

**Montgomery
Parks**
M-NCPCC



Upper Rock Creek Trail Corridor Plan

Approved & Adopted September 2008



The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks

Abstract

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Abstract	This Master Plan provides background materials, describes the planning process and outlines a plan for the development of the Upper Rock Creek Trail Corridor. It contains materials on natural and cultural resources, needs assessments and implementation strategies.

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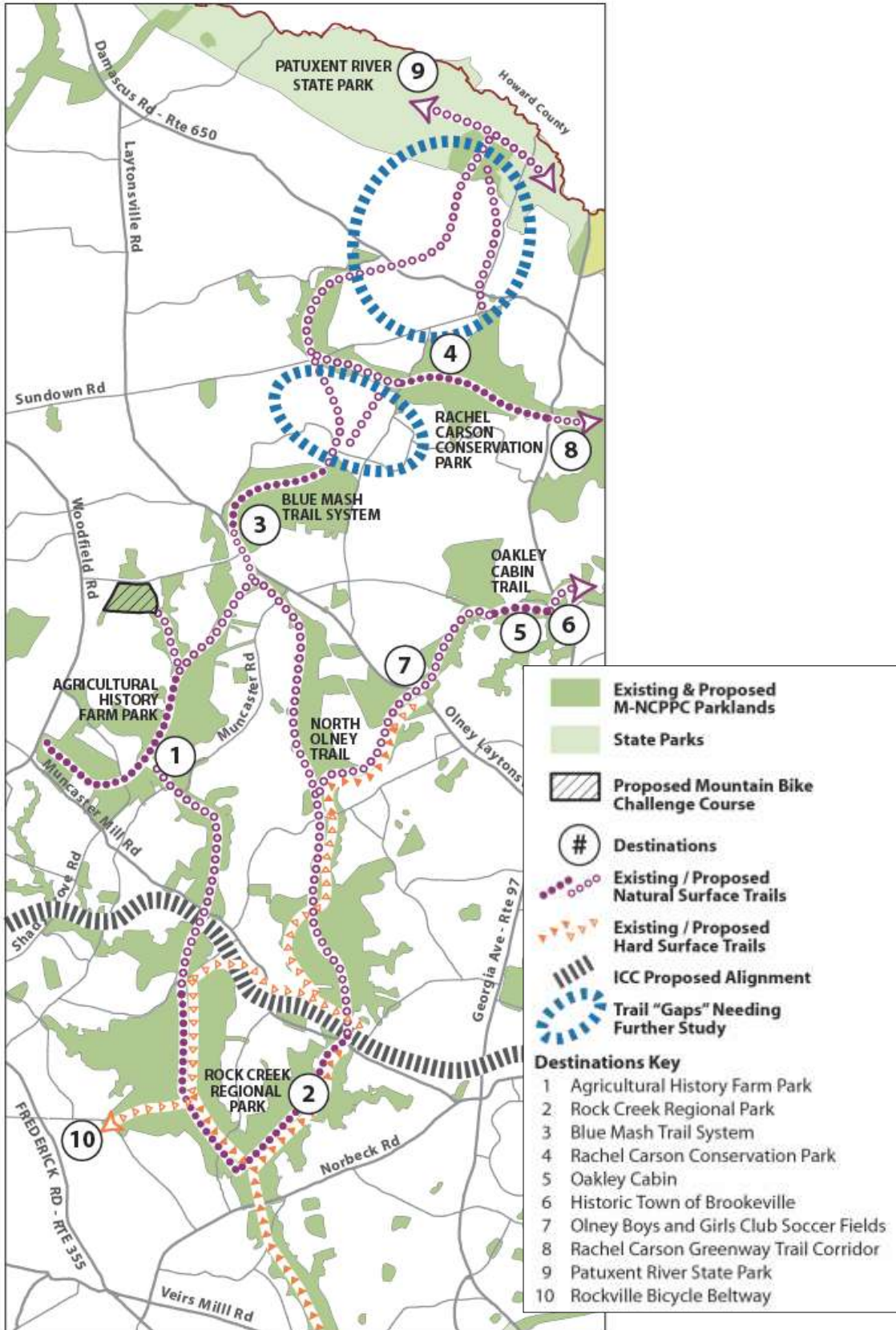
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Figure 1 Upper Rock Creek Trail Corridor Master Plan



Introduction

The trail plan for the Upper Rock Creek Trail Corridor is shown in **Figure 1**.

Many previous plans and studies have addressed trail connectivity in Upper Rock Creek. The Countywide Park Trails Plan (adopted in 1998 and amended in March 2004) identifies eight trail corridors for more detailed study. The Rock Creek Trail Corridor is number five (see Figure 2). The Plan objective for the Corridor is to “expand the trail system in Rock Creek Regional Park northward to Olney and the Patuxent River.”

Other plans addressing trails in the corridor include the Rachel Carson Greenway Trail Corridor Plan, the Park and Trail Analysis for the Upper Rock Creek Vicinity, the Rock Creek Park Master Plan, the Agricultural History Farm Park Plan and the Rachel Carson Conservation Park Master Plan. (More information on these plans may be found in the appendix). The proposed trail system that emerges from these plans is very extensive and includes both natural and hard surface trails.

The focus of this planning effort has been to consolidate the trail vision expressed in these various planning efforts and to identify implementation strategies to make the trail system a reality.

Figure 2 Relation to Countywide Park Trails Plan

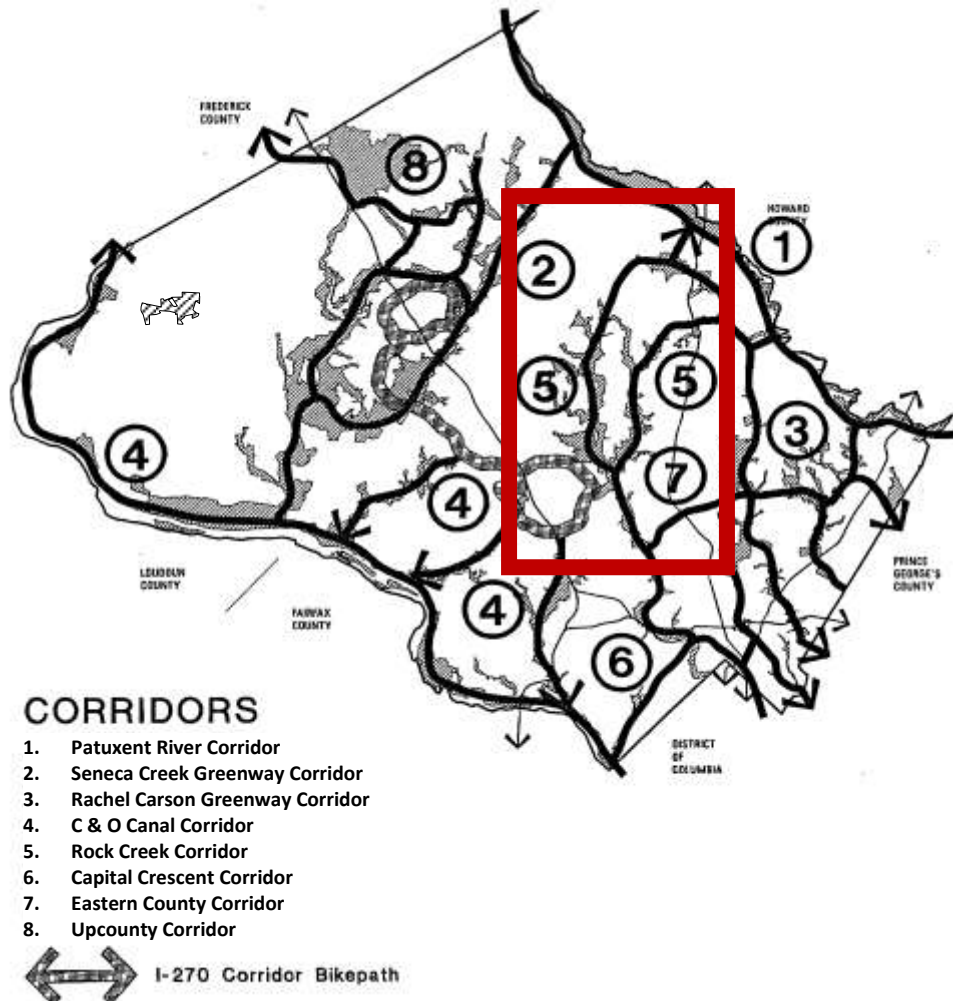
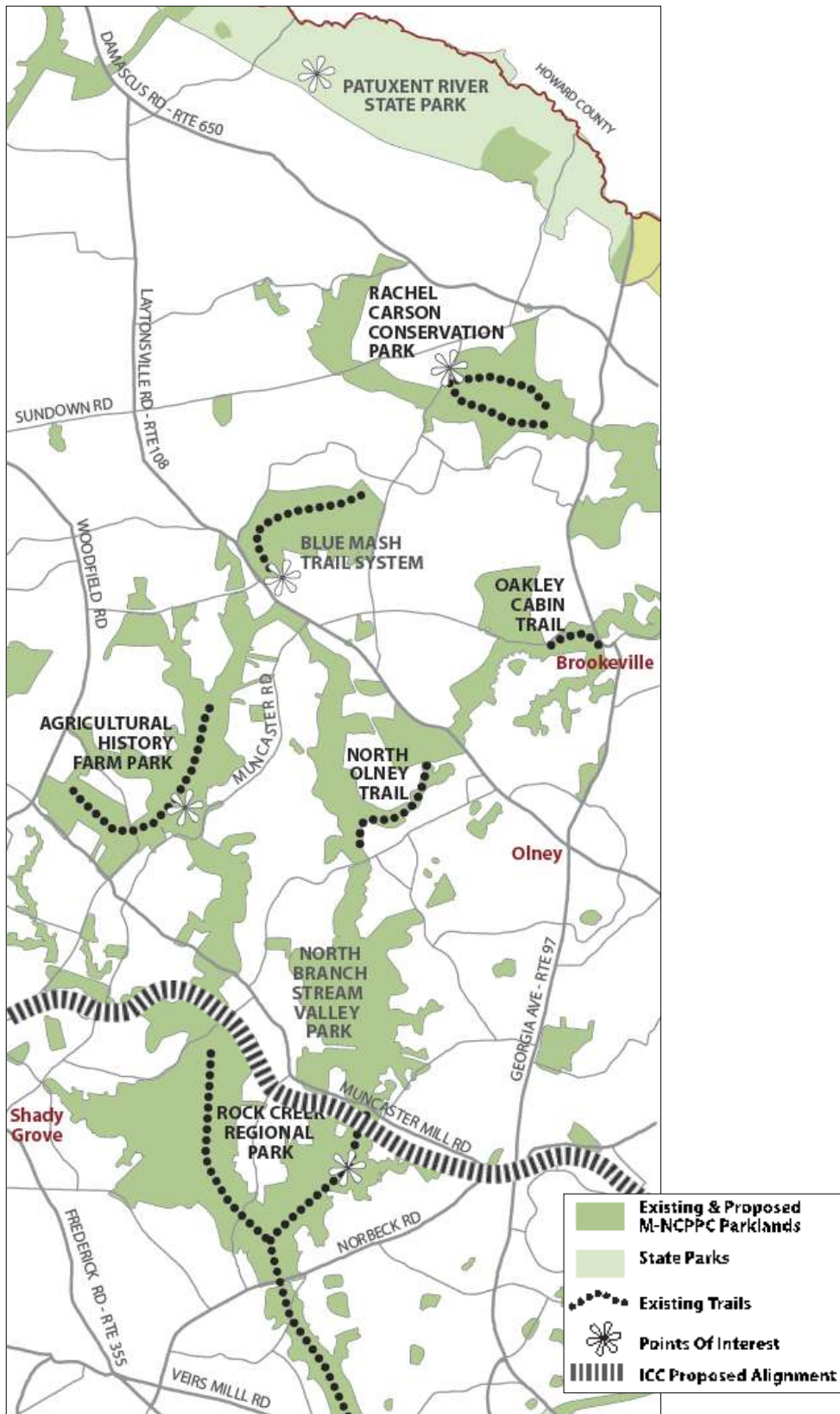


Figure 3 Upper Rock Creek Trail Corridor Study Area



Overview of the Study Area

Figure 3 depicts the Upper Rock Creek Trail Corridor Study Area. The study area is referred to as “Upper Rock Creek” as there are no planning issues related to the southern portion of the Rock Creek where a hard surface hiker biker trail already exists.

Trails that are currently available in the corridor are described in the below. Maps of the trails in Montgomery County parks are available at: www.montgomerytrails.org.

Rock Creek Regional Park - both hard surface and natural surface trails.

This popular 1810 acre park features two lakes and is the terminus of the 14 mile long Rock Creek Hiker-Biker trail.

Agricultural History Farm Park - Includes almost 5 miles of natural surface trails.

The Agricultural History Farm Park is a 410-acre complex with a farmhouse, barn, assorted farm buildings and an activity center. 70 acres of the farm has been set aside to depict historic life on the farm. The Farm Park hosts seasonal festivals depicting farm life, both past and present.

The Blue Mash Trail System - 5 miles of natural surface trails.

The Blue Mash natural surface trails are located in the buffer area surrounding the site of the former Oaks Landfill, near Mt. Zion.

The Blue Mash Nature Trail commemorates the pre-Civil War settlement called Blue Mash inhabited for many years by freed slaves. "Mash" was the colloquial pronunciation of marsh. Before emancipation, the Blue Mash swamp was known to have been a hiding place for fugitive slaves

The Rachel Carson Conservation Park - 6 miles of natural surface trails.

This 650 acre conservation park features the Rachel Carson Greenway Trail and many other trails that meander through the park's exceptional natural setting.

North Branch Trail – hard surface trail.

This short segment of hard surface trail was built as a part of the surrounding subdivision. This trail forms the northern segment of a proposed trail that will one day extend south to Rock Creek Regional Park.

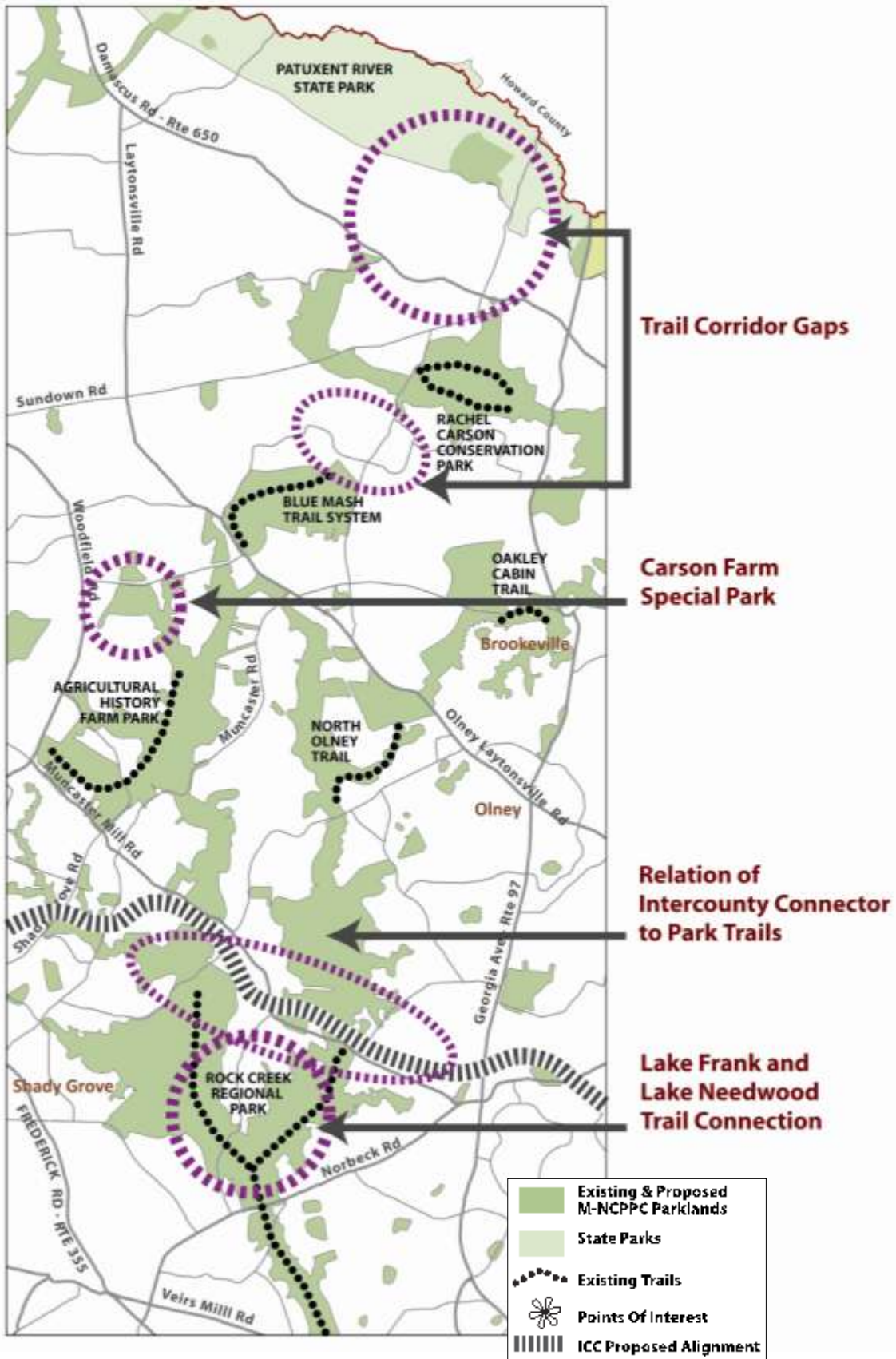
Oakley Cabin Trail – approximately 1-mile natural surface trail.

The only publicly owned African American historical site in Montgomery County. The cabin is open to the public. Built in the early 1800's, it was likely home to slaves from the Oakley/Dorsey farm and later to free black families. The trailhead is located at Oakley Cabin. The

Patuxent River State Park

The park is 6700 acres in size and recreational use is primarily hunting, fishing, hiking and horseback riding. Trail maps may be downloaded from the Patuxent River state Park website. www.dnr.state.md.us.

Figure 4 Key Issue Areas



Plan Concepts

The proposed trail plan for Upper Rock Creek Trail Corridor links existing park trails into a comprehensive trail network. When complete the network will feature over 30 miles of trails. The key destinations along the proposed trail system include:

- The Agricultural History Farm Park
- Rock Creek Regional Park
- Blue Mash Trail System
- Rachel Carson Conservation Park
- Oakley Log Cabin
- The Historic Town of Brookeville, MD
- The Olney Boys and Girls Club Soccer Fields
- The Rachel Carson Greenway Trail Corridor
- The Patuxent River State Park
- The Rockville Bicycle Beltway or Millennium Trail

The proposed trail plan reflects existing public policy and planning recommendations that are part of already approved and adopted master plans (see Appendix A). Only three new trail concepts are being proposed as part of this planning process:

1. Closing trail “gaps” in the northern portion of the corridor.
2. Adding a mountain bike challenge course at the Carson Farm Special Park.
3. Relation of InterCounty Connector (ICC) to Park Trails.
4. Proposing an alternative trail connection to link Lake Frank trails to the Rock Creek Hiker Biker trail.

These areas are shown in **Figure 4** and discussed in more detail in the chapter entitled, “**Key Planning Issues.**”

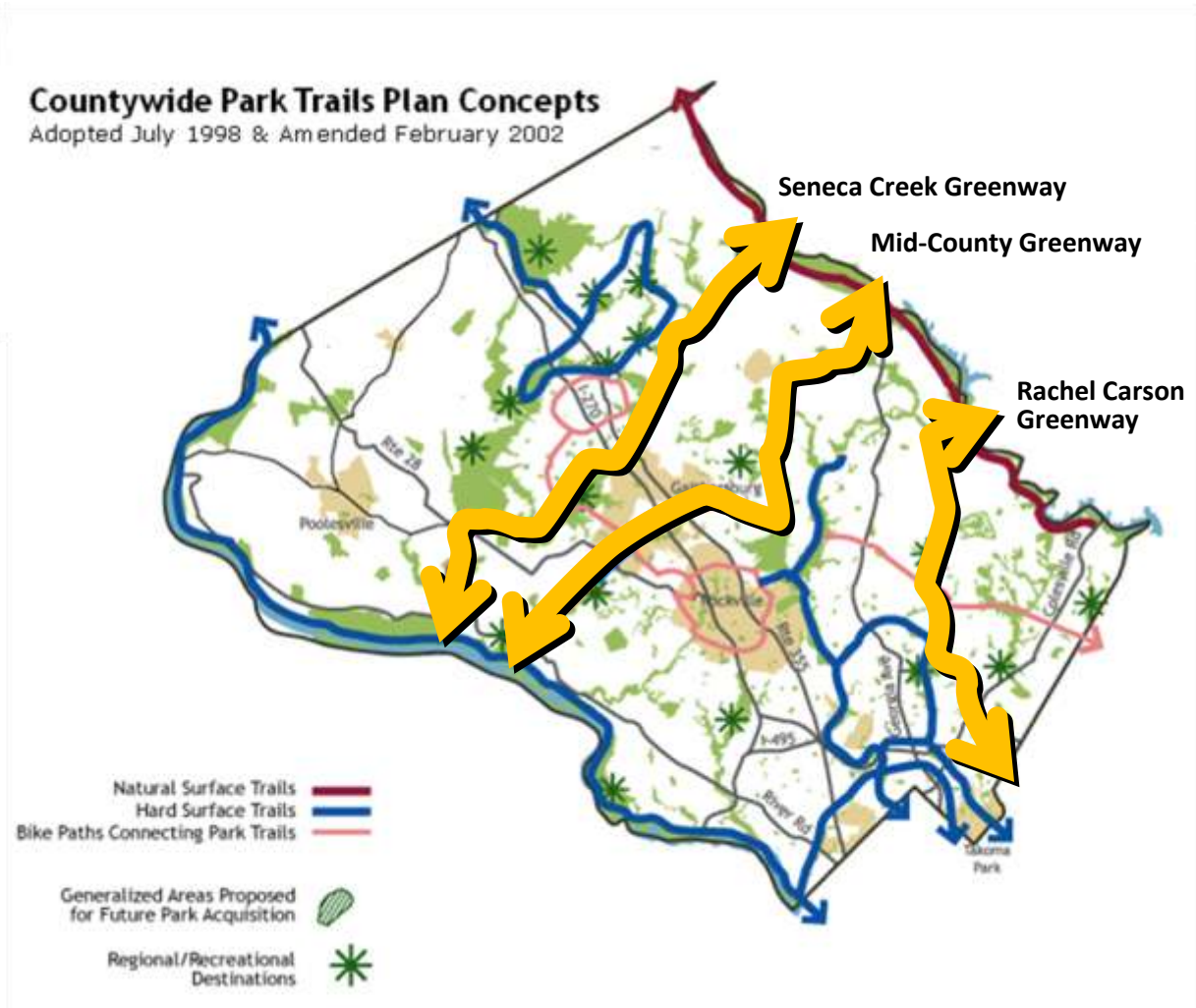
The trail plan for Upper Rock Creek Trail Corridor:

- **Supports the concept of a mid-county greenway trail corridor extending from the Potomac River to the Patuxent River as described in the Countywide Park Trails Plan.**

The Mid-County Greenway is shown in **Figure 5**. The Upper Rock Creek Trail Corridor forms the northern segment. The southern part of this corridor was included in the Muddy Branch Trail Corridor Plan.

This plan proposes how the trail corridor should extend from Rock Creek Regional Park to the Patuxent River. One of the key planning issues is the absence of either existing or planned parkland in the northern part of the study area. This Plan proposes options for providing trails in these areas (see discussion in Plan Issues section).

Figure 5 Midcounty Greenway Trail Corridor



- **Supports trail locations that achieve environmental stewardship objectives.**

Completing an environmental inventory is the first step in the Trail Corridor Plan process. A preliminary inventory has been completed and the key environmental features are shown in **Figure 6**. More about these features and their role in the trail planning process may be found in the Appendix B.

The most significant feature from a trail planning perspective is the Best Natural Area located in the North Branch Stream Valley Park. Rather than route a hard surface trail through this unique, fragile resource, this Plan endorses the recommendation of the Countywide Park Trail Plan to use bike paths along Muncaster Road, Emory Lane and the InterCounty Connector to provide trail connectivity.

Figure 6 Environmental Setting

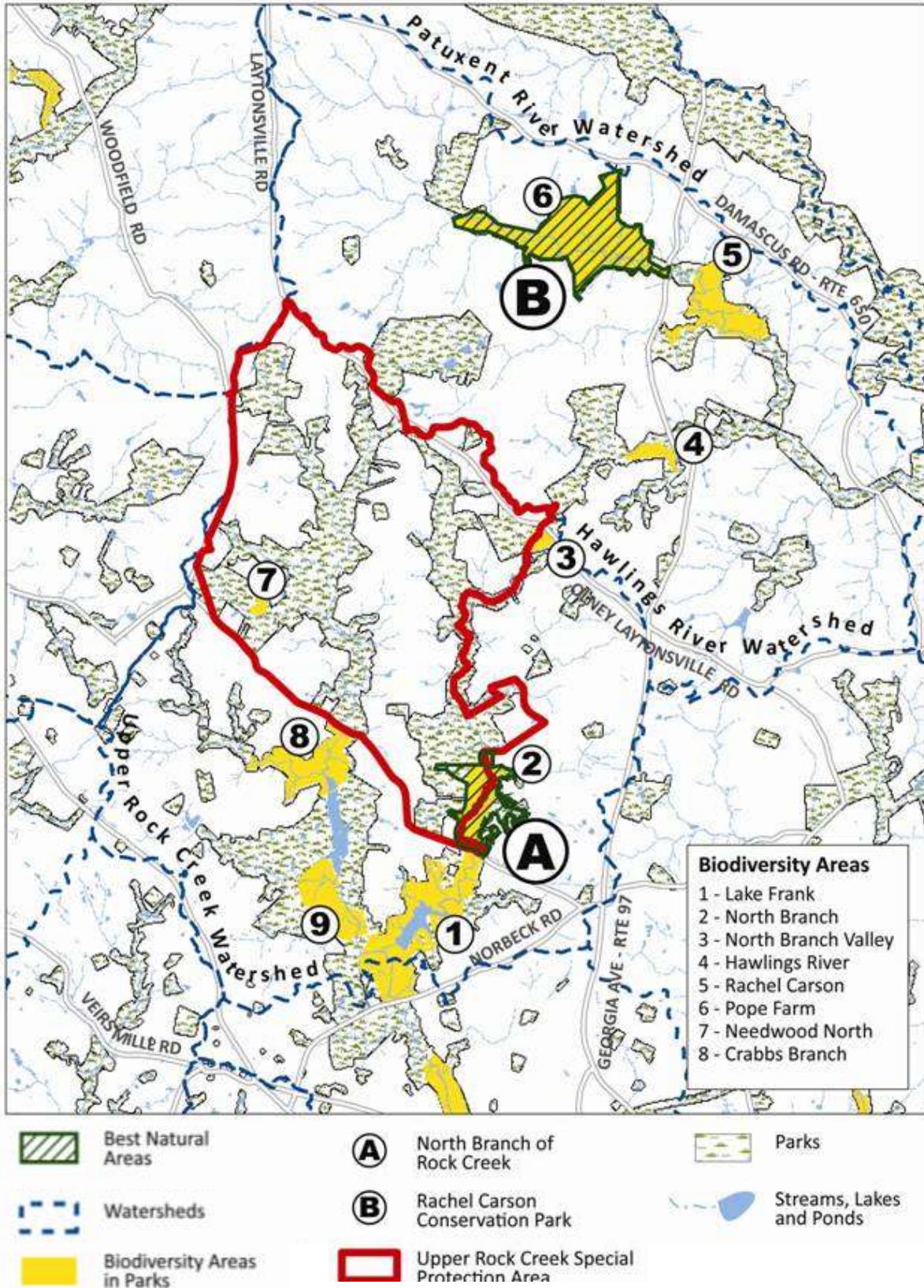
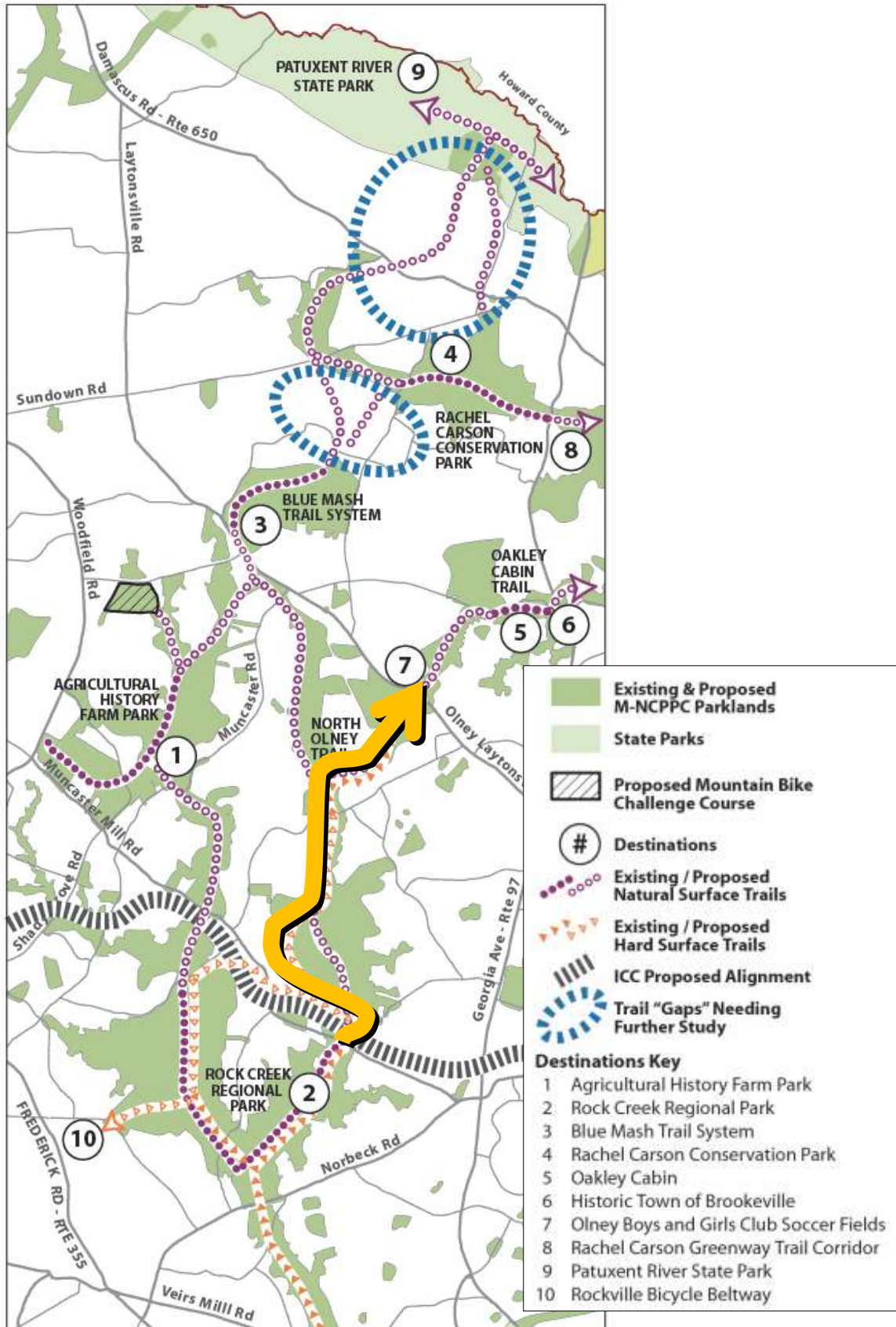


Figure 7 Hard Surface Trail Extension To Olney



- **Proposes a series of trail loops within the corridor**

The loop trail concept endorsed by this Plan is shown in the Plan Implementation chapter. Loop trails are popular because they offer variety and can be enjoyed from a single trail access point. Linear trails require “backtracking” to return to the trail head.

- **Recommends a hard surface trail connection from Rock Creek Regional Park to Olney.**

This connection, shown in **Figure 7**, has been part of the Olney Master Plan since 1980 and was reconfirmed in the Countywide Park Trails Plan.

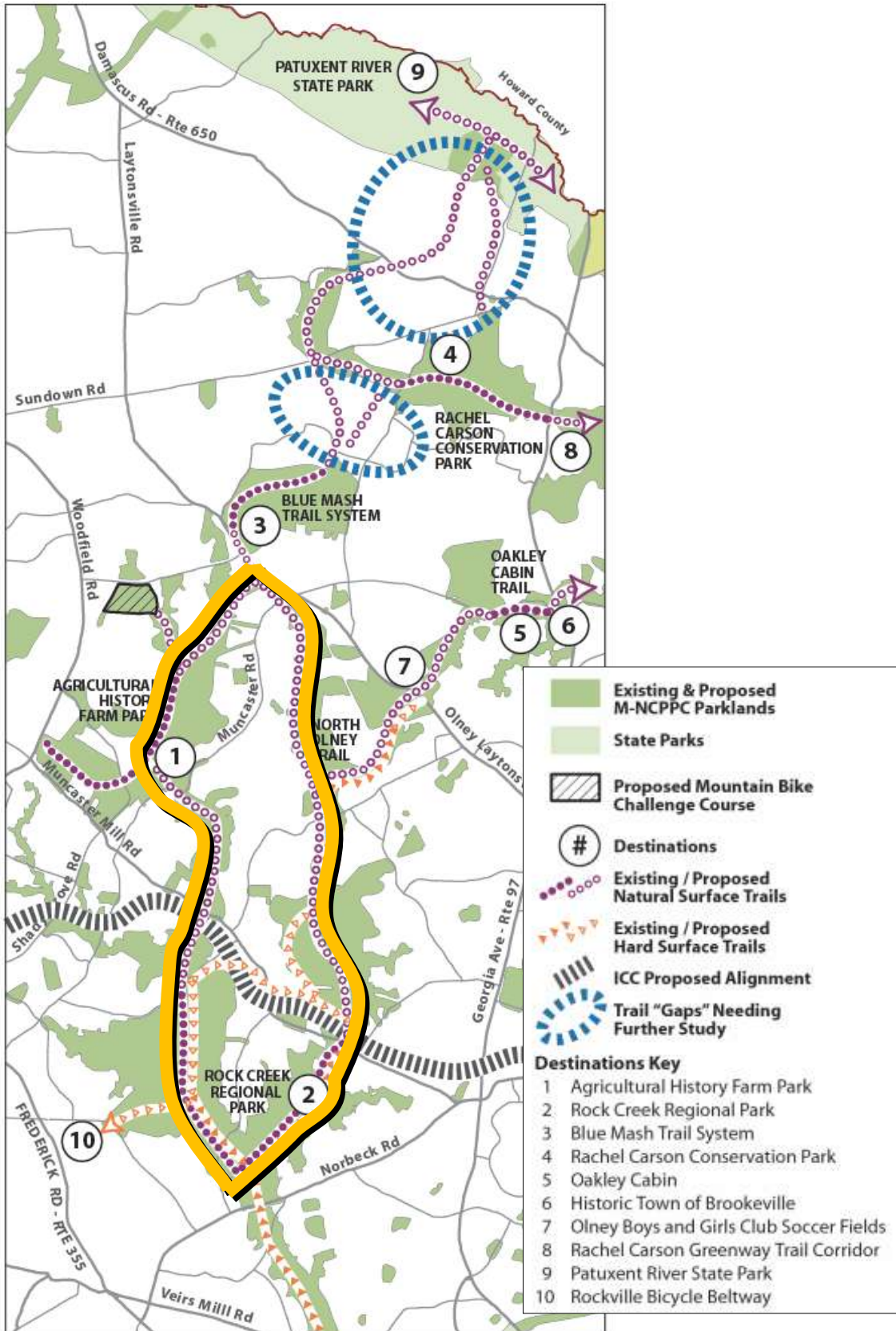
- **Recommends a natural surface trail network that accommodates hikers, equestrians and cyclists.**

The Countywide Park Trails Plan recognizes that hiking, horseback riding and cycling are all legitimate forms of recreation on natural surface trails “when and where it is practiced in an environmentally sound and socially responsible manner.” The Countywide Park Trails Plan also endorses “geographic parity in natural surface trail use opportunities for hikers, equestrians and bicyclists across the park system.”

As shown in the table below and in **Figure 8**, this Plan provides an extensive system of natural surface shared use trails that will be open to cyclists as well as hikers and equestrians.

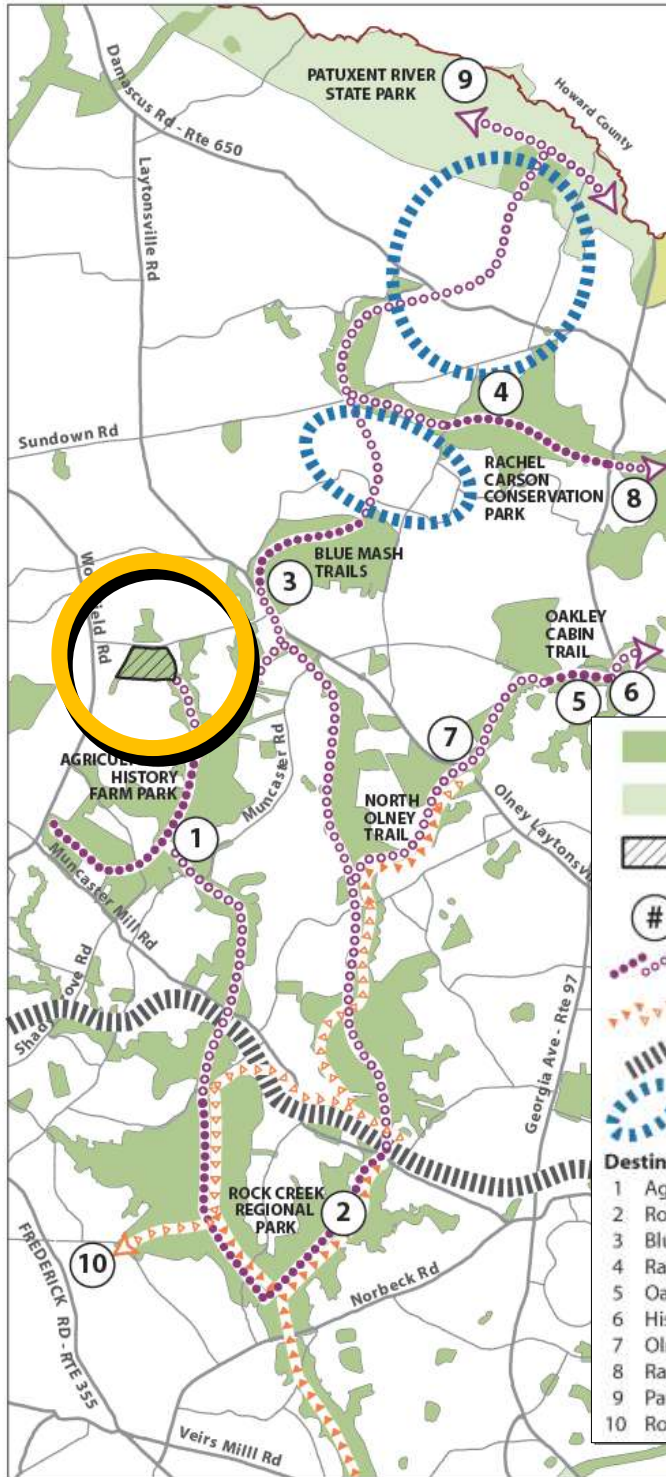
Natural Surface Trail Mileages	Total miles	Trail mileages by user group		
		hikers	equestrians	cyclists
Existing Trails (2008)	8.9	8.9	6.2	3.5
Additional proposed miles by re-assigned usage			2.7	2.7
Subtotals	8.9	8.9	8.9	6.2
Proposed additional miles of trails added to trail corridor after Plan implementation	21.2	21.2	21.2	21.2
TOTALS	30.1	30.1	30.1	27.4

Figure 8 Natural Surface Shared Use Trails Open to Cyclists, Hikers and Equestrians



- **Recommends a mountain bike challenge course at the Carson Farm Special Park.**

To complement the natural surface trail system, this Plan recommends a mountain bike challenge course at the George Carson Farm Special Park. A mountain bike challenge course is a natural surface bike trail with technical obstacles, like fallen logs or rock outcroppings.



This recommendation will provide the first recreation facility for mountain bikers in the Montgomery County park system. The only other facility in the County is located in the Seneca State Park. The location of a mountain bike course at the Carson farm would provide a facility in the eastern portion of the county (see **Figure 9**).

Figure 9 Location of Mountain Bike Challenge Course

- **Proposes a trail connection between lakeside trails in Rock Creek Regional Park.**

Providing a trail connection between Lake Needwood and Lake Frank trails is already part of the adopted Rock Creek Park Master Plan. This plan looks at the concept in more detail and recommends a new location for a trail connection, based on a suggestion made a community meeting (**Figure 14**).

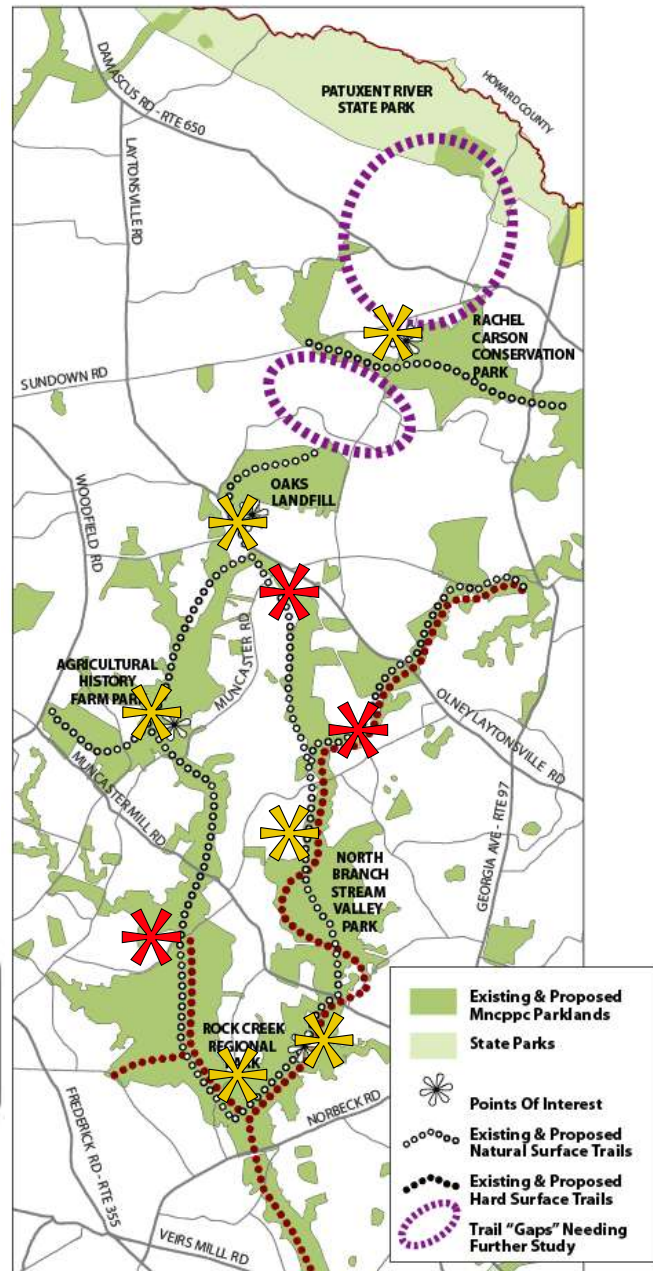
- **Recommends many points of access to the trail corridor and makes portions of the corridor accessible to people with limited mobility.**

The Rock Creek Trail Corridor is 14 miles in length. Trail access points that include parking (for cars and horse trailers) are needed at different locations along the greenway so people can hike or bike shorter sections of the trail (**Figure 10**). Locations for horse trailer parking also need to be identified. Providing opportunities for residents of communities near the greenway to access the trails would allow people to get to trails without using their cars.

Providing some short trail loops and interpretative areas that meet accessibility design standards will help assure universal enjoyment of the trail experience. Areas of challenging topography within the corridor will prevent the entire trail corridor from being accessible. However, finding areas in the corridor that can accommodate people with limited mobility will guide the trail implementation process. These trails should be close to parking lots that are handicapped accessible.



Figure 10 Access Points along the Corridor



 **Proposed Trailhead**  **Existing Trailhead**

- **Identifies mill sites for future interpretation**

There are twelve mills in the Upper Rock Creek Trail area that appear to be close enough to existing or proposed trails to make interpretive signage useful.

These mills can be grouped into three clusters for purposes of interpretation. These clusters are showing in **Figure 11**. More details about the mills may be found in the Technical Appendix.

Figure 11 Historic Mill Clusters

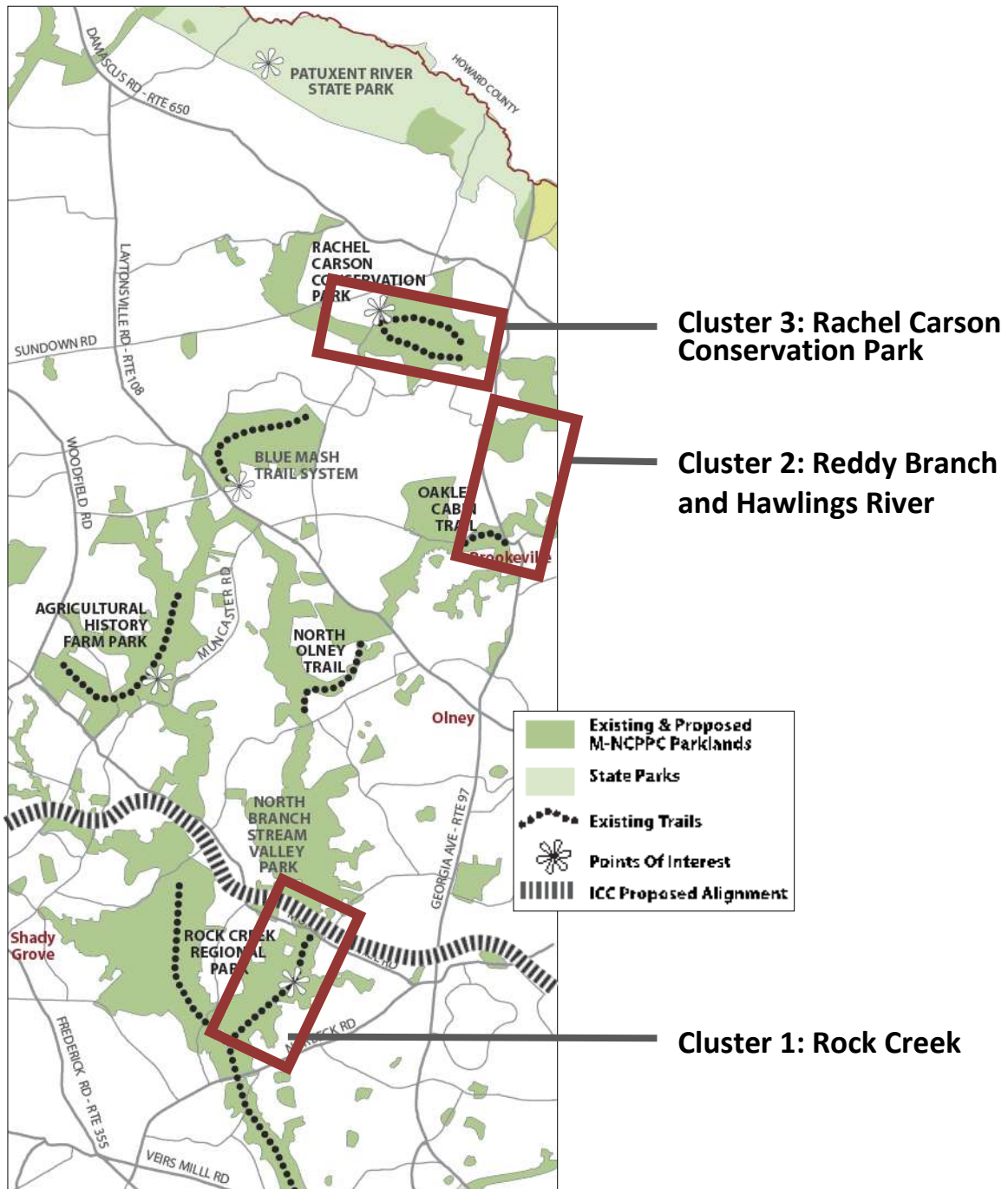
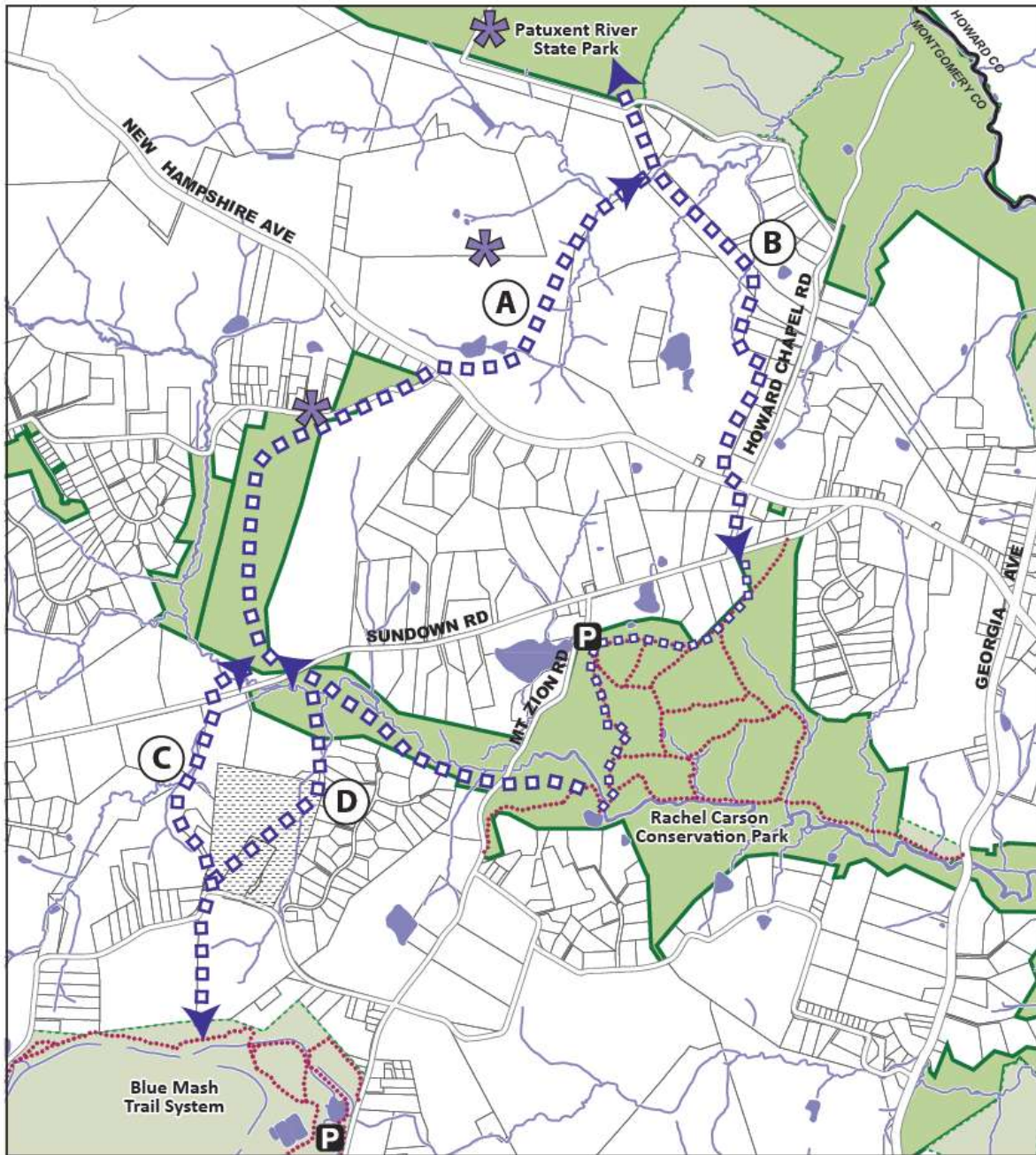


Figure 12 How to Close the Trail Gaps



Upper Rock Creek Trail Corridor Alignment

- Existing Natural Surface Trails
- — — — — Existing Hard Surface Trails
- Proposed Options
- P** Parking
- Existing Parkland
- Future Parkland
- Federally Owned Land
- Interpretive Opportunities

Key Plan Issues

- ***Closing trail “gaps” in the northern portion of the trail corridor.***

Over 80% of the trail corridor is already in park ownership. However, there are two significant “gaps” in the park pattern (**Figure 4**).

The gap between Rachel Carson Conservation Park and the Patuxent River State Park is characterized by several large farms. Continued operation of these farms is consistent with the Olney Master Plan and the County’s commitment to maintaining a critical mass of working farms. However, if subdivision ever occurs, it would be appropriate in this area to acquire a park trail corridor that does not interfere with continued farming operations. **Options A and B**, shown in **Figure 12** identify two “desire lines” for a park trail connection.

The gap between the Blue Mash trail system and Rachel Carson Conservation Park is largely subdivided and presents challenges for locating a trail corridor. The proposed trail location between the Blue Mash trail and Riggs Road has already been identified as a public use easement on a preliminary plan of subdivision. Two trail options are identified in **Figure 12** north of Riggs Road. **Option C** would be implemented by requiring a public use trail easement if and when the properties shown are subdivided. **Option D** includes a trail across property owned by the Federal government. This option could be implemented with the cooperation of the Federal agency involved or if the site is ever declared surplus.

- ***Providing a mountain bike challenge course at the George Carson farm.***

This plan proposes a mountain bike challenge course at the George Carson Farm Special Park (see **Figure 13**). This park poses few environmental constraints and offers a rolling topography that is a critical feature of a mountain bike course.

This proposal is consistent with the recent emphasis on park facilities that help ensure “no child is left inside” and the new Department of Parks initiative to provide Adventure Parks. The recommendation for a mountain bike challenge course at the George Carson Farm Special Park can be accommodated in accord with the Department of Park’s environmental planning principles and sustainable trail guidelines.

The George Carson farm was acquired in the late 1960’s. The Department of Parks purchased 55 acres of the 100 acre farm. Mr. Carson donated another 10 acres (including the farmhouse) for a memorial garden to honor the memory of his late wife. The master plan for the park, adopted in 1969, includes an area for contemplation, gardens and a 25 space parking area (the original plan is included in the Technical Appendix). The plan for the park was never implemented. Currently, the farmhouse and outbuildings are being used by Second Chance Wildlife Center, an organization dedicated to the conservation of wildlife through rehabilitation. The center treats, houses and feeds injured wildlife, preparing them for release back into the wild. Locating a challenge mountain bike course at the George Carson Special Park will not conflict with Second Chance Wildlife Center nor affect the long term vision for the park.

Staff has walked the park with representatives from IMBA (International Mountain Biking Association) and MORE (Maryland Off-Road Enthusiasts) to assure its suitability for a course. The site contains rolling hills and some grades necessary for the trails as well as flat terrain for parking, a skills area and specialized track features.

Figure 13 Mountain Bike Challenge Course Concept



The proposed concept plan for the course includes the following:

- **Trail loops** suited for riders of different ability levels, from novice to advance. These trails will feature challenging obstacles for advanced riders but offer “bypass” routes around these obstacles for novices.
- A **skills area** to provide riders the chance to practice on terrain and trail features they will encounter on the larger trail system.
- Two or more “**pump tracks**” with mounded dirt and in-sloped turns to provide higher levels of challenge.

All trails will conform to the Department of Parks standards for natural surface trail sustainability. For example, the layout of the trails will minimize erosion by following contours instead of running straight down a slope.

Although widely endorsed by the mountain bike community, the mountain bike challenge course has raised concerns of neighbors along Barcelona Drive, the only road access to the park. At the community meeting on the plan concept, neighbors along Barcelona Drive expressed concerns

about the traffic such a use would generate. (The main entrance to the George Carson Special Park is Barcellona Drive). The 1969 master plan proposes a 25 space parking lot.

The implementation priorities include providing temporary driveway access from Fieldcrest Road to the mountain bike challenge course.

- ***Assure the alignment and design of the InterCounty Connector (ICC) is supportive of the trail plan.***

The InterCounty Connector (ICC) is a planned highway that traverses the southern portion of the Upper Rock Creek Trail Corridor (see **Figure 14**). This section of the ICC includes a bike path along the northern edge of the right of way. The following are the trail planning concerns related to the ICC:

- Assuring that north-south natural surface trails are not blocked by the east-west alignment of the ICC.
- Assuring the bike path along the ICC and park trails interconnect to allow movement along both systems.

Relation to Natural Surface Trails

Natural surface trails will pass under the ICC, thereby assuring safe passage for trail users.

Connecting the ICC Bike Path and Park Trails

The ICC will have a bike path along the northern part of the right of way as it crosses two portions of the park. The challenge is providing access to and from this bike path to Rock Creek Regional Park.

Along the North Branch of Rock Creek, shown in **Figure 15**, the bike path along the ICC will provide an alternative to locating a hard surface trail in a sensitive biodiversity area. A combination of bike paths along the ICC, along Emory Lane and along a small section of Muncaster Road will provide a continuous trail network for those seeking a hard surface trail. Those preferring a natural surface trail will simply continue in the park beneath the ICC.

Further west in the park, north of Lake Needwood, the connection between park trails and the ICC will be from Needwood Road **Figure 16**. This important connection links the existing and proposed trail system around Lake Needwood to the ICC bike path. It is critical a shared use bike path off the road be provided for casual cyclists and walkers to easily and safely make the connection to the ICC bike path.

The Public Hearing Draft InterCounty Connector Limited Functional Master Plan Amendment supports these connections.

Figure 14 Relation of ICC Bikeway to Rock Creek Regional Park

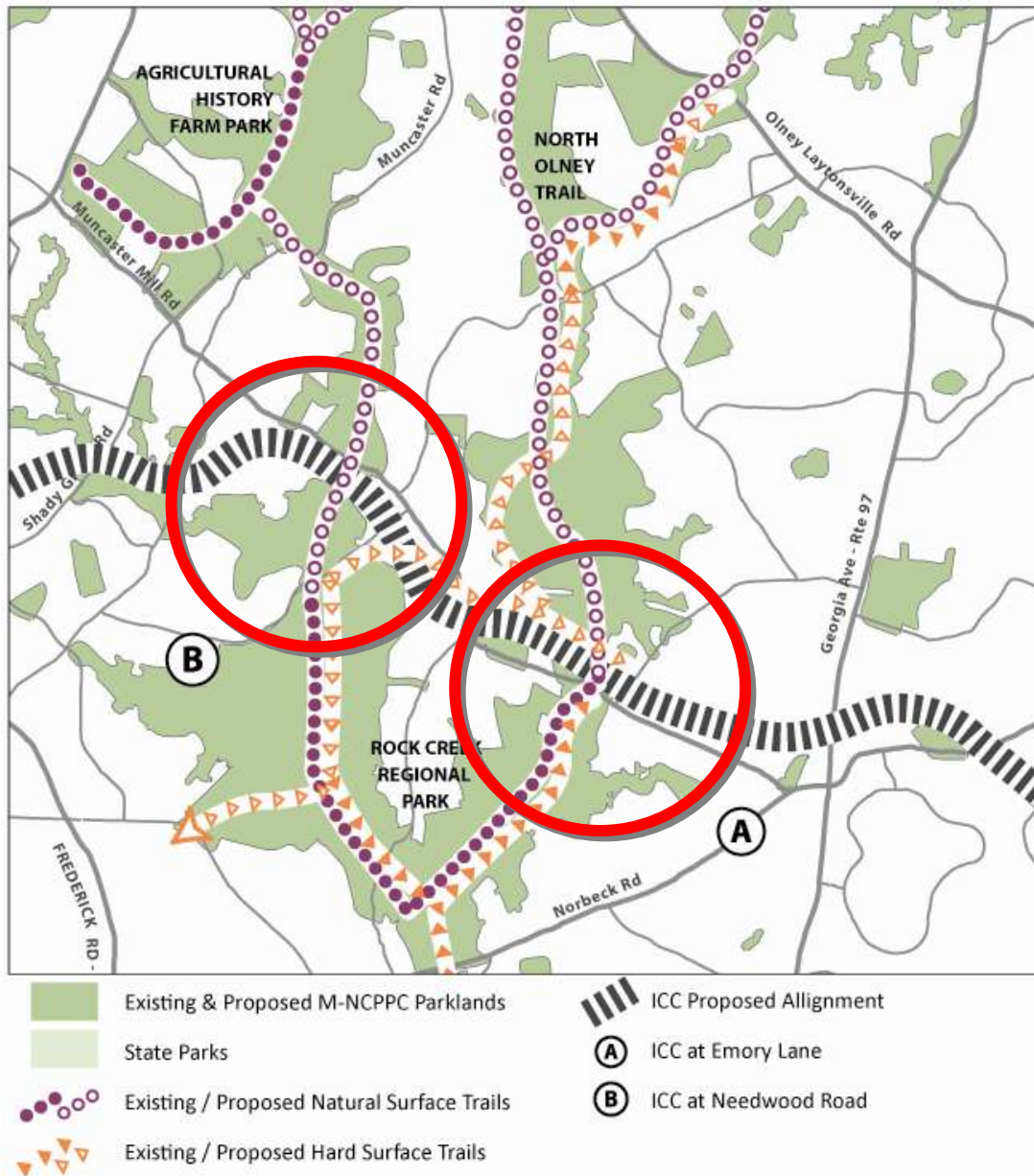


Figure 15 ICC at Emory Lane

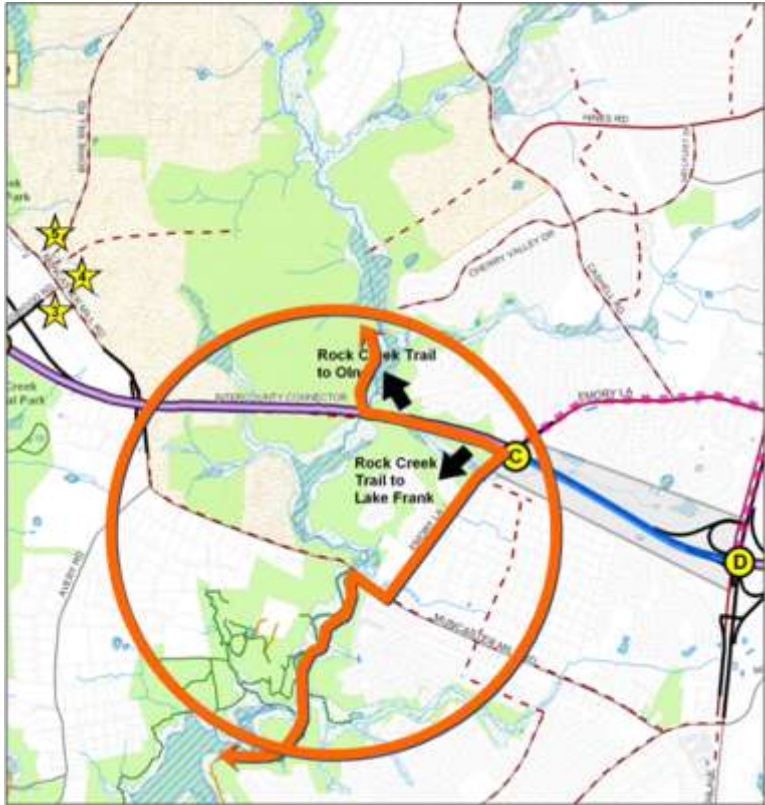
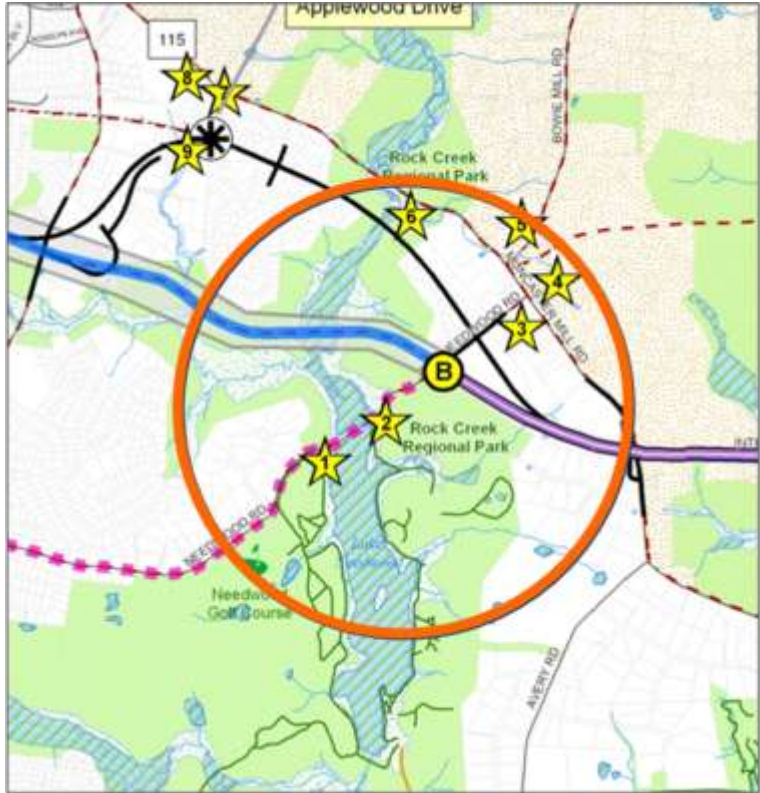


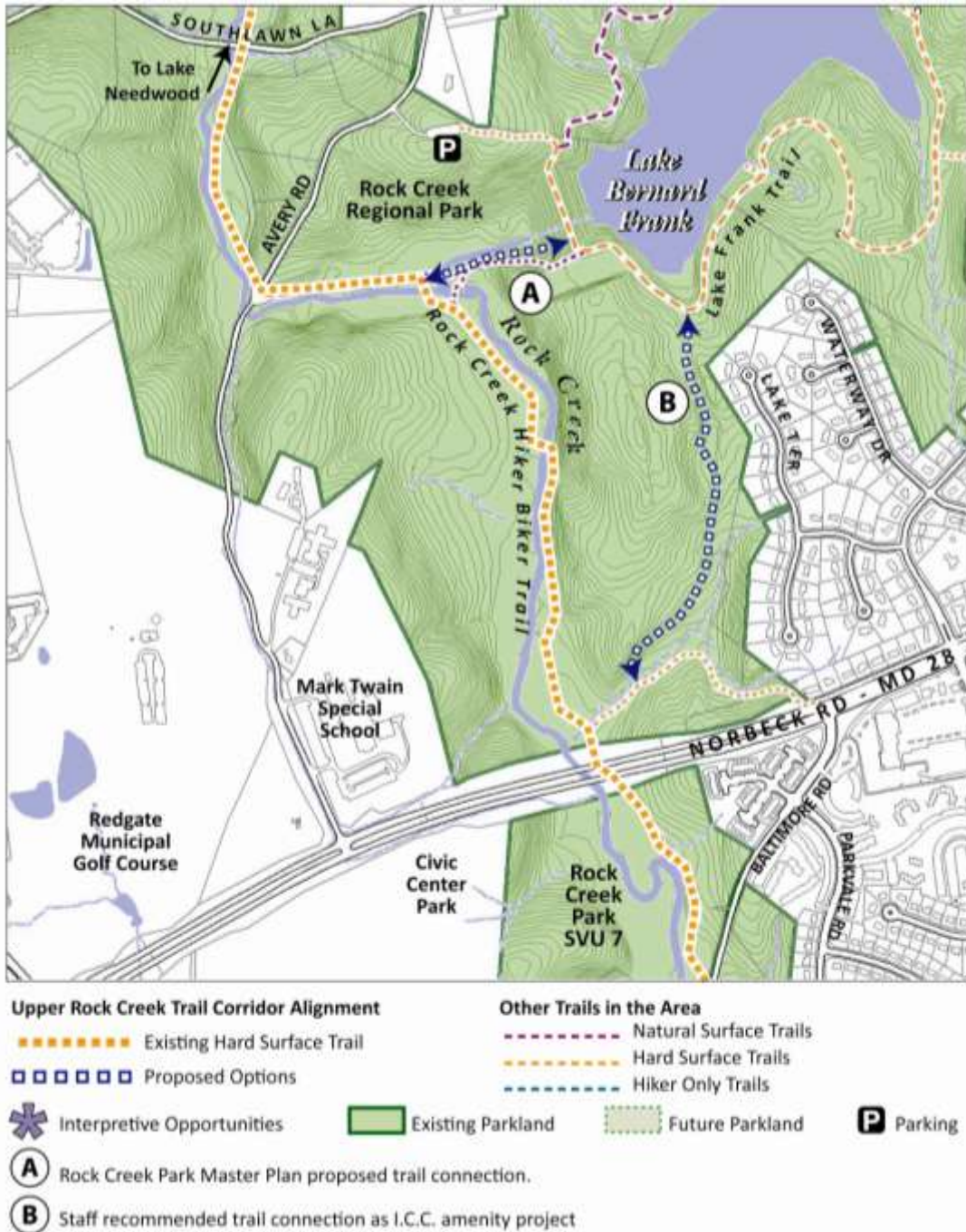
Figure 16 ICC at Needwood Road



- **Providing trail connectivity between Lake Frank and Lake Needwood trails and the Rock Creek Hiker Biker Trail.**

The Rock Creek Regional Park Master Plan proposes a hard surface trail connection between Lake Frank and Lake Needwood (option “A” in **Figure 17**). Community members have suggested an alternative trail connection that involves less steep topography and is already being used as a “people’s choice” trail. The location of this potential trail connection is also shown in **Figure 17** as option “B”. Staff supports option B.

Figure 17 Lake - Trail Connectivity



Implementation Priorities

- 1. *Implement the trail connection of Lake Frank and Lake Needwood as an ICC community enhancement project.***
- 2. *Implement the mountain bike challenge course and provide a temporary access from from Fieldcrest Road.***

The Plan supports including in Minor New Construction, Non-Local, for FY11 and FY12 the design and construction of a temporary gravel entrance driveway, culvert and parking lot from Fieldcrest Road and a turn-around located immediately inside Park property.

Staff is also recommending that completion of a park facility plan be included in the FY 11-16 CIP, including future, permanent paved access road, parking lot and trailhead. All improvements to the Carson Farm Special Park will comply with the impervious requirements for the Upper Rock Creek Special Protection Area. Providing an access from Fieldcrest Road by FY 12 would coincide with the planned construction of the mountain bike challenge course, proposed to be initiated in FY 11. This schedule would eliminate the need for a temporary parking area with access from Barcellona Drive.

If the mountain bike challenge course is implemented before the entrance from Fieldcrest Road is completed, a temporary parking lot for 15 cars with access from Barcellona Drive should be provided.

- 3. *Prepare a natural surface trail assessment study for new trail proposals in the Upper Rock Creek Trail Corridor Plan.***

This recommendation includes the mountain bike challenge course trail. The trail assessment study will begin in FY10 with natural surface trail connection occurring in FY11-14.

- 4. *Provide a continuous natural trail around Lake Frank***

This project requires a bridge across the North Branch of Rock Creek and designation of one sanctioned "loop" trail around Lake Frank. A trail assessment study will be done to determine location of the bridge and the possible need for boardwalk. This will be added to the work being done in the FY11-14 time period.

- 5. *Designate a continuous hard surface trail around Lake Needwood.***

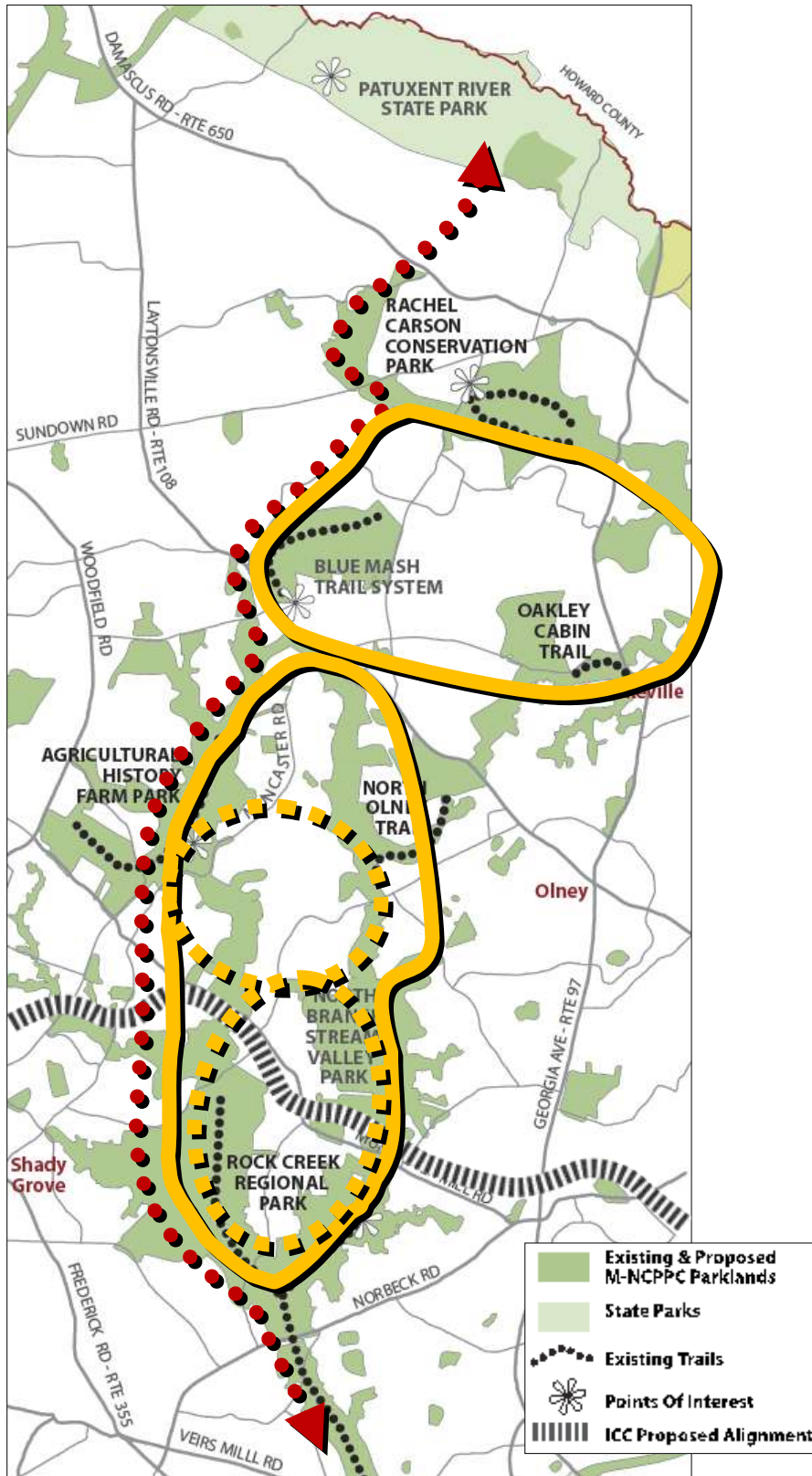
This project requires designation of one sanctioned "loop" trail around Lake Needwood. A key issue is how to provide safe access along Needwood Road as part of the trail loop. This Plan supports moving the guard rail from its current location to allow separation of hikers and cyclists from automobiles.

- 6. *Initiate a facility plan as the first step in providing a hard surface trail connection from Rock Creek Regional Park to Olney.***

A facility plan provides critical information on design, cost, and environmental impacts associated with park development and is the basis for a decision by the Planning Board and the County Council to fund a project for construction. At present, the extension of the Rock Creek hard surface trail to Olney is a candidate project for facility planning in FY13.

a.

Figure 18 Trail Corridor Loop Connectivity



7. Revisit the current master plan for George Carson Special Park.

Donated to Montgomery County in the 1960s, George Carson donated the farmhouse and surrounding 9.76 acre property to be a memorial to his late wife Anna Carson, He wanted the property to represent a small farmstead of the 1930s, with an emphasis on vegetable and flower gardening.

The park master plan, completed in 1969 (Appendix D), reflects Carson's wishes but was never implemented. The master plan needs to be revisited for three reasons:

- a. To provide a permanent park entrance from Fieldcrest Road rather than Barcellona Drive. Fieldcrest Road was not built or planned when the park plan for George Carson Farm Special Park was completed.
- b. To re-examine the plan's recommendations in light of environmental guidelines that have been adopted since 1969.
- c. To re-examine the future of the farmhouse and outbuildings.

8. Implement a series of interconnected loop trails at time of subdivision and in accord with any related road improvements.

The plan for the Upper Rock Trail Corridor will provide a trail loop that is over 30 miles in length. As shown in **Figure 18**, a series of shorter loop trails can be created by providing east west connections within the larger loop. Bikeways and sidewalks are critical to this concept.

8. Add interpretive signage related to historic mills as related trails are open to the public.

As trails are opened in the areas shown for historic mill interpretation, signs should be installed to inform trail users of the historic significance of the area.

Technical Appendix

Appendix A

Overview of Plans with Trail Policies and Recommendations for the Upper Rock Creek Trail Corridor Plan

<p>Countywide Park Trails Plan</p>	<p>Extend natural surface trails from Rock Creek Regional Park to the Hawlings and the Patuxent Rivers.</p> <p>Explore ways to connect the Rock Creek natural surface trail system to the Seneca Greenway.</p> <p>Provide a hard surface trail connection between Rock Creek Regional Park and Olney.</p> <p>Provide a hard surface trail from the Lake Needwood recreation area to the ICC right-of-way.</p> <p>Implement the bikeway recommendation in the Olney and rock Creek master Plans for bike paths along Emory lane and Muncaster Mill Road.</p>
<p>Rachel Carson Greenway Trail Corridor Plan (2005)</p>	<p>The Rachel Carson Greenway Trail Corridor proposes a trail connection from the Rachel Carson Conservation Park to the Patuxent River State Park and suggests a trail link to the Agricultural History Farm Park. The Plan states: “The Rock Creek Trail Corridor Plan will address this connection.”</p>
<p>Park and Trail Analysis for the Upper Rock Creek Vicinity (2002)</p>	<p>To reflect the environmental, bikeway and land use recommendations of the Upper Rock Creek Master Plan, several changes were made to the Countywide Park Trails Plan. The most significant was removing a portion of hard surface trail proposed in a sensitive environmental area in the North Branch of Rock Creek and relying on instead on a bikeway along Muncaster Mill Road for trail connectivity in the area.</p>
<p>Rock Creek Regional Park Master Plan (2000)</p>	<p>The Rock Creek Regional Park Master Plan includes a comprehensive trail network. The Plan proposes “ ... a general expansion of the hard surface and natural surface recreational trail system to create a multiple-use loop trail system between Lake Needwood and Lake Frank.” And recommends, “...extension of hard surface trails up the North Branch Stream Valley toward Olney and natural surface trails up the Rock Creek Stream Valley Park to the Agricultural History Farm Park.”</p>
<p>Agricultural History Farm Park Program and Facility Development Plan (1990)</p>	<p>This Plan provides guidance for two distinct areas in the park: the historic farm area and the modern agricultural area. Natural surface trails are shown on the plan and have been implemented. Staff is currently exploring strategies to make the park a fully functioning farm operation with farm interpreters.</p>
<p>Rachel Carson Conservation Park Master Plan (2000)</p>	<p>The Plan proposes a natural surface trail system that offers opportunities to observe outstanding natural areas while protecting the park’s resources. One of the goals of the Plan is to provide connections to regional trail systems identified in the Countywide Park Trails Plan.</p>

Appendix B

Plan Response to Environmental Features

BEST NATURAL AREAS

Best Natural Areas contain the best examples of exemplary natural resources in Montgomery County. Features such as large wetlands, high quality aquatic resources and forests, diverse vegetation, uniquely spectacular topography and bedrock formations and/or unique habitats that are scarce and /or fragile help determine an area as the county's best natural area.

No single factor was determinative, and the areas chosen were not necessarily ranked high in all of the criteria. In fact, for some areas only one or two of the features may have been present. However, each of the chosen best natural areas contained a biodiversity area and at least some rare, threatened, endangered or watchlist species.

Feature In Plan Area

North Branch Stream Valley Park:

This mixed deciduous forest offers considerable diversity of vegetation and wildlife habitat. The large tracts of contiguous forest are required for forest interior dwelling birds and wildlife as well as for rare plant and animal species. Interspersed throughout the stream valley park are high quality, forested wetlands, floodplains, early successional forested uplands and considerable amounts of more mature upland forests.

Plan Response: In North Branch Stream Valley a single sanctioned natural surface trail will replace the informal trails now being used. This will allow informal trails that are not environmentally sensitive to be closed. The sanctioned trail will be shared by hikers, equestrians and cyclists.

This Plan endorses the recommendation of the Countywide Park Trails Plan that a hard surface trail not be located here but that trail connectivity be provided by surrounding bike trails along roads.

Rachel Carson Conservation Park:

A 650 Acres park area of contiguous, high quality mixed-deciduous forest, with oak dominated uplands, lush floodplain forest, old fields in varying successional stages, old ponds with emergent aquatic species, seven identified species of rare, threatened endangered or watchlist plants, and extraordinary diversity of vegetation including seven species of orchid.

Management needs for both areas include the need to control non-native invasive species as well as controlling the population of white-tailed deer.

Plan Response: In Rachel Carson Conservation Park the plan proposes a natural surface trail system that offers opportunities to observe outstanding natural areas while protecting the park's resources. One of the goals of the Plan is to provide connections to regional trail systems identified in the Countywide Park Trails Plan.

Overall, it is not intended that the designation as a “best natural area” would necessarily preclude the development of appropriate and needed facilities within its boundaries. It is hoped that significant consideration and protection would be given, however, to the high quality natural resources contained therein.

In all case the trail alignment is determined after a thorough environmental assessment along the desired alignment. When space allows, the trail is located outside of environmentally sensitive areas which include; steep slopes, erodible soil, stream buffers, seeps, spring, wetlands, 100 year floodplains, significant habitats, species of State or county concern, species listed as R,T,E, or W or significant or unusual in the county. All alignments are carefully field located to avoid the sensitive areas.

If space is limited, potential to acquire new land to accommodate the trail is evaluated and acquisitions made if possible.

BIODIVERSITY AREAS

These areas are defined in the 1998 PROS (Parks, Recreation and Open Space) Plan as: “Significant natural communities that enhance the biodiversity of the County. These areas contain one or more of the following natural resources:

- a. Populations of rare, threatened, endangered or watchlist plants or animals.
- b. Unusual or unique types of habitat,
- c. Examples of high quality or otherwise significant natural communities, and/or
- d. Plant or animal species with importance to the County or locality

The locations of biodiversity areas, including some buffer area around them, are mapped by the Maryland Department of Natural Resources (DNR) on existing parkland.”

Feature in Plan Area

Nine (9) Biodiversity Areas are identified and named within the URC Trail Corridor.

Crabbs Branch	Hawlings River
Lake Frank	North Branch
North Branch Valley	Needwood North
Pope Farm	Rachel Carson Conservation Park
Western	

Plan Response:

The same planning approach described for Best Natural Areas will be used to assure protection of biodiversity areas (**Figure 6**)

LARGE TRACTS OF SIGNIFICANT FORESTS, WETLANDS AND FLOODPLAINS

Feature in Plan Area

Large tracts of forests, wetlands and floodplains lie outside the areas already identified above, and along stream valleys and undeveloped areas not in parklands.

Plan Response:

Maintain stream buffers in accordance with the Environmental Guidelines.

Environmental Guidelines: Guidelines for Environmental Management of Development in Montgomery County, approved by Montgomery County Planning Board in February 1997

UPPER ROCK CREEK SPECIAL PROTECTION AREA

The Special Protection Area program was established in 1994 by Montgomery County Code Chapter 19, Article V (Water Quality Review-Special Protections Areas, Section 19-67) and the program was implemented through Executive Regulation 29-95, *Water Quality Review for Development in Designated Special Protection Areas*. Annual stream monitoring is required by law to track the effectiveness of best management practices within the Areas. The County Council has designated four areas including: Clarksburg Master Plan SPA, Upper Paint Branch SPA, Piney Branch SPA, and the Upper Rock Creek SPA. The Upper Rock Creek SPA (URCSPA) was designated on February 24, 2004, with the adoption of the Upper Rock Creek Master Plan. The URCSPA was expanded farther to the east with the adoption of the Olney Master Plan in April 2005.

All four SPAs have existing water resources or other environmental features directly relating to those water resources that are of high quality or unusually sensitive; and where proposed land uses would threaten the quality or preservation of those resources or features in the absence of special water quality protection measures which are closely coordinated with appropriate land controls which would help ensure that the impacts from master planned development activities are mitigated to the greatest extent practicable. Such measures include: reducing imperviousness, minimizing grading, and saving natural features such as forested stream buffers by use of sediment controls and storm water management structures that go beyond minimum standards.

Feature in Plan Area

Because the Upper Rock Creek SPA designation is relatively new only 3 years of data are available. However, the limited monitoring data indicate that overall the stream channels are stable and the streams provide good habitat and water quality conditions. An impervious cap has been set at 8% for the Upper Rock Creek SPA.

Plan Response:

The hard surface trail proposed to extend from Rock Creek Regional Park to Olney lies within the URCSPA.

As required by the Code, MNCPPC-MC staff will work closely with regulatory reviewers to minimize impacts to the SPA stream conditions. Biological monitoring which measures the cumulative impacts of developments that occur in the watershed is required.

At time of facility planning, the amount of impervious surface associated with the trail will be calculated in accord with of the SPA guidelines. If the level of imperviousness exceeds the 8% cap, then other approaches to reducing imperviousness in the watershed will be explored

including use of pervious or semi-pervious materials for the trail surfaces and/or removing impervious surfaces elsewhere in the watershed.

WATERSHED USE CLASSIFICATION

Use Class III, IV and IV-P (Upper Rock Creek and Hawlings River Watersheds):

Use Class III are Natural Trout Waters. That are suitable for the growth and propagation of trout, and that are capable of supporting self sustaining trout populations and their associated food organisms.

Use Class IV waters are Recreational Trout Waters. Waters that are capable of holding or supporting adult trout for put and take fishing, and that are managed as a special fishery by periodic stocking and seasonal catching (cold or warm waters).

Use Class IV-P are Recreational Trout Waters and Public Water Supply. Waters that include all uses identified for Use Class IV waters and Use as a public water supply.

Feature in Plan Area

Use Class III watershed includes Rock Creek and all tributaries upstream of Muncaster Mill Road, and North Branch of Rock Creek and all tributaries upstream of Muncaster Mill Road.

Use Class IV watersheds include Rock Creek and all tributaries (including Lake Frank and Lake Needwood) between Route 28 and Muncaster Mill Road.

Use Class IV-P watershed includes Patuxent River and all tributaries between Rocky Gorge and Triadelphia Reservoirs, and including Triadelphia Reservoir.

Plan Response

Maintain stream buffers in accordance with the Environmental Guidelines.

Environmental Guidelines: Guidelines for Environmental Management of Development in Montgomery County. Approved by Montgomery County Planning Board, February 1997

KNOWN ARCHAEOLOGICAL SITES

Feature in Plan Area

Several known archaeological sites exist in the URC Trail Corridor. Opportunities for interpretation abound.

Plan Response

To avoid impacting known archaeological sites, all trail alignments will be reviewed with the Park Department Archaeologist before final approval. The trail alignment can avoid the sensitive sites with careful planning.

Appendix C

HISTORICAL AND ARCHEOLOGICAL RESOURCES

There are three clusters of historic mill sites: one along the North Branch of Rock Creek; one along the Hawlings River and Reddy Branch from Brookfield and to the east; and the third further north along the Hawlings River between Mount Zion Road and Georgia Avenue. (See) Mill research continues, so the information below may be supplemented as new research comes to light.

The first cluster includes:

- **Horner's Mill** (Rock Creek, near junction with North Branch)
This grist and saw mill on Avery Road was built before 1786 by the Williams family. The mill name changed to Needwood Mill and by the mid-19th century, changed again to Prather's Mill. In the late 1870s, it was owned and operated by the Horner family.
- **Elgar's Mill** (North Branch of Rock Creek, about a half mile below Muncaster Mill Road)
Built in 1763, by Joseph Elgar, Sr., the mill ceased operation before 1860.
- **Muncaster Mill** (North Branch of Rock Creek at Muncaster Mill Road)
Built about 1820, by Joseph Elgar, for the Robertson family, this mill was owned by the Muncaster's in the second half of the 19th century. It ceased operation in 1925, and was extensively photographed by the WPA before it burned in 1935.
- **Owen's Mill** (North Branch, about a mile above Muncaster Mill)
This mill was built by Colonel Owen before 1850. The mill ground bones that farmers used to fertilize their fields.
- **Bowie Mill** (west of Bowie Mill Road on the south side of North Branch)
This small grain and saw mill, built before 1850, was owned by Thomas J. Bowie. There was no dam; the wheel (called a flutter wheel) was turned by the force of the stream flowing under the wheel. In 1900, the mill was modified to run on steam.

The middle cluster includes two mills near Brookville (Thomas' and Newlin's), and two (Brookville Woolen Mill and the Chandlee Mill) to the east which may be close to the proposed eastward loop trail. We do not have a detailed map of the proposed loop trail.

- **Newlin's Mill** (Reddy Branch at the corner of 108 and Brookville Road) Built by David Newlin in 1800, this was an oil mill for pressing flax seed. By 1879, the mill was owned by William Downs and operated later by Nathan Shaw. It ceased operation sometime after 1887. The race from this mill runs west along Brookville Road near Oakley Cabin.
- **Thomas Mill**, also known as Brooke's Mill (on the Hawlings River near the fork with Reddy Branch). Built in the 1790s by James Brooke, this mill produced wheat flour.
- **Brookville Woolen Mill** (1901 Brighton Dam Road, on Hawlings River). Built in the early 1800s, the mill was constructed by the David Newlin to take advantage of the embargo placed on imported goods during the War of 1812. This mill has been restored and is now used as an office.
- **Chandlee Mill** (on Hawlings River, near the intersection of Goldmine and Chandlee roads). This mill was built sometime between 1817 and 1829 by Mahlon Janney Chandlee, a great-grandson

of James Brooke. It was originally a saw mill, but was modified before 1880 to be a grist mill as well.

- **Haviland Mill** (on Hawlings River at Haviland Mill Road). Sometimes known as Lea's or Leawood Mill, this was first operated by Thomas Lea, and later by Merrit Haviland. It featured an unusual "tub wheel." In the 1850s it was operating as a flour mill; by 1880 it was both a saw mill and a grist mill.

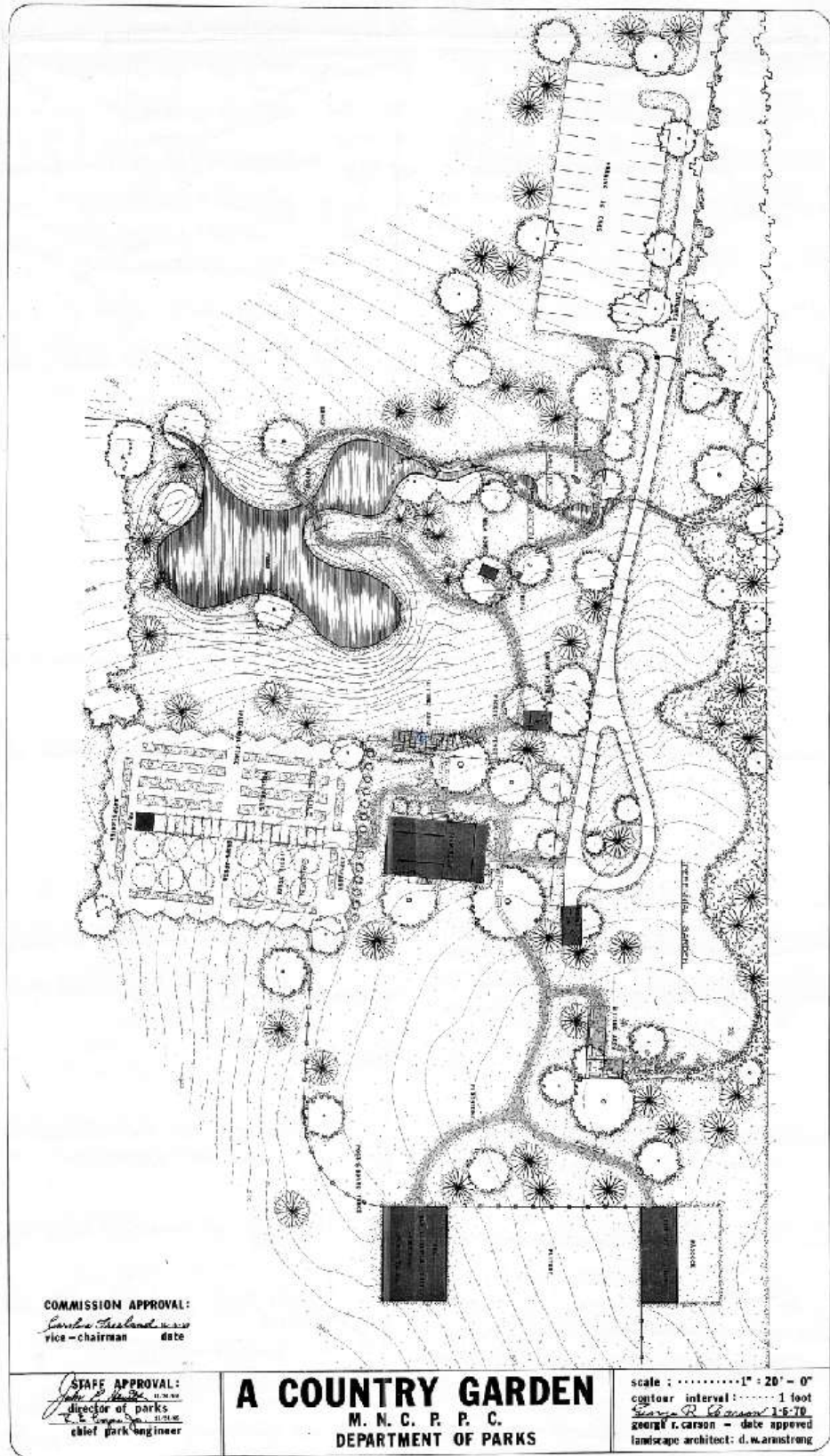
The northern cluster is in or near Rachel Carson Conservation Park. It includes:

- **W. B. Gaither Mill** (Hawlings River east of Zion Road, south of Unity post office). This grist mill was built in 1795.
- **Musgrove Mill** (Hawlings River, east of the Gaither Mill). This grist mill first appears on the 1783 tax list. This mill was operated before and after the Civil War by Wilson Johnson, first as a slave and later as a free man.
- **Greenwood Mill** (Hawlings River, just west of Georgia Avenue). Built before 1810, probably by Thomas Davis, this grist mill was in operation until 1921.

Minutes from the Montgomery County Archives reveal that on June 21, 1984, Historic Preservation Commission staff noted "that the house itself was a fairly undistinguished example of turn-of-the-century architecture. The age of the smokehouse was open to some question. Although it was constructed in an old manner, much of the chinking is covered with modern cement and the roof has new wood shingles." Furthermore, Commissioner Charles Edson moved and Eileen McGuckian seconded that "that the Carson Farm/Log Smokehouse not be recommended for placement on the *Master Plan for Historic Preservation* as neither building met any of the criteria of the Ordinance." Because the Carson Farm was removed from the *Atlas* and was not recommended for designation on the *Master Plan for Historic Preservation*, it has not received protection under the Montgomery County Historic Preservation ordinance since 1985.

Appendix D

1969 Carson Farm Special Park Concept Plan

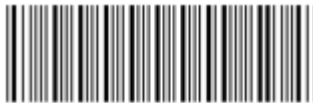


INSIDE BACK COVER



UPPER ROCK CREEK TRAIL CORRIDOR PLAN (2008)

The Maryland-National Capital Park & Planning Commission
Montgomery County Department of Parks



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