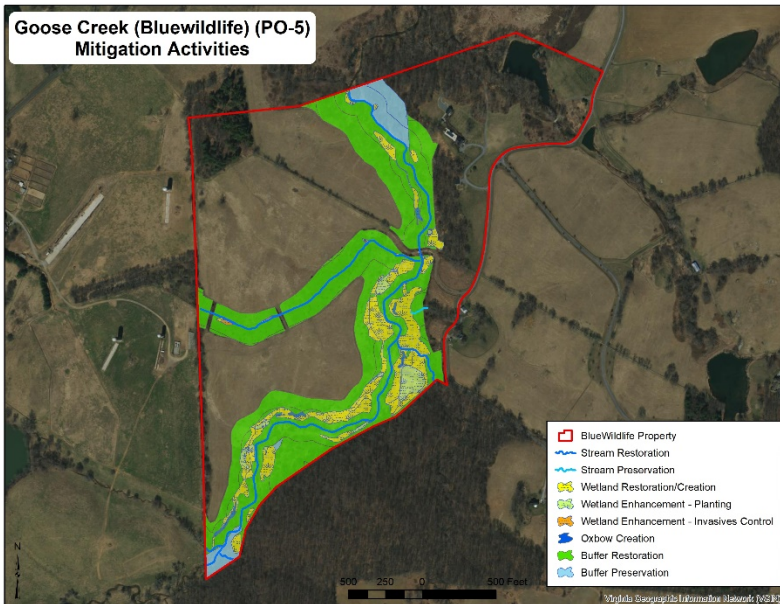


Goose Creek – BlueWildlife LLC (PO-5)

Fauquier County, Virginia



BlueWildlife Mitigation Activities

Restoration Goals:

To reduce stream bank erosion and sedimentation, enhance and establish forested riparian buffers and wetlands, improve water quality and stream stability, and protect and enhance wildlife habitat.

Project Facts:

- Status: IRT approved \$1.9M for property acquisition, assessment/design, permitting, implementation, monitoring, and corrective action. 2018 was year 10 of 10-year monitoring period. 4.91 of ~8 total credits were released in 2011.
- 7 ac wetland restoration/creation
- 1.2 ac wetland enhancement
- 0.3 ac open water/oxbow creation
- 7,243 ft stream restoration
- 119 ft stream preservation
- 28 ac buffer planting
- 3 ac buff preservation

Project Summary

The 119-acre BlueWildlife property is located within the Potomac River Watershed. The property contains Bolling Branch and several unnamed tributaries. Bolling Branch is a tributary to Goose Creek, a TNC priority stream in northern Virginia. These waterways are also part of a complex stream network that has been ranked by TNC as having the highest relative resilience to climate change.

This project was identified by an environmental consultant and brought to the Virginia Aquatic Resources Trust Fund (VARTF) as a potential funding source.

The property owner donated a conservation easement on the entire property to TNC in 2007. The property is situated within a portion of the county experiencing widespread conservation efforts. This property is adjacent to several Virginia Outdoors Foundation and Fauquier County Open Space easements.

Before: Cattle had access to streams, streams were incised and degraded, and adjacent wetlands were impacted.



After: Livestock removed, stream channels re-connected to the floodplain, wetlands created and enhanced, and riparian buffer restored.

Restoration Activities

Restoration work began in 2009 and entailed removal of livestock, reducing the steep height of the stream banks, realigning the stream channel, adding meanders and in-stream habitat structures, creating wetland depressions and open water features, and planting trees to create a forested buffer along the stream and to enhance existing wetlands.



A total of 58 in-stream grade control and habitat structures were installed. Abandoned channels were left in place and were designed to receive overbank flow, creating oxbows. Although not a mitigation activity, these open water features create habitat for waterfowl, a component the property owner was seeking.

Wetlands were created by grading to elevations dictated by adjacent wetland communities. Emergent, scrub/shrub, and forested wetland cells were created based on the expected level and duration of inundation. Existing wetlands were enhanced through woody stem planting.

The Conservancy contracted with Williamsburg Environmental Group Inc. to design and oversee the restoration. The construction was completed by Environmental Quality Resources LLC.

Corrective Actions

Supplemental planting of woody stems in select areas identified through success monitoring.

Maintenance activities along Bolling Branch to repair minor bank scours and stabilize structures following large storm events.

Control of non-native/invasive plants. Species treated include reed canary grass, cattail, quackgrass, burdock, cocklebur, garlic mustard, jimsonweed, teasel, velvetleaf, wormwood, autumn olive, rambler rose, beefsteak plant, tall fescue, poison hemlock, privet, Japanese barberry, tree-of-heaven, princess tree, and non-native thistles, docks and honeysuckles.

Beaver activity was observed in Bolling Branch following restoration. Monitoring for beaver was regularly conducted by USDA. Trapping and dam removal occurred on several occasions.

