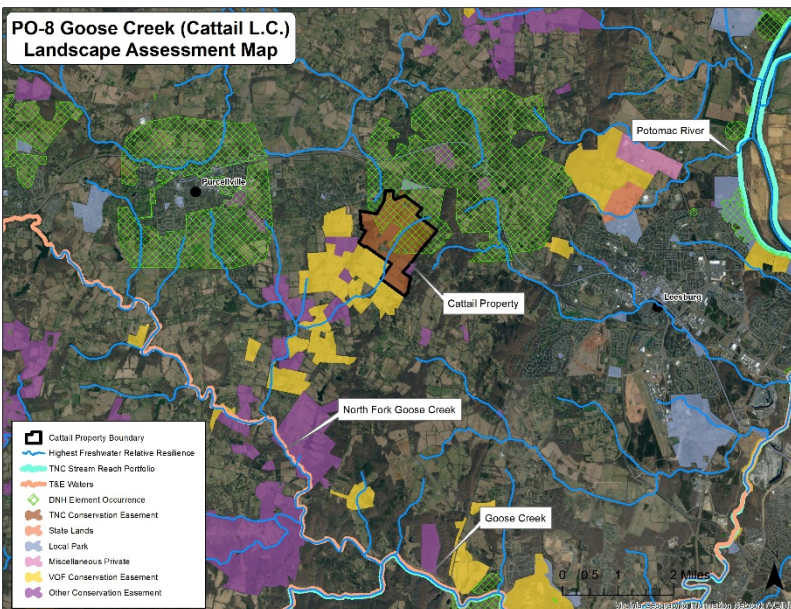


Goose Creek – Cattail (PO-8)

Loudoun County, Virginia



Cattail landscape context.

Existing Conditions

The 816-acre Cattail property is located within the Potomac River Watershed. The property contains nearly 30,000 linear feet of unnamed tributaries to Crooked Run. Crooked Run flows to Goose Creek, a state scenic waterway and TNC priority. 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.

The property has been in agricultural use for many years. The vast majority of the streams have little to no buffer and have been directly impacted by current or past agricultural activities including straightening and ditching. Nearly half of the agricultural land previously contained cattle which had access to the streams. Other areas of the property have been used for row cropping and hay for many years. These intensive farming activities have resulted in widespread channel instability and degradation of in-stream and riparian habitat, and overall poor water quality conditions.

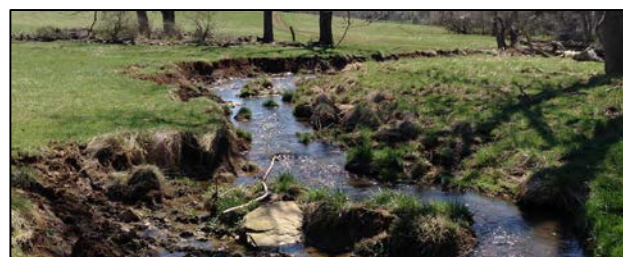
In addition to the impacts to the property associated with farming, the property was threatened with development pressures as a result of its close proximity to the Washington D.C. area.

Restoration Goals:

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

Project Facts:

- Status: IRT approved Phase I funding for property acquisition and concept plan development. Project pending approval of Phase II.
- Protection of up to 150' buffer along nearly 30,000 feet of streams
- Livestock removal
- Stream restoration/enhancement/preservation and riparian buffer reestablishment
- Largest Virginia Aquatic Resources Trust Fund (VARTF) stream restoration project to date



Existing conditions on the property.



Livestock were removed in 2011.



Over 175 acres of open field will be preserved and reforested.

Restoration Activities

In 2010, the landowner contacted TNC about protecting this property, and opportunities for stream restoration quickly became evident. Phase I of the project included initial preservation activities and livestock exclusion. A conservation easement was placed on the property in 2011, protecting a 35-foot riparian buffer, and livestock were removed.

Phase II of the project will include expanding the stream buffer protected under Phase I, and completing additional stream and buffer restoration, enhancement, and preservation activities. An overlay easement will be placed on the expanded mitigation site to protect a riparian buffer up to 150 feet wide.

An existing conditions assessment, concept plan, and Section 106 survey work have been completed. Plans are pending agency approval, and restoration activities are expected to occur in 2020-2021.

Restoration work will entail reducing the steep height of the stream banks, realigning stream channels, adding meanders and habitat structures, and enhancing the buffer through invasive species control and tree planting. Overall project goals include:

- Reduce sediment inputs by restoring degraded streams and removing cattle.
- Return a stream network to a stable form that supports biological functions important to aquatic and terrestrial species.
- Improve water quality by restoring or enhancing the forested riparian corridor.
- Protect existing high quality streams and buffers that provide important habitat.



Concept Restoration Plan.