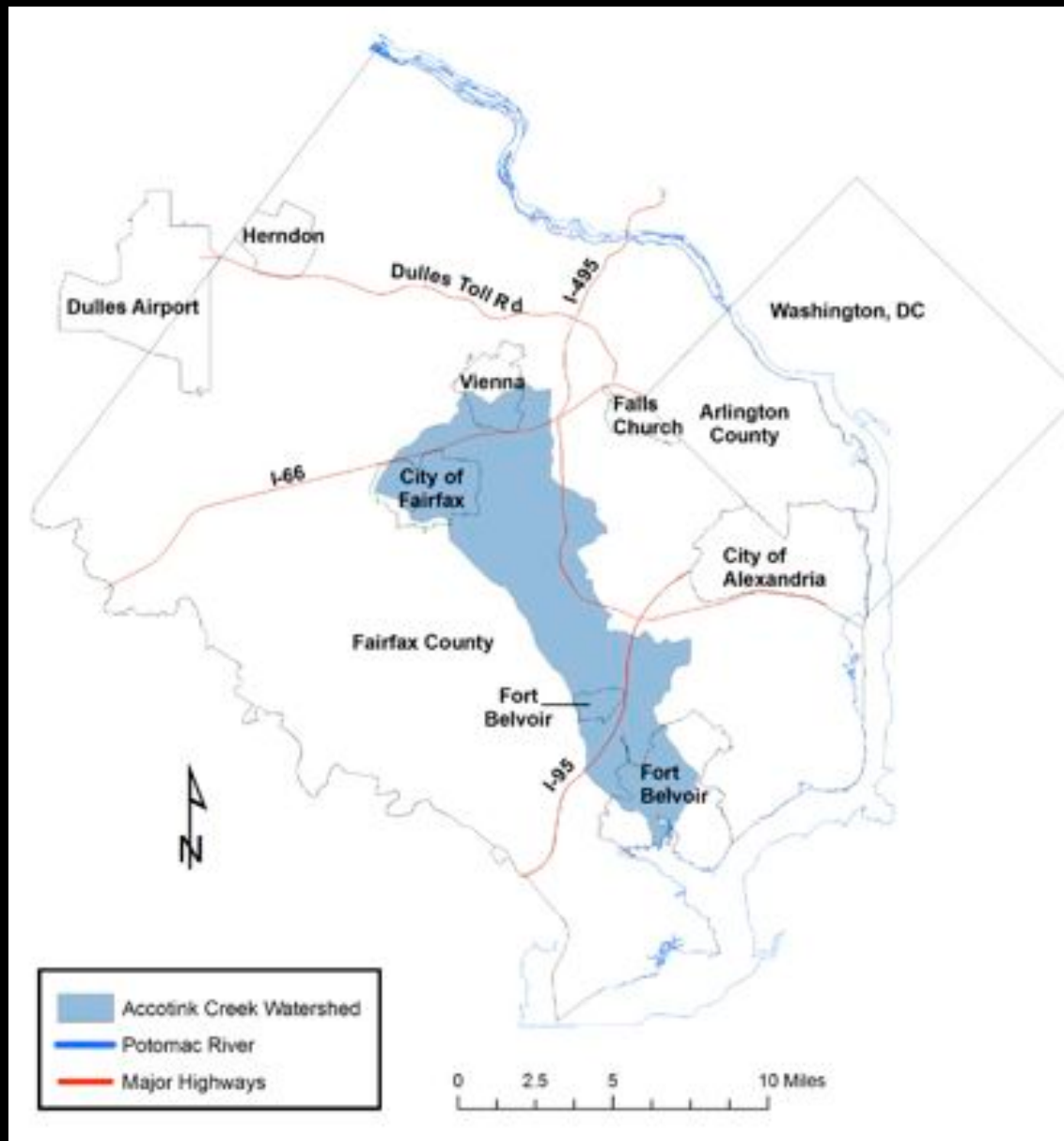




Accotink Creek runs 26 miles through one of the finest wildlife corridors of rapidly-developing Fairfax County.

The Friends of Accotink Creek partner with volunteers, communities, schools, businesses, and government agencies to protect, restore, and improve the Accotink Watershed. Our motto is "Find just one other person who cares"..

# Accotink Creek Watershed



Accotink Creek has been identified as impaired on the Clean Water Act §303(d) list for not supporting the aquatic life use due to poor health in the benthic biological community. The Accotink Creek has been significantly degraded due to human impacts, and cannot currently support the aquatic life that should be living there.



This is primarily due to human impacts associated with development:  
Habitat loss due to construction, and  
Stormwater runoff due to impervious surfaces – roads, buildings, and parking lots.

Large amounts of sediments are washed into Accotink Creek during rain events from construction sites if erosion and sediment control practices are inadequate.





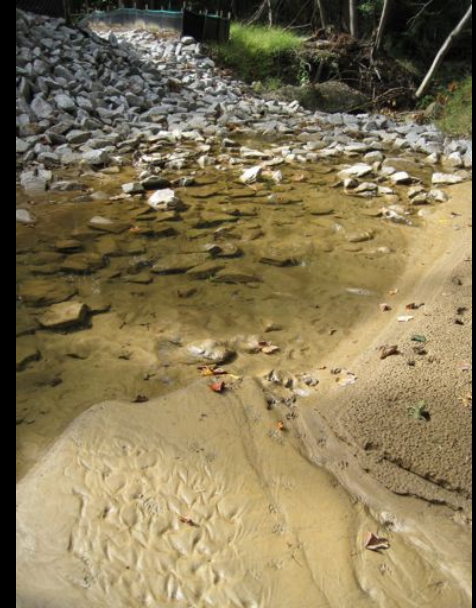
Impervious surfaces channel rain water into the stormwater system, and then Accotink Creek. Large rain events result in large amounts of water flowing quickly downstream. This erodes the stream banks, both the sides and the bottom.

100 years ago, Accotink Creek was a shallow “V”. Now, it’s a deeply incised “U”- a channel with steep banks.



Silt and sediment washed into the Creek from construction sites, or eroded from the banks during rain events, smothers the aquatic life in the creek. It is toxic for many beings, like smoke is toxic for us.

Fine particles of silt can take weeks to settle out of the water, and sediment that accumulates on the bottom smothers macroinvertebrates that live among the rocks and pebbles.





Trash dropped in the Watershed, eg in a parking lot, gets washed into the stormwater system, and ends up in Accotink Creek.

We find enormous numbers of plastic bottles, cans, cigarette butts, styrofoam waste, and plastic bags on every clean-up.



Illegal dumping of tires, waste, and toxic materials is also a problem.



Trash from the Accotink Watershed flows downstream to the Potomac River, the Chesapeake Bay, and then the Atlantic, eventually accumulating in the North Atlantic Trash Gyre



These plastics threaten marine life in various ways, and gradually break down into small toxic particles. These bioaccumulate up the food chain back to us.

If we don't clean up the trash in our watershed, it will come back to us as poison in the food we eat.

Fairfax County Federation of Citizens Associations is partnering with the  
Friends of Accotink Creek on a stream cleanup!

October 18, 3:00 PM - 5:00 PM

Accotink Creek at Old Lee Hwy, just south of Fairfax Circle

Parking across the street from Arties/Bowl America

Go to [accotink.org](http://accotink.org) for more information

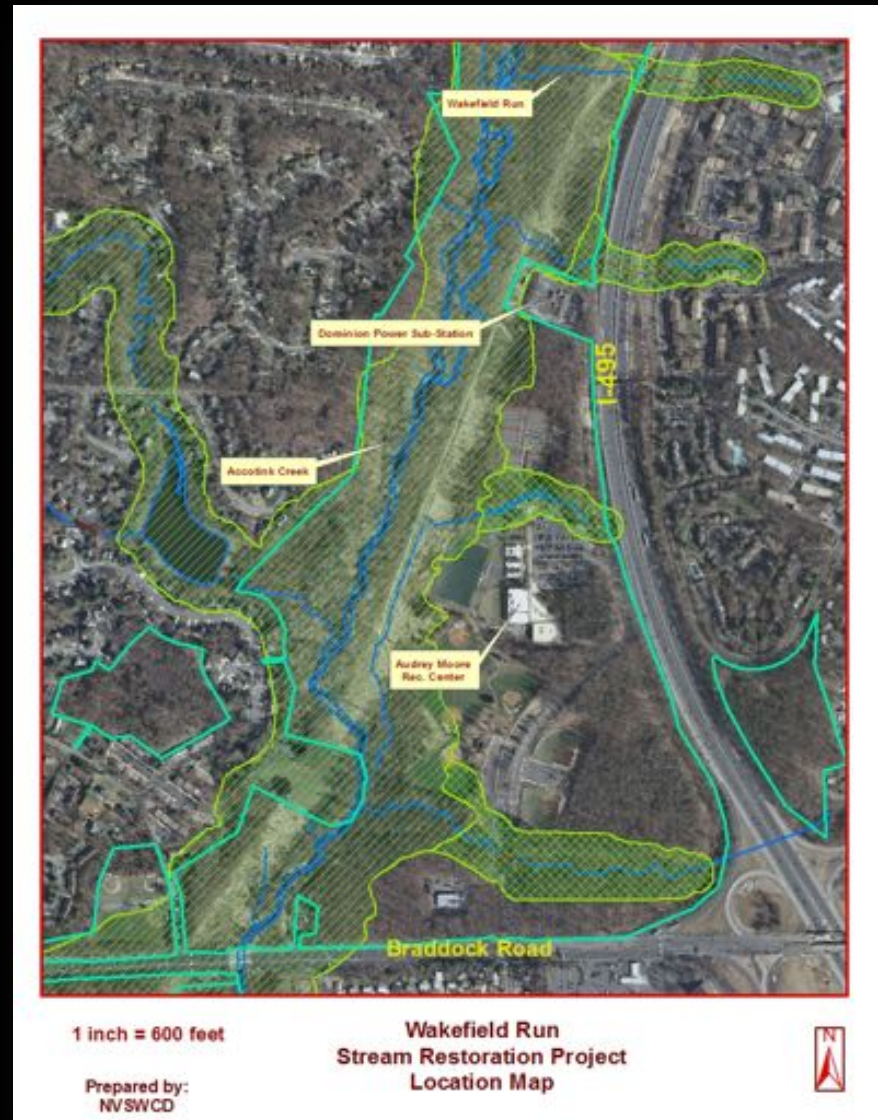


## Why Restore Wakefield Run?

Stream restoration is defined as the process of converting an unstable, altered, and degraded stream corridor, including its riparian zone and flood-prone areas to its natural and stable conditions.

Wakefield Run is actively eroding and acts as a source of sediments that damage downstream natural resources.

Erosion could cause damage to existing public assets within the stream corridor, including sanitary manhole, trail crossing, bridge, and natural gas line.



# Wakefield Run Restoration

- The Wakefield Run Restoration created meanders and gentle slopes, stabilized and planted the banks, replaced a large rip-rapped culvert outfall with a shorter, more effective outfall, and reconstructed a stream crossing and stabilized the Cross-County Trail Bridge. This project will restore the stream to a stable condition and improve water quality in Accotink Creek.



## Wakefield Run Restoration Project Partners:



Northern Virginia Soil & Water Conservation  
District

Fairfax County DPWES  
- Stormwater Planning Division

Fairfax County Park Authority

Dominion Virginia Power  
Braddock District Supervisor

VDOT/Fluor Lane

Friends of Accotink Creek

Fairfax Trails and Streams

Mid-Atlantic Off-Road Enthusiasts (MORE)

Earth Sangha



## **Danbury Stream and Flag Run Stream Restorations:**

Objective: Restore sections of two headwater streams of Accotink Creek (Danbury Stream and Flag Run) to address ongoing stream bank erosion and reduce stormwater-based sediment and nutrient pollution of Accotink Creek and the downstream Potomac/Chesapeake watershed.

Both streams have been severely eroded by stormwater runoff, creating steep channelized banks, undercutting trees, exposing sewer lines and mains, and causing significant sediment contributions to Accotink Creek and Lake Accotink. In addition, the erosive widening of both streams is threatening surrounding homeowner properties, and Danbury Stream will imminently wash away a popular community walking trail and footbridge.

### **Danbury Stream**



Tree undercut by erosion



Eroding streambank



Trail threatened by erosion

## Danbury Stream and Flag Run Stream Restorations:

The restoration projects will use Natural Channel Design techniques to stabilize stream banks and reduce stormwater- based erosion and sediment pollution. This will include:

1. Grading and rerouting stream channels to restore a more natural stream hydrology. Stabilizing and strengthening steep eroding stream banks with rock and log structures to reduce sediment erosion and protect community infrastructure and homeowner properties from erosion-related damage.
2. Installing grade controls and plunge pools to slow stormwater velocity and reduce its erosive power.
3. Replanting the floodplain with native species to stabilize stream banks, reduce stormwater runoff and erosion, and create native habitat.
4. Replacing turf grass with native plantings to reduce stormwater runoff and create natural habitat.



Examples of Natural Channel Design from the Wakefield Run Restoration

# Collaborative Grant Example: Danbury Forest and Flag Run Restoration Project

## Partners:

Audubon Society of Northern Virginia  
Danbury Forest Community Association  
Fairfax County Department of Public Works and  
Environmental Services  
Fairfax County Restoration Project  
Fairfax County Park Authority  
Fairfax County Public Schools  
Friends of Accotink Creek  
Friends of Lake Accotink Park  
Northern Virginia Soil and Water Conservation District  
Office of Public-Private Partnerships  
Virginia Department of Transportation

