

AC44 Environmental Stewardship Chapter

Objectives and Actions

1. Protect and restore the quality and connectivity of rivers, streams, wetlands, floodplains, and forested riparian buffers, including by implementing the recommendations of the Stream Health Initiative.

Adopt and implement the Stream Health Initiative. *(Plan)*

Update the County's standards for restoring streambanks and mitigating permitted impacts to riparian buffers [SHI 2] and update the Zoning Ordinance to permit environmental restoration projects by-right in all zoning districts [SHI 3]. *(Regulation)*

In the Rural Area, implement the Land Conservation for Water Quality program [SHI 6] to acquire new voluntary riparian conservation easements (donated and/or purchased), and to work with willing landowners to amend older conservation easements without strong buffer protections to add those requirements. *(Program)*

Establish a stream quality assessment program with county landowners to assess stream conditions and restoration needs on private properties [SHI 12]. *(Program)*

In the Rural Area, implement the Riparian Conservation Assistance Program [SHI 7] to help landowners overcome cost barriers to improving water quality and natural resource protection along priority riparian areas. Scale financial assistance to landowners' level of need. *(Program)*

Track and report on the impact of the County's water resource protection and restoration activities. Use existing data sources where available and fill data gaps where needed through GIS analyses, field surveys, and monitoring. *(Analysis/Study)*

Develop metrics that can inform County staff and community about the condition of Albemarle County streams and watersheds over time. Use these metrics to help prioritize where to focus County's water resource protection and restoration funds and activities. *(Analysis/Study)*

Partner with other rural localities to incentivize habitat restoration projects on private land by pursuing changes to state enabling legislation that would permit those projects to qualify for the Open Space category of use-value taxation. *(Coordination/Partnership/Grants)*

2. Reduce the amount of unmanaged stormwater and other sources of pollution that enter natural waters, stream channels, and riparian areas.

Update County ordinances and guidance documents to allow, encourage, or require Low Impact Development (LID) [SHI 11]. *(Regulation)*

Develop incentives for low impact development (LID) and green infrastructure, such as rain gardens, green roofs, pervious pavements, and bioswales [SHI 11]. *(Program)*

Increase funding to the Albemarle Conservation Assistance Program, administered by the Thomas Jefferson Soil and Water Conservation District (TJSWCD), to support reduced stormwater impacts and increased biodiversity on developed land [SHI 10]. *(Program)*

3. Protect and improve the quality and quantity of groundwater throughout the county.

Increase staffing and funding resources to the Thomas Jefferson Soil and Water Conservation District for the implementation of agricultural and residential property best management practices [SHI 8 & 9]. *(Program)*

Promote responsible management of septic systems through financial assistance and pump-out requirements, with a long-term goal of hiring staff for outreach, data collection, community input, administration, and enforcement [SHI 4]. *(Program)*

Reduce impacts to groundwater and water supplies from private septic systems by incentivizing connections to the public sanitary sewer system for properties in the Development Areas that are on private septic systems, such as through the Albemarle Septic to Sewer Program. *(Program)*

Work with local and regional partners to monitor groundwater levels in the county and promote water conservation, particularly during times of drought. *(Coordination/Partnership/Grants)*

Protect and enhance the recharge of groundwater through promoting programs that support forest protection and re-forestation, such as the Virginia Trees for Clean Water Grant Program. *(Coordination/Partnership/Grants)*

Provide outreach to community members, including newer residents, landowners, and students, on ways to protect water quality [SHI 13] and biodiversity on privately-owned land, cost-share programs, and stewardship opportunities available in the county [SHI 14]. *(Coordination/Partnership/Grants)*

4. Protect and restore critical habitats for biodiversity and ecosystem health, including a network of large and well-connected native habitat blocks, priority areas identified in the Biodiversity Action Plan, the Mountain Protection Areas, dark skies, forested habitat corridors, and riparian buffers.

Update the Biodiversity Action Plan to:

- Develop indicator measures for tracking the state of biodiversity in the County. Once developed, regularly maintain and update indicators and data.
- Incorporate the most up to date information.
- Provide a more specific map of priority habitat cores, patches, and corridors for protection.
- Focus on prioritized actions for protection and restoration of landscape patterns that support and improve native biodiversity. *(Plan)*

(CW, RA focus) Use land-conservation tools to:

- Protect core forest habitats and important sites (including those identified in the Biodiversity Action Plan), priority biodiversity areas, and the Mountain Protection Areas.
- Pursue forest-vegetation protection for carbon sequestration.

- Protect wildlife corridors (including any identified in the Biodiversity Action plan or the Virginia Wildlife Corridor Action Plan) and prevent creation of potential barriers to wildlife movement.
- Protect forest cover on steep slopes. *(Program)*

Revise the County's lighting ordinance requirements to minimize the impacts of lighting on the health of animals, plants, and humans; to provide safe lighting for multimodal transportation options; and to protect and enhance dark skies and related wildlife habitat and travel. *(Regulation)*

Improve the templates of County- and ACEA-held easements to more specifically address appropriate management of important habitat areas. *(Program)*

Develop a management plan for the removal of invasive plants on County public lands. *(Plan)*

Protect, increase, and restore habitat areas in County parks and on other County-owned land. *(Program)*

Assist landowners with acquiring grants and other financial and informational support to protect core habitats and important sites identified in the Biodiversity Action Plan. *(Coordination/Partnership/Grants)*

Use available data to document occurrences of rare habitat types and species in the county. *(Analysis/Study)*

Contribute funding to programs managed by local partner organizations that address invasive plant removal and native plant restoration. *(Coordination/Partnership/Grants)*

Partner with community member-scientist groups and organizations to help gather data on the state of biodiversity in Albemarle County. *(Coordination/Partnership/Grants)*

Consider establishing grant programs and/or other incentives to assist property owners in attaining compliance with dark sky initiatives. *(Coordination/Partnership/Grants)*

(CW, RA focus) Increase County outreach to landowners (including a new-landowner outreach program) on habitat protection and options for land management techniques that support native biodiversity and water quality. *(Coordination/Partnership/Grants)*

5. Remove barriers to wildlife movement and improve habitat connectivity.

Require new stream crossings to use bridge or culvert designs that maintain connectivity for aquatic wildlife and organisms. *(Regulation)*

Pursue dam removal, culvert replacement, fish-passage structures at dams, and other measures to replace barriers with passages viable for fish and other aquatic species that are consistent with flood control and stormwater management. *(Program)*

Identify and map barriers to the safe movement of wildlife along wildlife corridors and to stream-habitat connectivity (including dams and culverts). *(Analysis/Study)*

Work with relevant state agencies to mitigate wildlife-movement barriers and reconnect interrupted corridors with voluntary private landowner participation. (*Coordination/Partnership/Grants*)

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