CONSERVATION
CORRIDOR PLANNING

Northern Virginia
Regional Commission

nvrc

January 2012

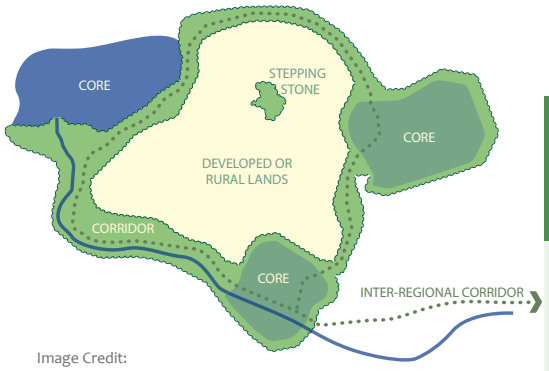
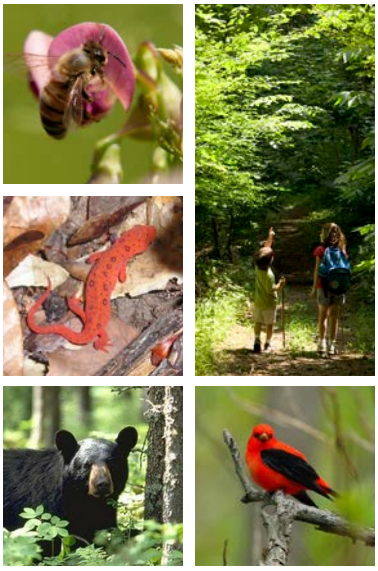


Image Credit:
Green Infrastructure Center

Green Infrastructure Planning: An Overview

Green infrastructure planning connects intact habitat areas (cores) through a network of multi-purpose corridors that provide for wildlife movement and trails as well as pathways for pollinators. Maintaining intact, connected natural landscapes and areas that serve as stepping stones is essential for basic ecosystem and watershed services, such as clean air and water. Mapping the region's key green infrastructure assets, such as forests and waterways, allows for better decision-making regarding the location and design of grey infrastructure, such as roads and utilities, which support development.

Who Uses Cores and Corridors?



Regional Green Infrastructure

The Northern Virginia Regional Commission (NVRC)'s Conservation Corridor Planning Project is a regional effort to help area governments and their constituents integrate green infrastructure planning as part of their civic toolkit. By working regionally, we can identify new opportunities to collaboratively plan for the connection, restoration and enhancement of Northern Virginia's natural resource assets, strengthening public health, local quality of life and the region's economy.

This assessment presents a snapshot of the region's high-value natural resources, along with potential multi-jurisdictional applications and recommended next steps.

Project Goals

- Refine state-level analyses for local applications using local data and priorities.
- Identify and map high-value habitat cores and corridors across the region.
- Highlight opportunities for regional connections.
- Quantify the benefits of these areas.
- Collaborate on cross-jurisdictional efforts to pursue these regional opportunities.

Project Approach

NVRC and its partners worked with the Conservation Corridor Workgroup, a multi-disciplinary advisory group of long-range and environmental planners, natural resource managers, ecologists and others from local governments and conservation organizations in Northern Virginia.

Asset Mapping: State and local data guided identification of natural, cultural, historical and recreational assets, which are viewable at a regional scale. The state's Virginia Natural Landscape Assessment was a key model used in evaluating the highest-value natural resource assets in Northern Virginia.

Opportunity Identification: The project team analyzed assets that cross jurisdictional boundaries and would benefit from collaborative opportunities.

Implementation (ongoing): Project information and data are available to interested parties who want to work on conserving local and regional connections. Project maps will require regular updates with current data.

Regional Base Map

The map on page 3 highlights the network of lands, waterways and corridors in Northern Virginia that provide the greatest green infrastructure benefits integral to the region's quality of life, public health and economy. The regional-scale map illustrates how Northern Virginia's natural resources intertwine through wide-ranging development patterns, from urban growth areas around Washington, D.C. to more suburban and rural development to the south, west and northwest.

The base map displays areas of regional significance that provide benefits for more than one jurisdiction. Due to the regional scale of the project, not all locally significant resources are visible on the map. Effective green infrastructure planning in Northern Virginia will require tailoring goals, strategies and progress measurement to varied settings and scales, as well as regional coordination among area localities to maintain connections.

SEEKING A CONNECTED AND HEALTHFUL LANDSCAPE

Forested cores and connecting corridors cross political boundaries. Keeping these areas intact and connected helps maintain wildlife habitat, recreation, clean water and supports scenic and historic vistas.

High-Value Core = an area of intact, un-fragmented forest at least 100 acres in size that provides habitat for local species as well as other benefits, such as protecting water quality. These include cores with outstanding to moderate ecological integrity (C1-C4), as identified in the Virginia Natural Landscape Assessment (VaNLA).

Contributing Landscape = an area that supports a core by buffering it from development and providing other related benefits, such as scenic views. These include cores with general ecological integrity (C5), as identified in the VaNLA.

- High Value Cores
- Contributing Landscapes
- Intact Tree Cover (greater than 1/4 acre)
- Major Rivers
- Streams
- Rural Lands
- Urban Developed Lands

Source habitat cores data supplied by the Virginia Department of Conservation and Recreation, Division of Natural Heritage.

Conservation Corridor Regional Base Map


FCPA

Planning for the Future: Conserving and Enhancing the Region's Green Infrastructure

Green Infrastructure Services

Trees filter air pollutants while also taking up stormwater, filtering runoff, cooling urban areas, and making streets, neighborhoods and commercial districts more attractive.

Intact forests provide benefits for wildlife, people and pollinators. Breaking up forests into smaller and smaller pieces results in fragmentation of Northern Virginia's forests. The loss of intact forests results in a loss of wildlife habitat, natural areas and ecosystem services, such as clean air and water, raw materials, recreation opportunities and natural hazard mitigation.

Northern Virginia's communities are closely linked economically and through traditional "grey" infrastructure including road networks, mass transit and airports. The region's significant natural resources – its green infrastructure – are no different. Forests, waterways and wildlife habitat all cross jurisdictional boundaries, providing regional ecosystem and watershed services, which are expensive to replicate if lost. Additionally, these resources enhance quality of life for Northern Virginia's residents, providing clean water, agricultural soils and public parks and trails.

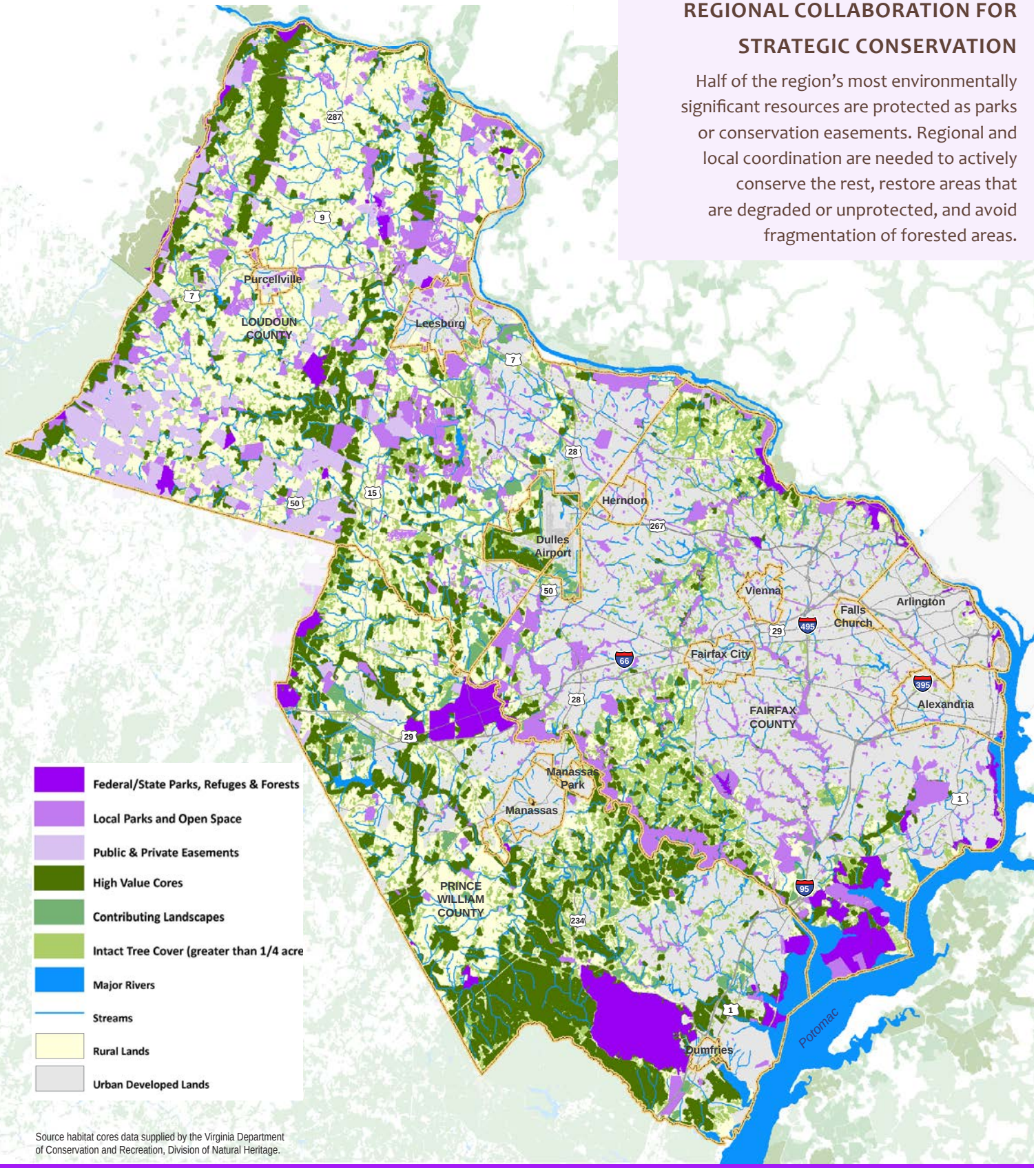
Northern Virginia has been growing by about 35-38,000 people per year, on average, for more than 30 years. By 2020, the area will be home to an estimated 2.5 million residents. The population equivalent of a new Loudoun County – about 300,000 people – joins the region about every eight years. In turn, this results in a need for additional homes, roads, buildings and other grey infrastructure.

To help plan for and guide Northern Virginia's future growth, effective local and regional green infrastructure planning is essential. Our remaining forests, farms, parks and wetlands protect public health, ensure the quality of our water and air, sustain recreation opportunities and the area's heritage, and provide direct economic benefits. Just as our highways and utilities require planning and maintenance, our natural resources also require careful attention and effective management over time.

The map on page 5 illustrates conserved lands across the region and remaining significant environmental resources that are currently unprotected and vulnerable to disturbance. Northern Virginia's localities and conservation organizations can work locally and across jurisdictional boundaries to conserve, maintain and restore these resources.

REGIONAL COLLABORATION FOR STRATEGIC CONSERVATION

Half of the region's most environmentally significant resources are protected as parks or conservation easements. Regional and local coordination are needed to actively conserve the rest, restore areas that are degraded or unprotected, and avoid fragmentation of forested areas.



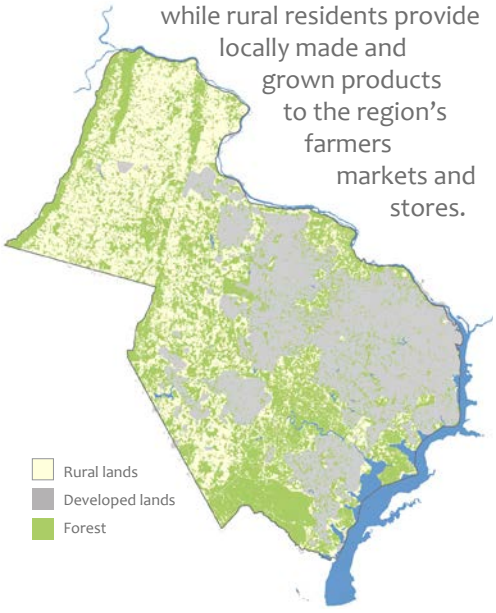
Source habitat cores data supplied by the Virginia Department of Conservation and Recreation, Division of Natural Heritage.

Conserved Lands

Connecting People and Landscapes

Northern Virginia's Inter-Community Connections

The region's communities rely heavily on each other's historic resources, recreation areas and working landscapes. Urban and suburban residents visit pick-your-own farms and enjoy wineries in rural areas while rural residents provide locally made and grown products to the region's farmers markets and stores.



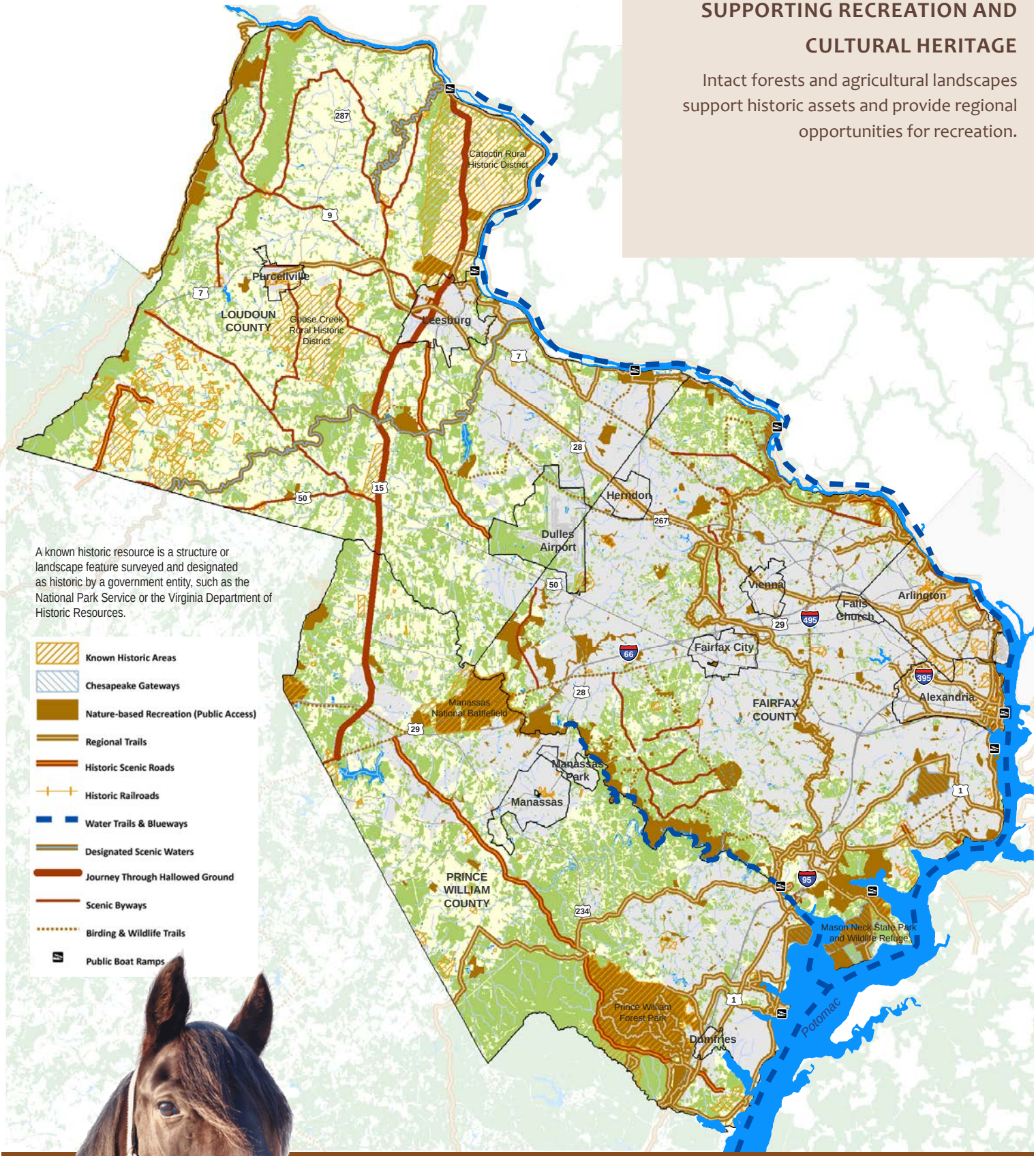
Northern Virginia is a special place. Home to one of the country's most vibrant economies and more than 2.2 million residents, the area enjoys a rich history, hosts diverse cultures, and benefits from recreation areas and working landscapes – forests and farms – vital to our economy and quality of life. These resources are closely linked with Northern Virginia's natural resources, as highlighted by the map on page 7. Effective green infrastructure planning supports history, culture, recreation areas and working landscapes.

Northern Virginia's natural resources provide vital landscape context for its historic assets. For example, natural areas around Mount Vernon and Manassas National Battlefield Park provide the setting within which visitors explore and learn about these national treasures. The map on page 7 also illustrates how the region's nature-based recreation resources – areas such as Algonquian Regional Park and the Meadowood Special Management Recreation Area – provide opportunities to connect the natural corridors critical to protecting water quality and maintaining connections between key habitat areas. The nature-based recreation features highlighted on the map are regionally significant areas. The recreation opportunities in these areas are dependent upon a natural setting.

NVRC member governments can use the Cultural Heritage and Recreation Map to explore cultural, historical, agricultural and recreational interconnections with the area's green infrastructure network. The map can be further refined to reflect specific community goals and priorities, as well as to identify and inform planning strategies requiring an inter-jurisdictional approach.

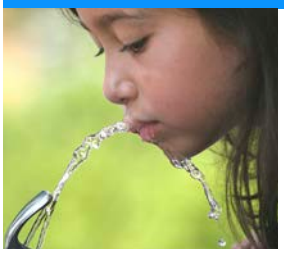
SUPPORTING RECREATION AND CULTURAL HERITAGE

Intact forests and agricultural landscapes support historic assets and provide regional opportunities for recreation.



Cultural Heritage and Recreation

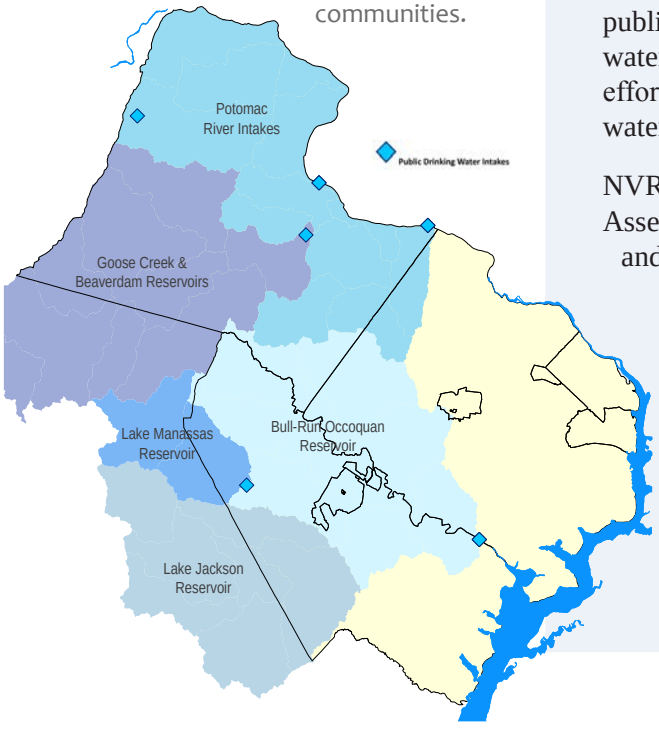
Ensuring Water Quality and Supporting Public Health



Linking Land Use and Water Quality

Three-quarters of the region's watersheds drain into public water supply intakes (see map below). Underground aquifers and community wells supply drinking water to areas not connected to public water systems. Land uses in our watersheds directly affect the quality of local and regional drinking water.

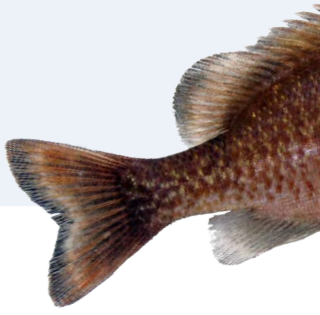
Stormwater management, agricultural best management practices, wetlands restoration, and public outreach and education are some of the ways we can maintain the quality of our public water supplies, helping ensure the long-term health of our communities.



The map on page 9 highlights the relationship between Northern Virginia's abundant water resources and its forested areas. Important regional waterways, such as Goose Creek, Bull Run, the Potomac River and Occoquan Reservoir thrive because they are shaded by trees and vegetation that filter stormwater, prevent erosion, facilitate ground water recharge and moderate temperatures. Green infrastructure planning ensures these vegetated areas along waterways – also called forested buffers – are maintained and enhanced over time, protecting public health and water quality.

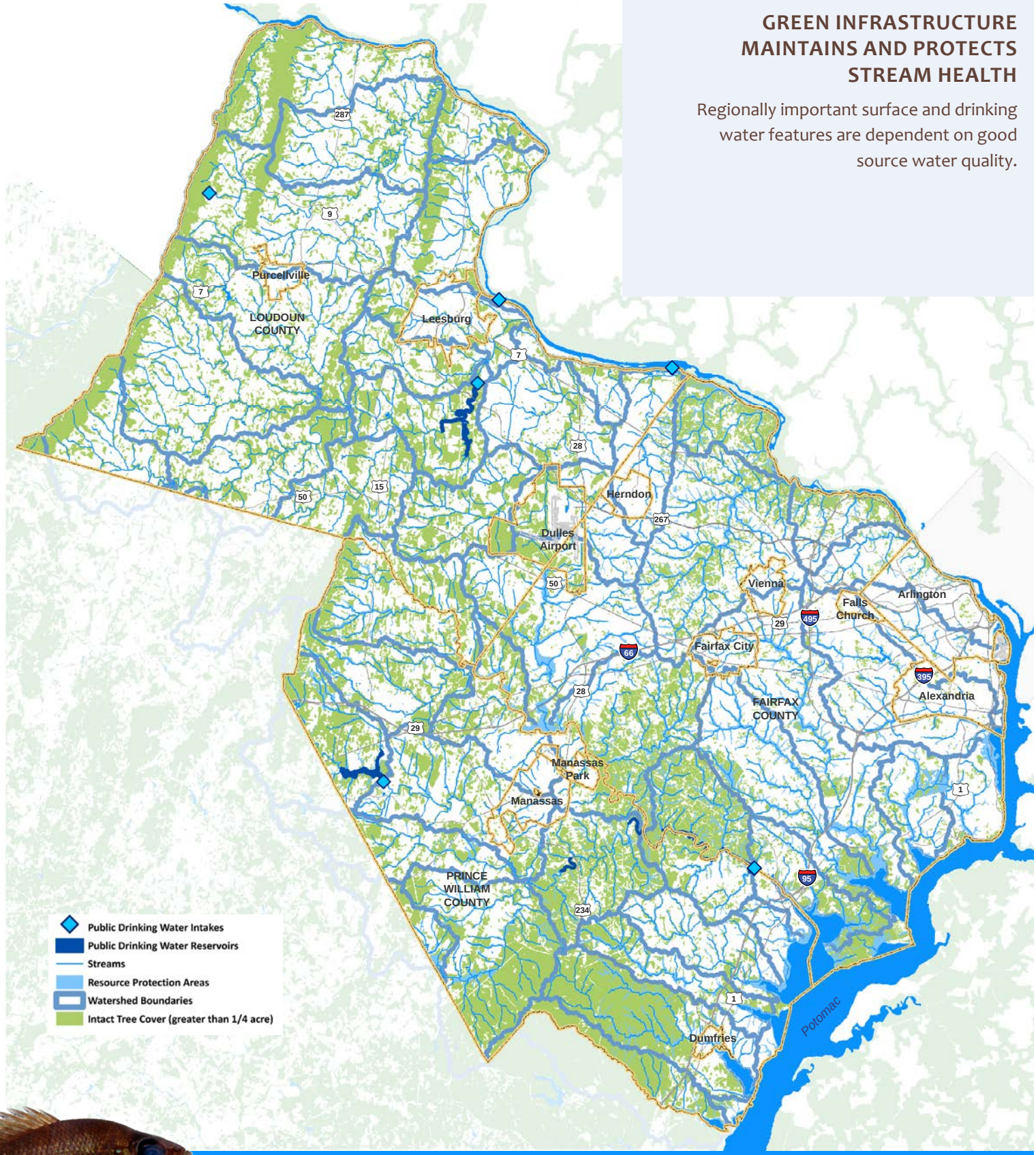
The map illustrates that the extent of forested buffers near the region's waterways varies substantially, ranging from less extensive in urban, suburban and agricultural areas to more extensive in non-agricultural rural areas. Maintaining and enhancing forested buffers near Northern Virginia's waterways requires tailoring tools and approaches to these varied settings. Localities with extensive buffer areas may focus on how to maintain and protect these resources, for example. Localities with less extensive buffers may identify locations such as parks, schools and other public areas that provide opportunities for buffer restoration and expansion. For watersheds that cross jurisdictional boundaries, multiple localities may coordinate efforts to maintain or enhance their buffers for shared benefit, such as drinking water protection.

NVRC member governments and other organizations can use the Water Resources Asset Map to review the characteristics of local waterways, identify the extent and location of forested buffers, and analyze the relationship between local land uses and area waterways. The map can be further refined to reflect specific community goals and priorities, as well as to identify and inform planning strategies requiring an inter-jurisdictional approach.



GREEN INFRASTRUCTURE MAINTAINS AND PROTECTS STREAM HEALTH

Regionally important surface and drinking water features are dependent on good source water quality.

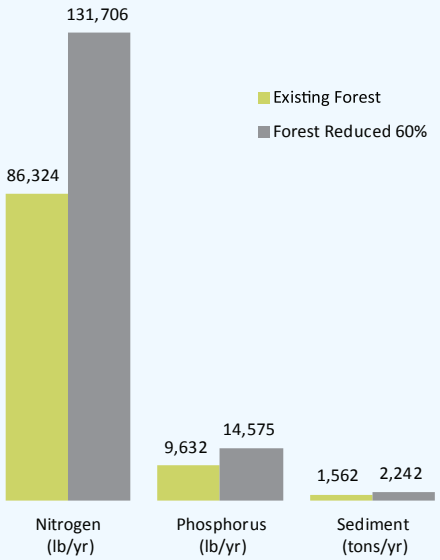


Water Resource Assets

The Value of Regional Collaboration

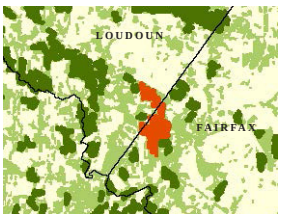
Waterway impairments such as excess sediment can limit opportunities for fishing and recreation and affect the quality of our water supplies. For example, a typical urban watershed in Northern Virginia is approximately 40 percent forested. Analysis using the Virginia Department of Forestry's InFOREST nutrient and sediment runoff calculator indicates that developing 60 percent of that forested land could result in a roughly 50 percent increase in the amount of nitrogen, phosphorus and sediment entering the region's waterways and, ultimately, the Chesapeake Bay each year. U.S. EPA has identified nitrogen, phosphorus and sediment as the three primary pollutants that must be reduced to restore the health of the Chesapeake Bay and its tributaries. A wide range of approaches can address these impairments, including reducing runoff and restoring stream banks and buffer areas.

Looking to the future, preventing water quality impairments and ensuring adequate water flows are vital to ensuring safe water supplies, recreation opportunities and the ecological integrity of the region. Coordination and collaboration among Northern Virginia's towns, cities and counties is needed to make this possible.

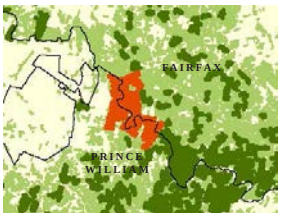


Cross-Jurisdiction Coordination

Two highlighted areas illustrate a cross-jurisdiction opportunity to maintain high-value natural resources.



The high-value area, a forested core located along Elklick Branch and shared by Loudoun and Fairfax Counties, is 845 acres in size and includes 206 acres of priority habitat. Each year, this core removes 74,416 pounds of air pollutants, a savings of $199,246, stores 31,790 tons of carbon and saves $29 million in stormwater management costs that would be incurred if the trees were not uptaking this stormwater.



The high-value core spanning the Occoquan Reservoir and shared by Prince William and Fairfax Counties, is 5,434 acres in size and includes 646 acres of priority habitat. Each year, this core removes 306,573 pounds of air pollutants, a savings of $820,840, stores 130,968 tons of carbon and saves $166 million in stormwater management costs.

Annual estimates are based on an analysis using CITYgreen software, a GIS-based application to calculate the benefits of trees, which correlates to the savings noted above.

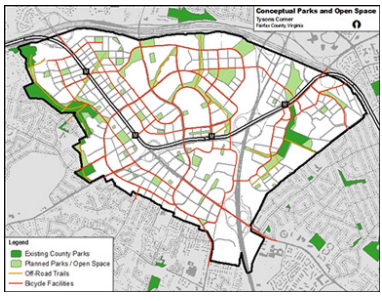
Case Study Examples

Within the region's urban areas, there are several ongoing efforts to maintain and restore green infrastructure assets.

Four Mile Run Restoration

Since the early 2000s, the City of Alexandria and Arlington County have worked toward the restoration of the Four Mile Run stream valley corridor to form an "emerald spine in an urban corridor." In turn, improving the environmental integrity of the waterway improves the surrounding landscape and quality of life for residents in both jurisdictions. For more information, visit www.novaregion.org/fourmilerun.

Tysons Corner Green Network



The revitalization of Tysons Corner includes a conscious effort to create a "Green Network" by maintaining environmentally sensitive areas and enhancing park space and connections through a "greenway." Fairfax County developed innovative urban parkland standards to accommodate recreation and leisure interests of residents and workers in the area. For more information, visit www.fairfaxcounty.gov/tysons.

BENEFITS OF CONSERVING NATURAL ASSETS

The environmental benefits provided by Northern Virginia's natural resources, such as clean air and water, are significant. Often referred to as "ecosystem services," these environmental functions help make the region a thriving and resilient area. Equally important, these resources provide benefits vital to public health, quality of life and economic growth in Northern Virginia. Examples of these diverse benefits are discussed below.

Public Health: Forest cover reduces surface temperatures, keeping cities cooler and more livable. Forested and natural areas also help with attention deficit hyperactivity disorder (ADHD). A study of children who moved closer to green areas found they tended to have the highest levels of improved cognitive functioning following the relocation, regardless of the level of affluence (Wells, 2000). Green outdoor settings appear to reduce ADHD symptoms in children across a wide range of individual, residential and case characteristics (Kou and Taylor, 2003).

Land values: A study by the National Association of Realtors found that 57 percent of voters are more likely to purchase a home near green space and 50 percent are willing to pay 10 percent more for a home located near a park or other protected area. A similar study (Correll et al., 1978) found that the value of homes adjacent to green space in Boulder, Colorado, were 32 percent higher than those 3,200 feet distant. In the country's current difficult economy, maintaining property values ensures stable tax revenues for localities and enables homeowners to maintain the investment value of their properties.

Jobs: Preserving open space helps to attract companies with good jobs. Small companies, especially those that are have a well-paid and skilled workforce, place a strong importance on local environmental assets (Crompton, Love and Moore, 1997). The creative class – artists, media, lawyers and analysts – make up 30 percent of the U.S. workforce and they place a premium on outdoor recreation and access to nature (Florida, 2002).

Regulatory Requirements: Cleaning up polluted water and reducing flooding is an example of an ecosystem service provided best by forested land cover. Forested lands can significantly reduce runoff of nitrogen, phosphorus and sediment, the three pollutants identified for reduction as part of the mandatory federal plan to clean up the Chesapeake Bay.

Cost Savings: A survey by the American Water Works Association found that a 10 percent increase in forest cover reduced chemical and treatment costs of drinking water by 20 percent (Barten and Ernst, 2004). Since much of Northern Virginia depends on surface water for drinking, reducing treatment costs benefits more than half of the region. For those who depend on well water, forests help recharge the aquifers that supply the wells by holding water, filtering it and allowing the water to slowly infiltrate into ground water. The longer a well can remain in service, the lower the costs, since the well will not need to be relocated or redrilled to reach lowered water tables. American Forests has estimated that the value of urban tree cover in reducing stormwater problems in the nation's cities is more than $400 billion.

For more information on the benefits of green infrastructure and full citations for the articles referenced above, visit www.gicinc.org.

Regional Opportunities and their Significance

The assessment identified five priority regional conservation corridors in Northern Virginia. The assessment prioritized these corridors based on the vital role they play in defining the region's natural characteristics, providing water quality benefits, supporting cultural heritage and nature-based recreation opportunities, and contributing to the region's overall quality of life.

A

POTOMAC RIVER CORRIDOR

The Potomac River may be one of Northern Virginia's most recognized natural features.

- The river provides drinking water for residents across the Washington metropolitan area.
- The Potomac Gorge is home to the river and a tidally influenced estuary, one of the most complex ecosystems in the United States.
- Much of Northern Virginia's tidal shorelines are public areas managed by local, regional, state and federal agencies; these areas provide ready access to a range of nature-based recreation options. These areas also provide habitat for migratory birds and many threatened and endangered species, such as Bald Eagles.

B

POTOMAC GORGE – QUANTICO CORRIDOR

This suburban corridor, also known as the Northern Virginia Greenbelt, provides public access to significant nature-based recreation opportunities.

- The area includes stream valley parks and large tracts of undeveloped private lands.
- The area connects Prince William National Forest Park with Manassas National Battlefield Park and provides a larger north-south regional connection linking Northern Virginia's green infrastructure with Maryland's natural resources.

C

BULL RUN – OCCOQUAN CORRIDOR

Beginning at the Bull Run Mountains and heading east to the confluence of the Occoquan River with Belmont Bay, this corridor is rich in environmental and cultural assets both modern and old.

- Over one million Northern Virginia residents receive their drinking water from the Occoquan Reservoir, one of the country's first water reclamation facilities. The reservoir also provides popular flat-water recreation options.
- The western portion of the area is part of the Culpeper Basin Important Birding Area.
- Significant historic resources are also present, including several Civil War battlefields, historic railroads, scenic byways and prehistoric routes.

D

BULL RUN MOUNTAIN – CATOCTIN MOUNTAIN CORRIDOR

This north-south corridor connects the culturally and naturally rich foothills of the Blue Ridge Mountains in Northern Virginia.

- The corridor provides significant intact habitat for Northern Virginia wildlife.
- North of Leesburg, the corridor is underlain by limestone, providing a large area for ground water recharge.
- The Journey through Hallowed Ground (Route 15) runs through the corridor, connecting the region's Civil War legacy with other significant battlefields and historic sites across the mid-Atlantic.

E

BLUE RIDGE – SHORT HILL CORRIDOR

The western edge of Loudoun County includes part of the Blue Ridge Mountain range and its significant natural and recreational resources.

- The area's steep slopes make development difficult. However, the slopes provide a significant backdrop and viewshed for western Loudoun County's rural and agricultural heritage.
- The Appalachian Trail and associated facilities are located along the length of the corridor, providing a significant recreation resource for hikers and visitors.
- The underlying geology of the region transitions here from the Piedmont to the Blue Ridge physiographic province, providing distinctive vegetation and habitat for larger mammals, such as bears.

CONSERVATION STRATEGIES

1. Protect the highest quality habitat cores first.
2. Preserve corridors or stepping stones that provide multiple benefits.
3. Enhance ecosystem functions of cores with good management.
4. Restore degraded or missing connections.
5. Recreate ecosystem functions in developed areas.

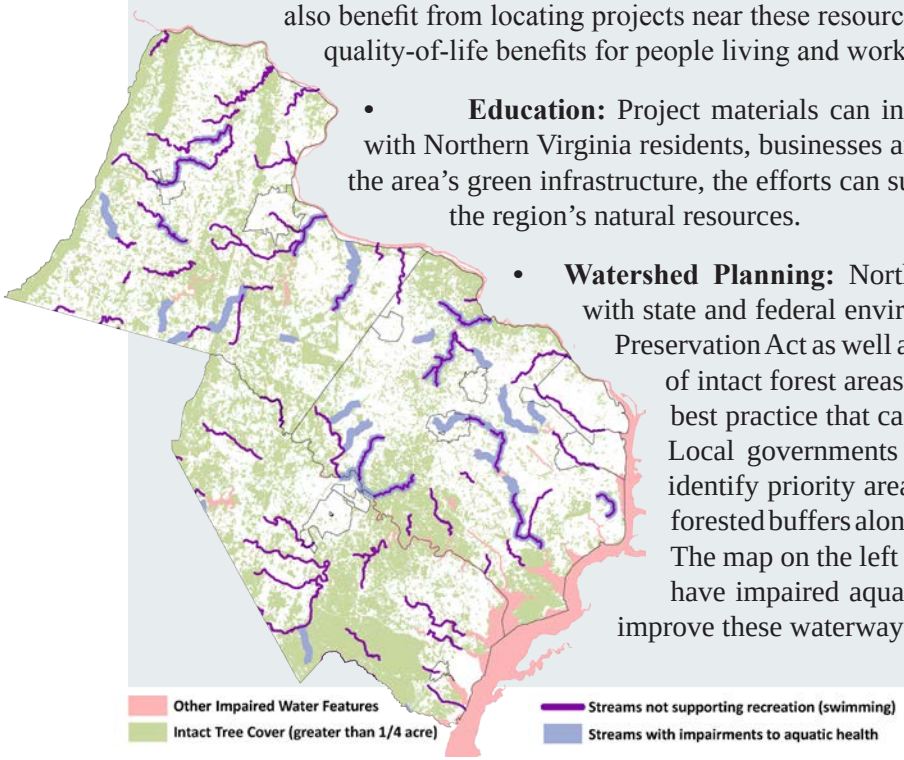
Regional Opportunities

Applications

The results of the Conservation Corridor Planning Project serve as a guide for conserving the region's most significant resources for their forest and wildlife habitat, recreation, cultural heritage, and water quality values. The project's green infrastructure maps, data and analyses are resources made available to NVRC member governments and constituents as they consider ways to integrate green infrastructure planning as part of their planning activities.

These regional maps are suited for regional and cross-jurisdictional planning. Further refinement of the maps and data will help ensure important local features and additional intact habitat areas and corridors are included in future planning efforts and initiatives at the local and regional level. Diverse users can use project information for a variety of purposes.

- **Mapping:** Users can graphically layer information on project maps to identify particular local and regional green infrastructure planning opportunities. For example, identifying areas with minimal tree canopy and impaired waterways that drain into public water supply intakes could lead to targeted tree and habitat restoration programs. Similarly, identifying vacant lands could lead to revitalization opportunities that emphasize habitat and water quality improvements.
- **Plan Review:** Local governments can use project information as part of the development plan review process, ensuring plans meet local natural resource management goals, such as tree canopy coverage and conserved open space.
- **Strategic Conservation:** Land trusts and other conservation organizations can use project information to inform land acquisition and conservation strategies that focus on high-value natural resource areas providing multiple benefits, including vital regional connections. The organizations can also incorporate project materials as part of their proposals for land acquisition and conservation project funding.
- **Strategic Development:** Developers can use project information to prioritize project designs, such as clustering, to avoid impacts to the region's high-value natural resources and regional corridors. They can also benefit from locating projects near these resources, resulting in higher property values and providing quality-of-life benefits for people living and working nearby.
- **Education:** Project materials can inform environmental education and outreach efforts with Northern Virginia residents, businesses and organizations. In addition to raising awareness of the area's green infrastructure, the efforts can support individual and community efforts to conserve the region's natural resources.
- **Watershed Planning:** Northern Virginia's towns, cities and counties comply with state and federal environmental regulations including the Chesapeake Bay Preservation Act as well as voluntary initiatives. The protection and restoration of intact forest areas and waterway buffers is a commonly recommended best practice that can help localities meet these regulatory requirements. Local governments can use project information and regional maps to identify priority areas for action. For example, conserving and restoring forested buffers along streams can effectively address certain impairments. The map on the left shows streams that cannot support swimming or that have impaired aquatic health. A green infrastructure approach can help improve these waterways and meet regulatory requirements.



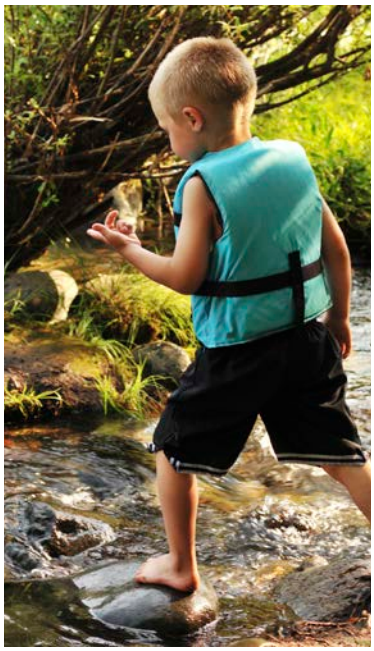
Planning at Different Scales

Planning approaches for protecting or restoring conservation corridors and natural assets vary depending on the scale of the assessment. For example, at the regional scale across Northern Virginia, consistent and comprehensive GIS datasets are important to avoid misrepresentation of existing resources that cross jurisdictional boundaries. At the county, city and neighborhood scale, more detailed GIS datasets featuring important local assets should be included in the analysis. Following are examples of possible follow-on planning efforts, with key datasets at each scale.

County Scale: Planning approaches at this scale should include elements from the regional scale assessment and local features. These features would include local waterways (e.g. headwaters and smaller tributary streams), smaller local parks, tree canopy, important agricultural soils in rural areas, smaller Civil War encampments or locally designated historic districts for which landscape context is important, and county trails. At the county or city scale, overlay maps can be added to show local zoning and land use designations such as agricultural and forestal districts as well as local areas protected by tools such as conservation easements. These maps can also support the identification of local priority conservation areas in locations that may change.

City or Town Scale: In addition to considering similar elements to the county-scale planning mentioned above, smaller-scale features such as individual street trees or pocket parks can be included at this urban scale. Planners may also want to consider where resources can be restored, such as by inventorying vacant lots to identify areas that could be restored to provide new or connected natural areas. A series of vacant lots can be restored and connected to create a wildlife corridor or an urban trail, for example. Similarly, brownfields restoration – cleaning up a contaminated site and replanting the area with native plants and trees – can help to increase natural areas within developed areas and support efforts to revitalize downtown districts or older industrial areas in transition.

Neighborhood Scale: Neighborhoods and subdivisions may wish to focus on the management of community open spaces, common areas and parks. Establishing no-mow zones along creeks, planting native trees and shrubs, and establishing small habitat areas such as brush piles for birds or butterfly gardens are examples of neighborhood-scale activities that can provide significant benefits. These smaller-scale projects can be even more effective when open spaces and parks are joined together to create larger conservation corridors used by native wildlife, birds, butterflies and pollinators. For more ideas, visit: www.dgif.virginia.gov/habitat.



Next Steps for Conservation Corridors in Northern Virginia

The Conservation Corridor Planning Project supports many local conservation and open space planning efforts that are already underway. Possible additional next steps include:

- Continued collaboration through a workgroup to focus on the implementation of the five regional conservation corridor opportunities described on pages 12 and 13 of the assessment report.
- Outreach and education to landowners, homeowners and community associations on stewardship practices.
- Local-scale analyses to identify high-value natural assets at risk from future development or other factors.

High-resolution copies of this report and the project's regional maps are available online at www.novaregion.org/conservation. The project's GIS data are available to area governments and their constituents by contacting NVRC at 703-642-0700 or info@novaregion.org.

CONSERVATION
CORRIDOR PLANNING

Northern Virginia is rich in sensitive ecological areas, important drinking water sources, unique wildlife habitat, globally-rare forest communities, and nature-based recreational opportunities.

Through the Conservation Corridor Planning Project, NVRC and its partners are identifying and prioritizing regionally significant natural areas. These "green infrastructure" assets provide significant ecological, recreational and economic benefits in our communities.

The goal of the project is to help area governments and their constituents identify local and regional opportunities to manage, restore and enhance Northern Virginia's natural resources, thereby strengthening the region's health, economy and quality of life.

For more information, please visit:
www.novaregion.org/conservation

NVRC and its partners would like to thank the project's Conservation Corridor Workgroup. This multi-disciplinary advisory group of planners, natural resource managers, ecologists and others from local governments and conservation organizations in Northern Virginia contributed their time, expertise, resources and support. The project would not have been possible without their assistance and dedication.

nvrc
Northern Virginia Regional Commission

Project Partners

NVCT Saving Nearby Nature®

Green Infrastructure Center

skeo SOLUTIONS

List of Participating Organizations

Arlington County
Fairfax County
Loudoun County
Prince William County
Northern Virginia Conservation Trust
Northern Virginia Regional Park Authority
Prince William Conservation Alliance
Northern Virginia Urban Forestry Roundtable
Metropolitan Washington Council of Governments
Virginia Department of Conservation and Recreation
Virginia Department of Forestry
Maryland Department of Natural Resources
U.S. National Park Service
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