

Attachment A – Planning Commission Public Hearing – 5/14/19

**Public Comments and Actions Taken for CPA201800007 -
Proposed Comprehensive Plan Amendment to Include Biodiversity Strategies**

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Summary of Feedback from Planning Commission Work Session on 2/12/19

Comments	Actions taken regarding the comments
Add educational narrative addressing threats from biodiversity (as opposed to threats to biodiversity), use species to illustrate concept of interior habitat. Improve or replace Figure 4.	Revised and added wording to introductory session (before Strategy 4a begins). Replaced Figure 4 with a similar but simpler image.
From comments in online survey. Restoration is an important goal.	Added wording near end of Strategy 4a.
From comments in online survey. Address importance of land in private ownership for conservation.	Added wording at the end of Strategy 4a.
From comments in online survey. Discuss rivers and streams as corridors.	Added wording to Strategy 4b.
Use examples when discussing how the County can work with landowners.	Added wording to Strategy 4j.

Summary of Feedback from Planning Commission Work Session on 11/20/18 and Public Meeting on 11/29/18

Comments	Actions taken regarding the comments
Consider adding a strategy for diverse urban forests in Development Areas.	Meetings and discussion with staff, Commissioner Firehock. Strong support for this strategy, but it would be more appropriate in other sections of Comp Plan. Added wording to the fourth paragraph under Objective 4 to emphasize importance of Development Areas in conserving biodiversity, positive benefits of diverse urban forests.
Paragraph 3 under Objective 4. Does not clearly explain reasons for conserving biodiversity, reference to "City" residents should be removed.	Shortened and simplified the wording, removed references to "timber products from forests" and "City" residents.
Strategy 4b, comment from public meeting on 11/29/18.	Added information about Conservation Focus Areas regarding total acreage, private vs. public ownership, and acreage under conservation easement.
Strategy 4b. More information about Piedmont prairies is needed.	Added sentence to clarify, explain these systems.
Strategy 4c. County parks "should" play a critical role in conserving biodiversity, rather than "can" play a critical role.	Made the revision.

Strategy 4f, comments from public meeting on 11/29/18.	Added "Evaluate opportunities" to the strategy. Added information about Important Sites regarding total acreage, private vs. public ownership, and acreage under conservation easement.
Strategy 4g. Some clarification of "locally native plants" is needed.	Added sentence to clarify and explain the phrase.
Strategy 4g. Project goals should be considered under this strategy. Use of locally native plants should only be encouraged when they will perform equally or better than other species in meeting project goals.	Discussion with staff, Natural Heritage Committee. Strong support for the strategy as written. "Encourage" and "promote" allow for flexibility, do not require specific actions. Did not revise the strategy.
Strategy 4k. Reference to County's limited information and resources is inaccurate, conflicts with other strategies.	Revised wording of the strategy to reference the BAP and other County-generated data.
Implementation of strategies.	Comment from Commissioner Keller and others. Andrew Gast-Bray, other staff are working on enhancing metrics. Improved metrics will allow better tracking of implementing strategies.
Engage the ACE and ACEA committees and staff in CPA process.	ACE committee engaged since meeting of 10/10/18. Emailed county staff representing these committees with updated information and materials in Jan. 2019.

Several additional topics were mentioned or discussed during the 11/20/18 Planning Commission work session. Most are listed below as bullets. They are better addressed through outreach and education efforts or in other policy discussions and efforts rather than in the proposed Comprehensive Plan Amendment.

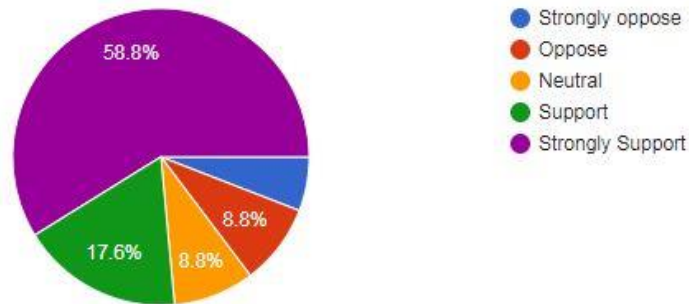
- Land Use taxation program
- Silvicultural activity
- Restoration of healthy, native hardwood forests
- Pollination of crops as critical ecosystem service
- Habitat connectivity and corridors linking rural areas with developed areas

Results of Online Survey about Draft Strategies for the Comprehensive Plan to Incorporate Biodiversity Strategies

34 Responses – Survey was Open from November 2018 through 1/24/19

4a: Implement an Action Plan for Biodiversity that includes protection of significant areas of biological importance in the County.

34 responses



Do you have any comments or questions regarding proposed strategy 4a?

7 responses

Maintenance and protection of the natural resources of Albemarle County is critical to ensure its protection for decades and centuries. It is too easy to think short term and favor destruction of natural resources for development and not take a stewardship role in protecting the land for perpetuity.

This is unnecessary and costly. Stop.

develop incentives for higher stewardship performance when no development. add requirements to any construction to improve standards

What areas of the county are of biological importance? Does this mean the county wants to prohibit farmers/land owners from selling their land to developers if they want?

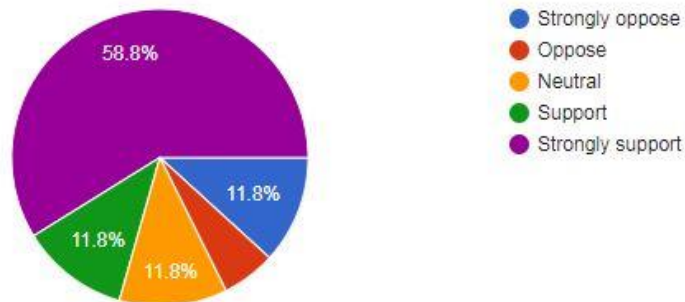
W
E
Have too many restrictive rules-no more needed

I have read the documents provided. I am shocked - to say the least - that not a single provision or proposal is made to support remediation or restorations of areas devastated, overgrown, or threatened by non-native species. I have been fighting invasive species of plants FOR YEARS a my home and it is a losing battle because neighbors are not doing, and County is not doing. Shocked! to say the least that provisions and proposals and plans have nothing! to say or to do about this. Also I have reviewed all the maps. The important biodiversity, habitats, and 'habitat connectivity' - as the maps emphasize! - along the entire James River border of the County is ignored! Again, profoundly shocking!

Please do not make it ANY harder to develop in the designated development areas!

4b: Use existing tools (e.g., conservation easements), develop strategies, and implement new conservation programs to protect lands in the three conservation focus areas, other conservation targets (e.g., examples of the five key ecosystems described below, large forest blocks or other intact, important habitat), and lands that can serve as habitat corridors or connections among important habitat areas.

34 responses



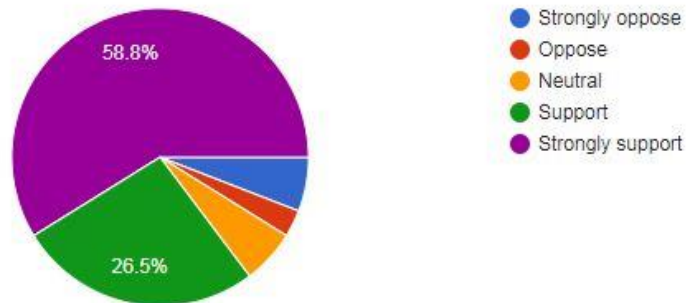
Do you have any comments or questions regarding proposed strategy 4b?

7 responses

- This is unnecessary and costly. Stop.
- Be more specific about the actual need of an easement in any particular situation/location
- may need new tools too
- Emphasize denser building for new construction
- The historical 'conservation easement' program has OBVIOUSLY been applied in a biased manner to substantially benefit LARGE land owners. This is an UNFAIR, UNJUST, INEQUITABLE, and UNTRUSTWORTHY system unless profoundly scrutinized and modified by public forums and comments. 4B is untenable without broad public scrutiny of conservation easements (ACE) system and other 'tools' - as 4b contemplates. The current CE system - by simply looking at the map - shows that the ACE largely benefits large land holders, thereby decreasing their fair, just, and equitable contributions to the public good by reducing their taxes. Can the County avoid the claim that this is racially and class biased? No County cannot. At a time when more taxes are needed - for public education, public safety, economic development, affordable housing, infrastructure, etc - the current ACE system is adverse to the stated purpose "of a lasting benefit to the public through the protection of open space, scenic beauty, wildlife habitats, air and water quality."
- Increase funding for the ACE program.
- This is fine so long as these new tools/strategies/programs do not make it ANY harder to develop in the designated development areas! And these programs MUST be voluntary and not regulatory.

4c: Protect and conserve natural resources on County-owned land to enhance biodiversity.

34 responses



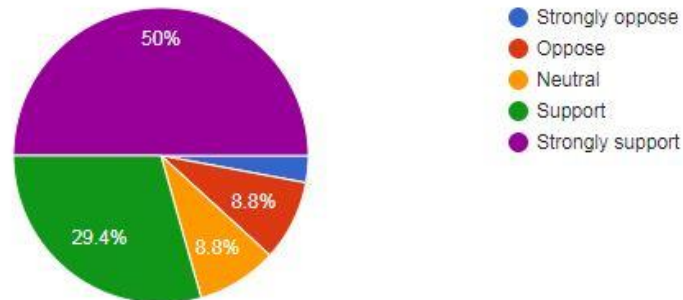
Do you have any comments or questions regarding proposed strategy 4c?

6 responses

- how will you measure "Success?"
- Biodiversity protection and recreational use are not mutually exclusive. We can and must accomplish both if we hope to connect people to nature.
- This is unnecessary and costly. Stop.
- as county has done in any other categories, showing the good example will encourage others to follow
- BUT reflecting on earlier point the plan says and does NOTHING about remediation/restoration of County land that is compromised by non-native species. County's poor stewardship impacts neighbors who are themselves trying to combat non-native invasive species but County is not wholeheartedly doing so.
- Restrict the use of pesticides. Use them only in emergency situations.

4d: Preserve existing vegetation in areas shown as Parks and Green Systems on Development Area Master Plans.

34 responses



Do you have any comments or questions regarding proposed strategy 4d?

6 responses

This is unnecessary and costly. Stop.

This is particularly relevant for development of the new Biscuit Run Park plan.

improve vegetation where it is substandard for conservation, avoid use of chemical controls wherever possible

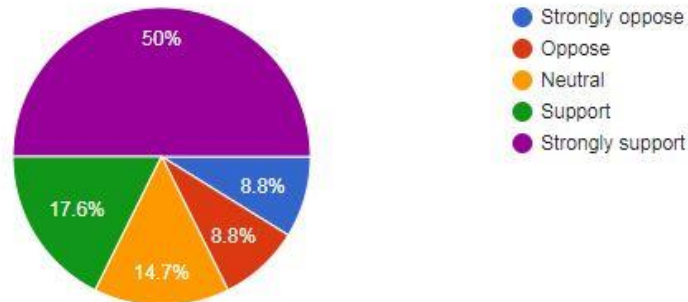
I support this concept, generally. If the existing vegetation in an area shown as Parks and Green Systems is low-quality or full of invasives, it would be better to manage it to promote biodiversity rather than to "preserve" it. Perhaps it would be better to change the first word in this strategy to "Conserve" rather than "Preserve".

BUT the plan says and does **NOTHING** about the unique biodiversity, habitat and 'habitat connectivity' along the James River border of the County!

Do not make it any harder to develop sports fields and other desperately needed recreational spaces. We need more **ACTIVE** and **USABLE** green space, not just vegetation. With 95% of the County designated for Rural Areas, do not restrict use of these areas any more than they already are.

4e: Revise criteria for ACE (Acquisition of Conservation Easement Program) and ACEA (Albemarle Conservation Easement Authority, formerly the Public Recreational Facilities Authority) easement applications to more accurately identify biodiversity resources and conservation needs.

34 responses



Do you have any comments or questions regarding proposed strategy 4e?

6 responses

This is unnecessary and costly. Stop.

Be more critical of actual need.

There are numerous public recreation areas for multiple use (boating, biking, swimming) but few for quiet, passive use (hiking, birdwatching). I strongly support increased acreage for passive use, preserving the ecosystems required for supporting animal & birdlife diversity. Active use areas become so inhabited by people that is discourages animals & birds.

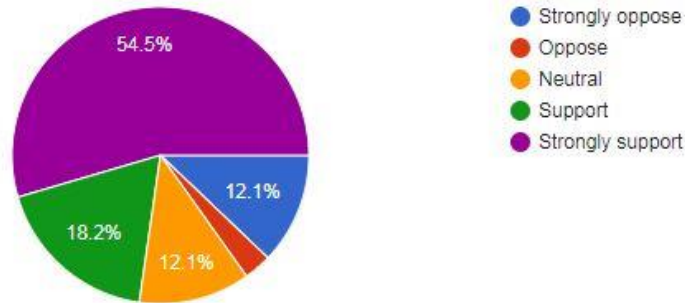
And MUCH MORE must be modified about ACE. See my earlier comments.

Increase funding.

It seems very helpful to have more rigorous criteria for evaluating applications.

4f: Take steps to conserve and protect high priority Important Sites in the County.

33 responses



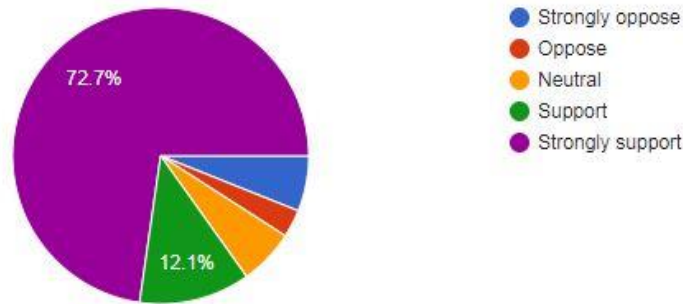
Do you have any comments or questions regarding proposed strategy 4f?

7 responses

- Who is going to decide what is "important?" "Important" to whom?
This is unnecessary and costly. Stop.
- What are 'high priority important sites in the county'??
What are the high priority Important sites?
- Who decides what is important ? If it's developers and the current status of quo, this will likely be used to benefit the wealthy and white wealthy.
- We see the map of the 'important' sites designated such by a County Natural Heritage Committee. Why are the historically Black and poor rural communities ignored with NO 'important sites'? The mission - so the website reports - of the Committee is "to maintain and restore the County's native biological diversity and provide a healthy environment for the citizens of Albemarle County." The Committee appears to REJECT the second phrase as UN-important or beneath their notice: 'health environment for the citizens of the County'. Why then are poor rural and historically Black communities - who have historically interacted with the natural environment for centuries in these areas of the County! - CENTURIES! - been ignored and demarcated without 'importance'? Again class and racial bias are infused throughout the 'tools' and 'references' of the plan. This must be overcome just as County Schools are studying the infusion of class and racial bias in naming of schools: Natural Heritage Committee must understand and explain any infusion of bias in their work. GET ON IT, ALREADY!
- If possible, the county should purchase some of these sites.

4g: Encourage the use of locally native plants in landscaping to protect and provide habitat for native biodiversity, to save water, and to connect landowners to the local ecosystem.

33 responses



Do you have any comments or questions regarding proposed strategy 4g?

6 responses

In addition to encouraging the use of native plants, I support educating the community in the destructive impact of various non-native flora, which can become invasive and impossible to eradicate.

This is nonsense explain how you are going to regulatorily "connect landowners to the local ecosystem."

This is unnecessary and costly. Stop.

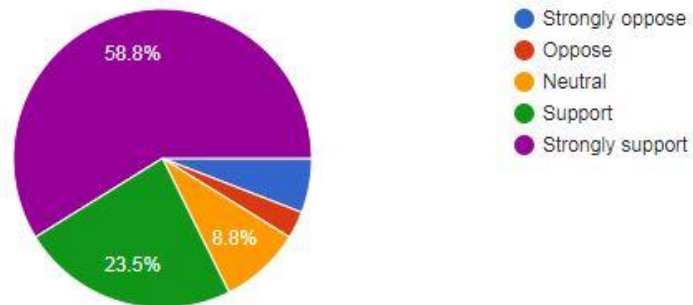
This section would benefit from a mention of the habitat creation, stormwater retention, and urban heat island reduction of green roofs (with a particular reference to native vegetation on green roofs) in the urban areas.

BUT, also have a strong plan to assist property owners to remove non-native invasive and dangerous species. Preferring small land owners and lower-income land owners who cannot otherwise do that work.

Perhaps refine to "locally grown native plants," which would link to a possible supply chain improvement and economic development stimulus for local nurseries raising these plants.

4h: Collaborate with resource management agencies, partners, and landowners to manage non-native invasive species to reduce their impacts and limit their spread.

34 responses



Do you have any comments or questions regarding proposed strategy 4h?

5 responses

This is unnecessary and costly. Stop.

do not use chemical controls, no spray herbicide or pesticides. worse than the weeds and bugs

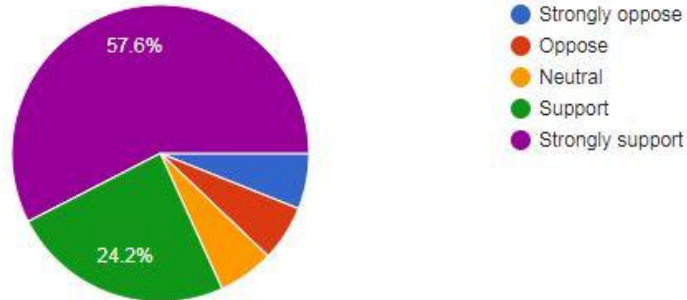
I hope that this strategy will apply to county-owned lands as well as encouraging practices on private lands.

BUT no merely 'collaborate'. That must be explained. The proper term might be 'Coordinate and support'.

I do not support the wide use of synthetic chemical pesticides to exterminate invasive species.

4i: Include aquatic and riparian habitat enhancement with strategies for water quality when developing the comprehensive water resources plan.

33 responses



Do you have any comments or questions regarding proposed strategy 4i?

4 responses

This is unnecessary and costly. Stop.

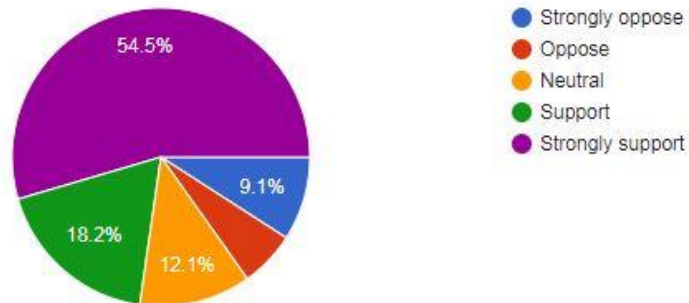
After every rainfall, our waterways run brown with silt. This runoff is unhealthy for both terrestrial and aquatic life forms--topsoil needs to remain in place to do its job in the ecosystem.

YES, so why is the James River border of the County obviously given such poor consideration? That must be explained directly! If Albemarle doesn't want to work with neighbor counties, or the Rail Road, then say so. Or say whatever the reason would be. BUT SAY IT directly.

Do not implement these strategies in the designated development areas.

4j: Increase the community's awareness of the importance of biodiversity to encourage protection of biological resources.

33 responses



Do you have any comments or questions regarding proposed strategy 4j?

4 responses

This is another feel good initiative. Money is better spent elsewhere.

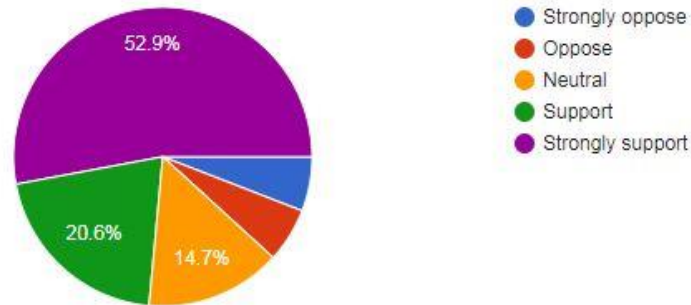
This is unnecessary and costly. Stop.

Offer more specific information than I have seen.

our survival depends on it

4k: Continue to collaborate with federal, State, and regional partners, who have geographic information on biological resources, to help build a biodiversity inventory.

34 responses



Do you have any comments or questions regarding proposed strategy 4k?

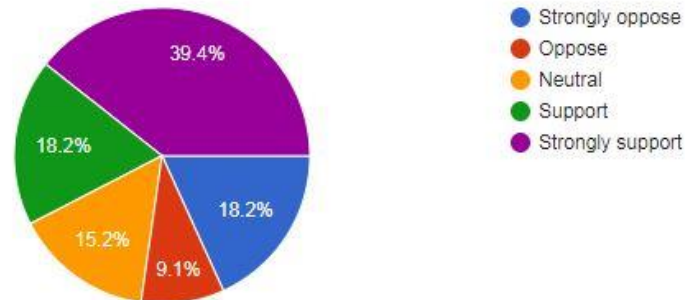
2 responses

This is unnecessary and costly. Stop.

Beware of other government interaction. Use extreme caution as we all know that government causes as many problems as it helps.

4I: Retain a position for a County staff member with expertise in conservation biology.

33 responses



Do you have any comments or questions regarding proposed strategy 4I?

5 responses

Missed this in the County Charter. Is there anything that says you can do this? And why don't you get what you already have running properly instead of hiring even more staff? More bureaucrats is not the answer.

This is unnecessary and costly. Stop. You are clearly looking for ways to waste taxpayers hard earned money. STOP!

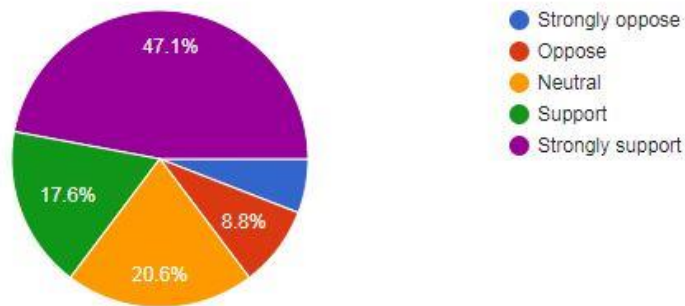
Depends on politics and ability to be truly neutral. If stores like Lowe's are pushing roundup and this person won't stand up to corporate interests, then efforts are grossly undermined.

If a new staff will be focusing on large landowners primarily NO! If spending equitable time in poor rural communities, with small landowners, etc Yes!

Not appropriate for Comp. Plan. This would be a separate HR decision.

4m: Develop indicators and monitor data that reflect the state of biodiversity in the County. Regularly repeat the land use/land-cover data-gathering process (as begun in 2009) for the purpose of monitoring landscape changes.

34 responses



Do you have any comments or questions regarding proposed strategy 4m?

4 responses

This is unnecessary and costly. Stop. You are clearly looking for ways to waste taxpayers hard earned money. STOP!

confirm the information about streams in our gis. many are missing so comm devel cannot do their job to protect with buffers.

We would agree but if the County's UNFAIR, UNJUST, INEQUITABLE and UNTRUSTWORTHY ACE program is an indicator we don't have high prospects for SCIENTIFICALLY UNBIASED data collections or monitoring!

minimize government oversight and negative impact to property owners

Do you have any other suggestions or comments regarding these proposed strategies for the Comprehensive Plan?

10 responses

DEFEND Mother Earth! WE ONLY HAVE ONE!!!

There is no need for this. Clearly you have a strategy to grow government even larger which is a waste of money. Stop.

Green (vegetated) roofs provide a mechanism for providing habitat continuity for birds and insects in the developed areas where large areas of pavement disrupt habitat connections. Please consider the creation of a specific section in this report to address specific conditions of the developed areas, in which such strategies as green roofs and rain gardens can play a role in protecting biodiversity that is different than in the rural areas.

bring back the ground water monitoring wells. have partners staff the readings.

NO MORE RULES

An informed public is to be supported, but bigger gov't is not the answer!

It is great to see Albemarle taking Biodiversity seriously in the Comp Plan strategies!

OVERALL the Comp Plan IGNORES the guidance in the Virginia Code:
§ 15.2-2223. Comprehensive plan to be prepared and adopted; scope and purpose. "The comprehensive plan shall be made with the purpose of guiding and accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, including the elderly and persons with disabilities." So why does the County's Comp Plan ignore ALL OF THIS: "best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, including the elderly and persons with disabilities." ? How can we trust the Comp Plan process that ignores a key GUIDANCE in the Code for what the Plan would cover?

Make the plan simple enough for most to understand. Redo plan for consumption by common citizens.

Do not make it any harder to develop or redevelop in the designated development areas!!



November 30, 2018

Mr. David Hannah
County of Albemarle
401 McIntire Road
Charlottesville, VA 22902

VIA ELECTRONIC TRANSMISSION

Dear David,

Thank you for your hard work preparing the Biodiversity Comprehensive Plan Amendment. Last night's roundtable was organized, well attended and well facilitated.

As promised, I have attached significant edits to the draft chapter. These edits are designed to improve clarity and add emphasis to certain elements. I also attempted to make this amendment more consistent with the balance of the Comprehensive Plan language.

As I mentioned last night, I believe a chart outlining the acreage you are considering important would be helpful to building understanding. I know you have this data and do not fault you for not having it at your fingertips at last night's session:

Conservation Focus Areas Total XX,XXX acres; XX,XXX acres in public lands X,XXX acres privately held
Important Sites Total XXX acres; XXX acres in public land, XXX acres privately held.

I believe it would be helpful to more clearly state the import of private stewardship. Many of the lines I eliminated in the draft plan could be considered academic at best. Others might read the passages as argumentative. The place for these citation and discussions is in the appendices not the body of the plan.

The import of local government leading the way with best management practices on public lands could be called out more clearly. This is the opportunity to use local service providers and have them gain expertise and understanding regarding biodiversity. While appreciative of the concept of cross-referencing other chapters to the biodiversity amendment, I do not believe this adds a great deal to an already lengthy amendment.

Please know these edits are offered in the spirit of cooperation and hope they will be received as constructive criticism. Thank you for the opportunity to comment.

Respectfully Submitted,

Neil Williamson, President

550 Hillsdale Drive, Charlottesville, VA 22901 434-817-2380 neil@freeenterpriseforum.org
www.freeenterpriseforum.org

Objective 4: Protect the biological diversity and ecological integrity of the County in both the Rural Area and Development Areas.

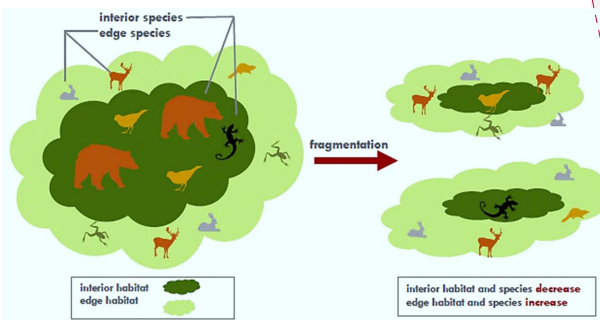
Biological diversity, "biodiversity" for short, is defined as "the diversity of life in all its forms, and at all levels of organization". The most common ways of viewing biodiversity include species diversity, genetic diversity, and ecosystem diversity.

The health of biological systems is often indicated by the amount of native variety they contain. Native species have evolved to live in their current habitats and, generally, the more diverse a system is, the healthier it is. The breadth of species creates strength for all species; when a species is lost, it signals a change that may affect all species.

Biodiversity is important to human populations.

Protection of biodiversity is important in both the Development Areas and the Rural Area. Because the quantity of resources is so much greater in the Rural Area, most of the efforts in protecting biodiversity are focused in the Rural Area. Different efforts to protect biodiversity exist for the Development Areas, such as identifying key species or systems that might be impacted by new development and considering how they should be protected. Preservation of environmental corridors, such as those shown on Parks and Green Systems plans in Development Area Master Plans, helps to maintain biodiversity in the Development Areas. Equally important is the preservation of wooded corridors that extend from the Rural Area into the Development Areas.

Figure 4: Illustration of Habitat Size and Biodiversity



There are a variety of threats to biodiversity, ranging from the local to the global scale. An ongoing threat in Albemarle County and beyond is habitat fragmentation. When large patches of habitat are fragmented into smaller areas, species dependent on large "interior" habitats or ranges cannot survive. As shown in Figure 4, the size of the interior habitat is reduced, minimizing area for food, cover, and movement. Fragmentation also reduces viability for species. Loss of safe passages between habitats (shown in picture B of Figure 5) prevents species from reaching needed habitats or recolonizing habitats that have lost those species.

Figure 5: Illustration of Habitat Range and Connectivity

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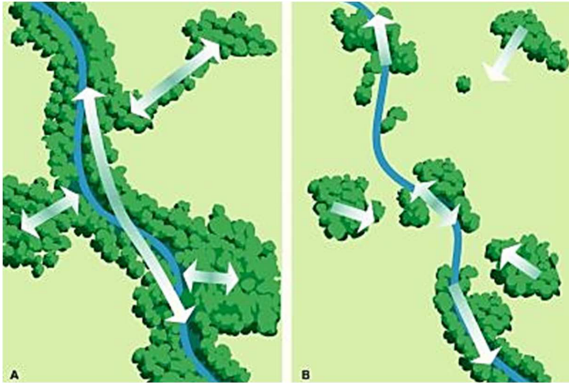
Deleted: Biodiversity is sometimes described as the totality of genes, species, and ecosystems of a region. is the variety of living organisms that inhabit a particular area or ecosystem.

Deleted: Worldwide, human life depends on the products of living organisms. Whether these animals, plants, or microorganisms are wild or domesticated, they provide food, medicine and industrial products essential to mankind. These products form the backbone of the world's economy. That is, fisheries, forestry, agriculture, and other industries depend on animals and plants, and therefore rely directly on a diversity of biological resources. Soil bacteria are essential for productive farmlands. Other bacteria provide crucial vitamins and enzymes. Biodiversity of species, landscapes, and ecosystems also provides for ecological services, such as retention of clean water, production of oxygen, consumption of carbon dioxide, resistance to parasites and disease organisms, control of agricultural pests, facilitating pollination, and critical recycling of inorganic nutrients upon which all natural productivity depends.

Deleted: for many reasons, not the least of which is the fact that we consume products of natural systems (e.g., wood products from forests). More broadly, we depend on the services that ecosystems, and the living things found in them, provide. Ecosystem services refer to the many benefits that humans receive, at no direct economic cost, from natural environments and functioning ecosystems. Some critical ecosystem services include purification of air and water, pollination of crops and natural vegetation, generation and renewal of soil and fertility, and mitigation of floods and droughts. Healthy, functioning ecosystems also greatly contribute to the quality of life of City and County residents.¶

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Deleted: Subdivision of land parcels into smaller parcels is conceptually distinct from habitat fragmentation and has been referred to as "parcelization" (Downing 2016). However, parcelization often leads to habitat fragmentation. Parcelization and subdivision of land can result in the size and/or shape of parcels that are generally usable only for residential purposes, thus complicating land management for forestry, agriculture, or conservation. ¶



A: A well connected landscape. B: A poorly connected landscape.
Source: Federal Interagency Stream Restoration Working Group (FISR WG)

Conversion of wildlife habitat to land uses that remove the key elements for survival result in many fewer native species and pose the greatest threat to biodiversity. [As discussed in the Rural Area Chapter \(page 18\), there is potential for much residential development in the Rural Area, which could negatively affect biodiversity.](#)

Aquatic habitats are also degraded by soil erosion when land is cleared for development. As a result, aquatic life declines and affects the health of rivers and streams. Any effort to protect the quality of ecosystems must include both terrestrial (land-based) and aquatic (water-based) ecosystems.

While the most important areas for biodiversity are in the Rural Area, the Development Areas also have a role to play in biodiversity protection. The most important features to protect in the Development Areas are wooded riparian areas, wetlands, and habitat corridors.

Strategy 4a: [Implement the Action Plan for Biodiversity including protection of significant areas of biological importance in the County.](#)

The Natural Heritage Committee (formerly the Biodiversity Committee) was appointed by the Board of Supervisors in 2005 to create and maintain the County's Biodiversity Assessment, advise the Board of Supervisors, the Planning Commission, and County staff on applying biodiversity information to land-use decision-making, and support biodiversity education in the County. Their mission is to [help](#) maintain and restore the County's native biological diversity and provide a healthy environment for the citizens of Albemarle County.

[After adoption of the 2015 Comprehensive Plan, County staff worked with the Natural Heritage Committee to develop a Biodiversity Action Plan which is included in the Reference Documents section of this document \(hyperlink\).](#)

[The BAP should be reviewed and updated on a regular basis to account for changing conditions and to incorporate new knowledge and data. The BAP was intended to cover a five year period and should be reviewed and updated as needed in 2023.](#)

[The strategies that follow provide specific ways to protect and conserve biodiversity in Albemarle County.](#)

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Deleted: Included as Reference Documents and part of the plan are an Executive Summary, Appendices, and maps. The Biodiversity Action Plan builds upon work conducted by the Biodiversity Work Group from 2002-2004. The work group was created as a temporary body and developed a biodiversity report This Committee will provide guidance to County staff to develop a plan of action. Developing the plan should also include other experts and volunteers. for Albemarle County in 2004. That report, a summary report, and appendices are also available in the Reference Documents section.

Deleted: The first step in planning for biodiversity protection is a landscape-level analysis. Such an analysis would incorporate data on the County's landforms and on the location and quality of habitats, including fragmentation and connectivity, as well as the current level of biodiversity. Aquatic biodiversity should also be addressed through a sub-watershed analysis. The landscape approach focuses on a wide scale (square miles rather than square feet) and on the management of major land features (e.g., forest blocks, watersheds, urbanized areas) to conserve biodiversity. The goal of these analyses would be to identify priority areas for conservation and restoration so that the County's policies and resources could be used to protect biodiversity in the most effective manner. Important landscape features can be prioritized for conservation measures (such as conservation easements) or for restoration efforts.¶

¶

The action plan can be developed from the inventory and analysis. The plan should contain the map of important landscape features and individual species occurrences that can be included in the County's Geographic Information System. When made widely available, County staff and the public can use the information for conservation purposes as well as reviewing requests for legislative approvals. The plan should recommend incentives and policies that would encourage land uses and conservation approaches to support the County's landscape management goals for each area of the County. Aquatic conservation should also be addressed through land management techniques designed for specific watersheds. It should also contain a set of indicators of biodiversity status that can be tracked. ¶

¶

The County should establish concrete goals for the Albemarle landscape, including targets for overall forest cover, the preservation of existing forest blocks, and the restoration or establishment of additional forest blocks or corridors. The County should also use the StreamWatch analysis of the relationship between land use (particularly forest cover and impervious surfaces) and water quality to classify stream health in the (... [1])

Deleted: The Biodiversity Action Plan (BAP) provides both a broad overview and detailed information about biodiversity in the County. A key component of the plan is a spatial analysis of the Albemarle County landscape and the habitat it contains. Fig (... [2])

Deleted: The BAP affirms the need to minimize and reduce habitat fragmentation County-wide by maintaining existing habitat connectivity. It promotes establishing new connectivity where possible and appropriate. It identifies non-native invasive species and climate change as significant threats to biodiversity both (... [3])

Strategy 4b: Use existing tools (e.g., conservation easements), develop strategies, and implement new voluntary conservation programs to protect lands in the three conservation focus areas, other conservation targets (e.g., examples of the five key ecosystems described below, large forest blocks or other intact, important habitat), and lands that can serve as habitat corridors or connections among important habitat areas.

The BAP identifies three areas of the County that are rich in biodiversity and have significant conservation value (see Figure 8). Five types of ecosystems are also identified as key for conserving biodiversity: 1) forests, 2) outcrops, bluffs, and other xeric habitats, 3) relict Piedmont prairies and grasslands, 4) rivers, streams, and riparian areas, and 5) wetlands. These ecosystems may be important conservation targets regardless of their location. That is, they do not need to be located within the conservation focus areas to merit protection. Similarly, lands that can connect areas of habitat may be important conservation targets regardless of location in the County.

The County's conservation easement programs, Acquisition of Conservation Easements (ACE) and Albemarle Conservation Easement Authority (ACEA), can be effective tools for helping conserve biodiversity. In addition to revising the criteria for these programs to include biodiversity values (as stated in Strategy 4e of this chapter), these programs should be evaluated. This is consistent with Strategy 5d of this chapter and Strategies 2b, 2d, 2e, and 2f (hyperlink) of the Rural Area chapter.

Other land and resource protection tools should be investigated for use in Albemarle County. Including Transfer of Development Rights (TDR) as well as other proactive resource protection tools.

Strategy 4c: Protect and conserve natural resources on County-owned land to enhance biodiversity.

Public lands provide opportunity to test and evaluate biodiversity enhancement. There are XX,XXX publicly owned acres in Albemarle County. Public lands and the ways they are managed play an important role in protecting open space, wildlife habitat, and biodiversity. Several land management practices, if implemented consistently on publicly-owned land, will contribute to enhancing biodiversity. Examples include controlling non-native invasive species, using locally native plants in landscaping, promoting natural plant communities on site when possible (e.g., establishing native grassland habitat in place of turf or large lawn areas), maintaining wide riparian buffers along waterways, and reducing stormwater runoff.

Strategy 4d: Preserve/repopulate existing vegetation in areas shown as Parks and Green Systems on Development Area Master Plans.

Each Development Area Master Plan describes the importance of preserving stream corridors and other environmentally sensitive areas. Wooded areas, riparian areas, and undeveloped well-vegetated land connecting these areas help retain habitat corridors.

Strategy 4e: Review and consider revising criteria for ACE (Acquisition of Conservation Easement Program) and ACEA (Albemarle Conservation Easement Authority, formerly the Public Recreational Facilities Authority) easement applications to more accurately identify biodiversity resources and conservation needs.

Strategy 4f: Evaluate opportunities to conserve and protect high priority Important Sites in the County.

Deleted: Conserving lands and resources within the three focus areas – Northwestern Albemarle, the Southern Albemarle Mountains, and the Rivanna River Corridor - prioritizes efforts and should maximize conservation effectiveness.

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Deleted: For example, a Transfer of Development Rights (TDR) program should be investigated as a possible method for conserving biodiversity. Lands within the three conservation focus areas and other identified conservation targets could be the focus of TDR programs. Researching a TDR program that is appropriate for Albemarle County is consistent with Strategies 1a and 2g (hyperlink) of the Rural Area chapter. ¶

Deleted: County

Deleted: County parks in particular can play a critical role in conserving biodiversity. Many parks contain examples of the five highlighted ecosystems, and several current and future County parks occur within or near the conservation focus areas. If managed properly, parks can conserve large, intact areas of forest and other habitat types. Management plans for the parks should include strategies to conserve and enhance biodiversity. Simple examples include controlling access to sensitive areas, designating specific locations for non-disturbance (e.g., reducing areas maintained by mowing), and using boardwalks and signage to limit access to sensitive areas while providing unique educational opportunities. Where possible, prescribed burning can be used to promote biodiversity. ¶

Deleted:

Deleted: These places are especially important to biodiversity as are other areas shown as Parks and Green Systems in the Master Plan maps. The Neighborhood Model principles, found in the Development Areas Chapter, describe the importance of parks, recreational amenities, and open space in creating and maintaining high quality neighborhoods.

Deleted: ise

Deleted: Conservation easements typically restrict development and protect agricultural, scenic, historic, and aquatic resources. They could be more effective at protecting specific habitat areas. While recognizing the value of biodiversity, current criteria for assessing biodiversity on ACE properties are limited in scope, with biodiversity data coming into play on a very limited basis. The criteria should be revised to include additional information and data sources, including BAP data. Improved criteria will allow biodiversity to be more easily considered in evaluating properties for ACE easements. For all County-held easements, terms and language need to be developed that provide effective methods for permanently protecting specific habitat areas that support biodiversity. ¶

Deleted: Take steps

Important Sites are defined as “locations of special plant communities, unusual habitats, or species rare to scarce in the County.” An initial list of Important Sites was developed by the Biodiversity Work Group in 2004. The Natural Heritage Committee (NHC) has maintained and revised the list in the ensuing years. Appendix C of the BAP provides descriptions of all 53 sites and a list of the 24 high priority sites. Map 3 of the BAP shows generalized locations of the sites.

Strategy 4g: Encourage the use of locally native plants in landscaping to protect and provide habitat for native biodiversity, to save water, and to connect landowners to the local ecosystem.

The use of locally native plants in landscaping, land management, and development projects is important to protect native biodiversity against invasive species, to save water compared to plantings not adapted to the local climate, to provide additional habitat for native species, and to help connect residents to the local ecosystems. In 2012, Albemarle County Department of General Services (since renamed Facilities and Environmental Services) staff developed a native plants database and currently strives to plant at least 80% native plants in County projects. Community Development Department staff should also encourage use of native plants in conjunction with the site development process.

Strategy 4h: Collaborate with resource management agencies, partners, and landowners to manage non-native invasive species to reduce their impacts and limit their spread.

Strategy 4i: Evaluate inclusion of aquatic and riparian habitat enhancement with strategies for water quality when developing the comprehensive water resources plan.

The County’s network of rivers, streams, and riparian areas are a vital component of regional biodiversity, as stated under Strategy 4b of this chapter. Efforts should be evaluated to protect these resources, for purposes of both improving water quality and protecting biodiversity.

Strategy 4j: Increase the community’s awareness of the importance of biodiversity to encourage protection of biological resources.

Volunteers and the County can support private conservation efforts by developing and disseminating educational and technical material to the general public, developers, and private land owners, including residents of the Development Areas. The material should contain information on the value of biodiversity and voluntary techniques that can be used to protect biological resources located on their land.

Strategy 4k: Continue to collaborate with federal, State, and regional partners, who have geographic information on biological resources, to help build a biodiversity inventory.

Strategy 4l: Evaluate County Resources (staff) required to implement Natural Resources Chapter.

Staff is in a unique situation to help make the connections between science, conservation management, and planning in the County. Staff time for conservation enables the County to be more effective and ensure that resources expended on these programs are put to the best use.

Deleted: Important Sites were evaluated based on their conservation value and the potential for conservation action that can be taken in the five years following completion of the BAP. The NHC intends to serve as an advocate for thirteen of the sites, working with landowners and local residents to raise awareness about them and discuss options for appropriate management and protection. Based on pending actions, the County is well positioned to positively influence activities and land management at nine Important Sites, and should take lead responsibility for them. The pending actions include development of new County parks, joint planning with the City of Charlottesville and Thomas Jefferson Planning District Commission on a Rivanna River corridor, and updating the Pantops Master Plan. The County and the NHC should share responsibility for two Important Sites. One site is adjacent to a future County park. The other site is within the Shenandoah National Park. ¶

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Deleted: The threat that non-native invasive species pose to biodiversity, agriculture, forestry, and other concerns is widely documented and accepted. Numerous state and federal agencies, nonprofit groups, and other organizations are actively engaged in trying to manage the threat. Examples include Virginia Dept. of Forestry, Virginia Dept. of Conservation and Recreation, Blue Ridge PRISM, Thomas Jefferson Soil and Water Conservation District, The Nature Conservancy, and the Virginia Native Plant Society. Efforts on this front by the County can be significantly strengthened by collaborating with these and other organizations. ¶

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Deleted: Strategy 1c of this Chapter calls for developing and implementing a comprehensive water resources plan for the County. The strategy includes stream restoration needs and strategies, public education efforts, and coordination of different County programs. This represents a logical and practical opportunity to enhance aquatic and riparian habitat as part of the comprehensive water resources plan. ¶ [4]

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Deleted: Taking actions for these purposes is consistent with Objectives 1 and 6 of this chapter, Strategies 1a, 6a, 6b, and 6c. ¶ [5]

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Deleted: Federal, State, and regional agencies all collect information on biological resources. ¶ [6]

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Deleted: Strategy 4g: Provide information to potential landowners about the County’s native plants database. ¶ [7]

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Deleted: Retain a position for a County staff member with the necessary skills. ¶ [8]

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Strategy 4m: Develop indicators and monitor data that reflect the state of biodiversity in the County.
Regularly repeat the land use/land-cover data-gathering process (as begun in 2009) for the purpose of monitoring landscape changes.

(The maps below will become Figures 6, 7 and 8 after review & editing is complete.)

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Deleted: The state of biodiversity in Albemarle County is continually evolving. Indications of change are important in monitoring and assessing the current state, for tracking changes through time, and for effective conservation planning. Indicators may directly or indirectly reflect biodiversity resources. Examples of indicators could include the amount of land and landscape areas that are protected, the level of protection provided, indices of habitat connectivity and fragmentation, water quality and stream health data, and the status of threats to biodiversity (e.g., non-native invasive plants).¶

¶
In 2007, Albemarle County, along with the Nature Conservancy, the Rivanna River Basin Commission, and StreamWatch (merged with Rivanna Conservation Society in 2016 to form Rivanna Conservation Alliance) funded mapping of land cover in the County and the rest of the Rivanna River watershed. The first map was completed in 2009 and is provided as a layer on the County's GIS web application. Because it is such a useful tool to track change over time, it is essential to repeat because it provides feedback on the effectiveness of conservation programs and allows conservation programs to adapt to trends in landscape changes. ¶

¶
Strategy 4c: Collaborate with federal, State, and regional partners, who have geographic information on biological resources, to help build a biodiversity inventory. ¶ [9]

Moved up [3]: Strategy 4c: Collaborate with federal, State, and regional partners, who have geographic information on biological resources, to help build a biodiversity inventory. ¶

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Moved up [5]: Strategy 4d: Assess the need for hiring a County staff member with expertise in conservation biology, and/or training existing County staff in principles of conservation biology to

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When the Biodiversity Report, which may be found in the Reference Documents was developed in 2004, the County was able to [10]

Moved up [6]: Staff is in a unique situation to help make the connections between science, conservation management, and planning in the County. Additional staff time for conservation would

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Moved up [1]: Strategy 4e: Encourage the use of native plants in landscaping to protect and provide habitat for native biodiversity, to save water, and to connect landowners to the local ecosystem. ¶

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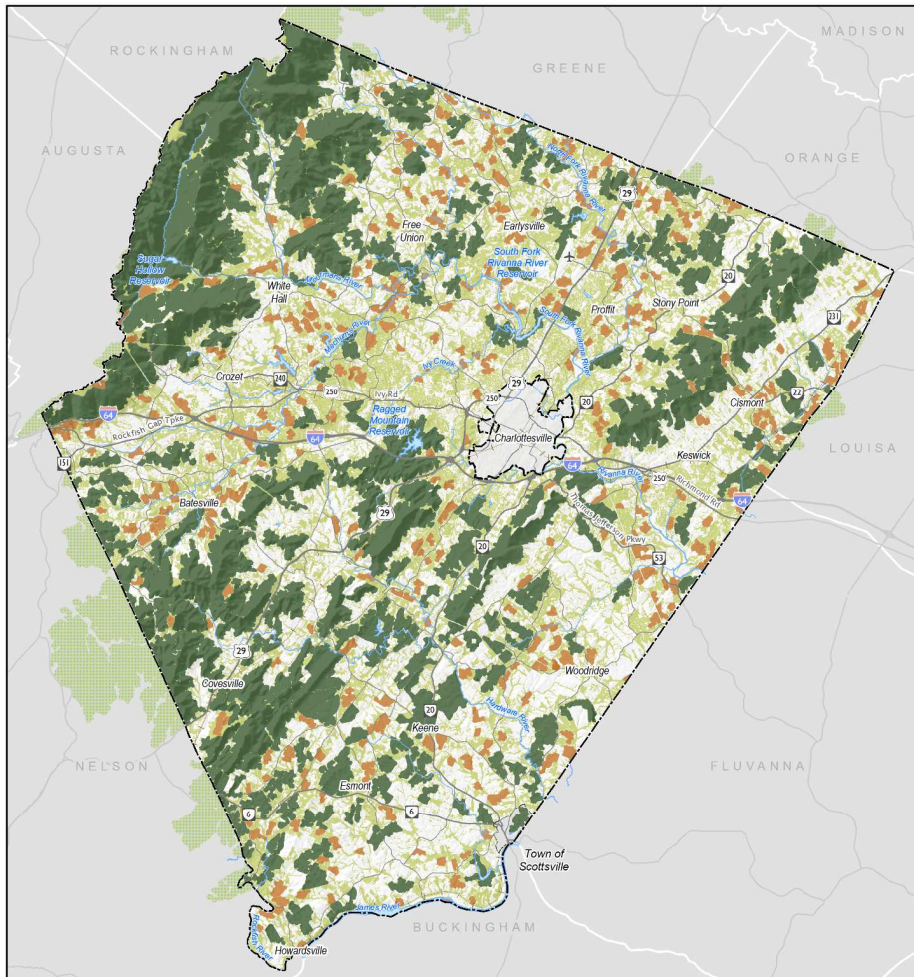
Moved up [2]: Strategy 4f: Increase the community's awareness of the importance of biodiversity to encourage protection of biological resources.¶

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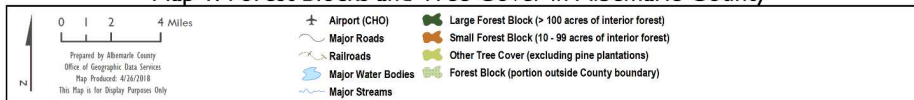
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Moved up [4]: Strategy 4g: Provide information to potential land subdividers on the importance of protecting habitat when creating lots for development.¶

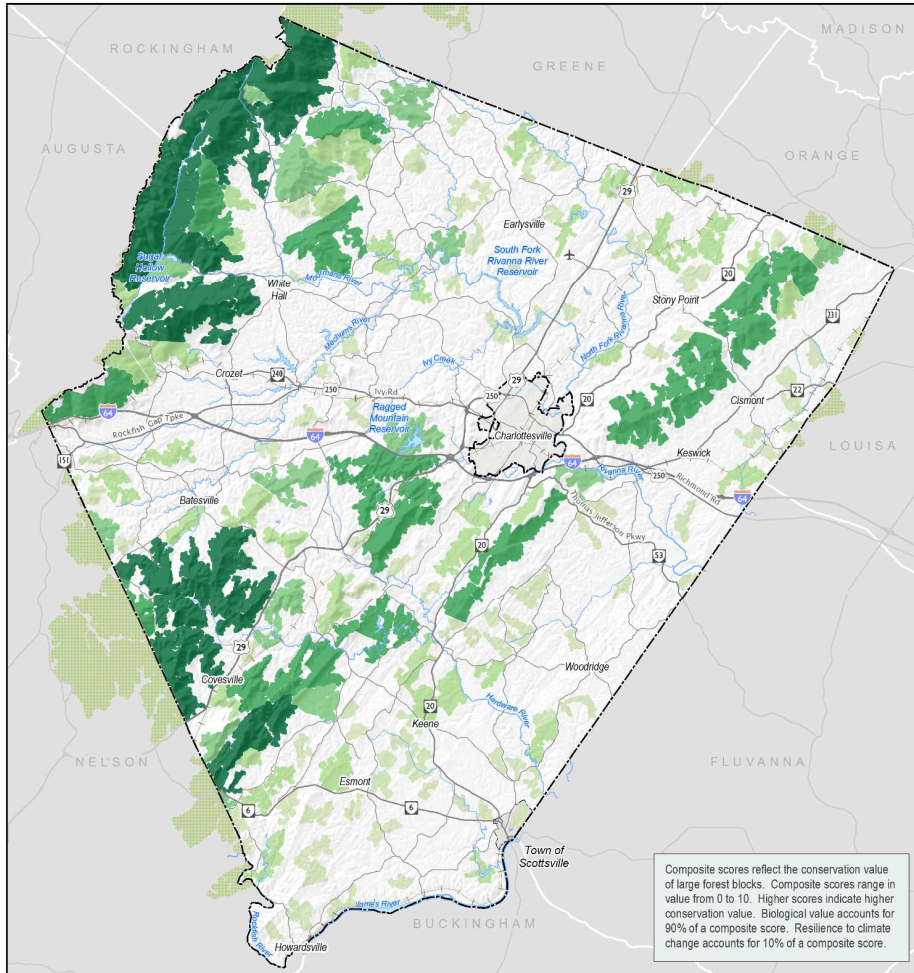
Deleted: Each Development Area Master Plan describes the importance of preserving stream corridors and other environmentally sensitive areas. These places are especially important to biodiversity as are other areas shown as Parks and Green Systems [12]



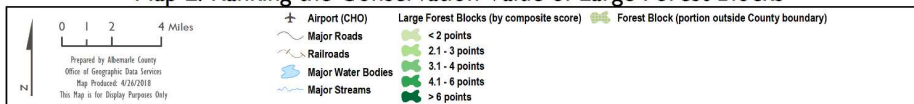
Map I: Forest Blocks and Tree Cover in Albemarle County



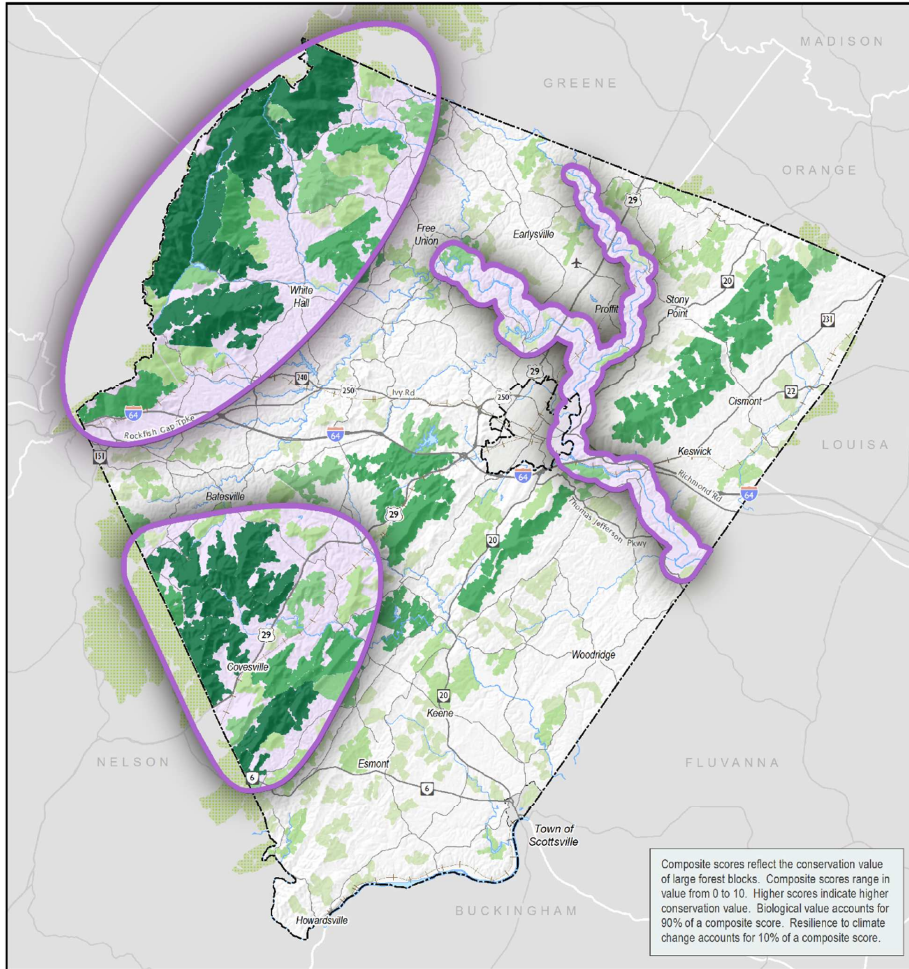
Map 1 illustrates forested areas and tree cover in Albemarle County based on 2009 land cover data. Pine plantations were not included as forest or tree cover in this analysis.



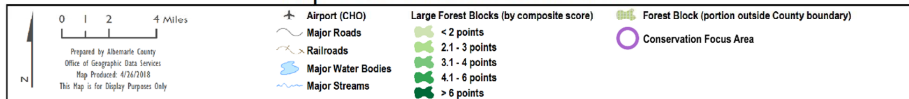
Map 2: Ranking the Conservation Value of Large Forest Blocks



Map 2 illustrates the composite scores of large forest blocks (blocks containing 100 or more acres of interior forest). Forest blocks were identified using 2009 land cover data.



Map 4: Conservation Focus Areas



Map 4 depicts the three areas in Albemarle County that should be a focus of conservation activity and attention.

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