens site drains to the Dismal Swamp Canal, a tributary to the Elizabeth and Chowan Rivers. The project and the associated wetland mitigation is evenly split between the Lower James River and Chowan River basins. The mitigation has generated over 160 non-tidal wetland credits, available for primary and secondary service areas in both basins.



Approval and acquisition of this site occurred in 2002. At that time, the property contained 230 acres of high-quality mature forested wetlands, which were placed into preservation, and it also contained 142 acres of open prior-converted agricultural land. The entire agricultural area was targeted for restoration into a non-tidal forested wetland community. The development of the site was monitored for 10 years with the final monitoring event occurring in 2013.

Volunteer red maple, sweet gum, and loblolly colonized the restoration area beginning in 2003. Today, bald cypress, sycamore, willow, and hydrophytic oak species have reached heights of 20-30+ feet and have replaced the early-successional volunteer species in canopy dominance, indicating a successful maturation of the wetland vegetative community.

