



PROPOSED COMPREHENSIVE PLAN AMENDMENT

COMBINED ITEMS: PA 2018-IV-BK1 and PA 2018-IV-TR1
November 29, 2018

GENERAL LOCATION: Primarily inside Huntley Meadows Park, which is southeast of the intersection of South Kings Highway and Telegraph Road and along Hayfield Road, southeast of its intersection with Telegraph Road.

SUPERVISOR DISTRICT: Lee

PLANNING AREA: Area IV

PLANNING DISTRICT: Rose Hill Planning District

PLANNING SECTOR: RH7 Huntley Meadows
Community Planning Sector

For additional information about this amendment call (703) 877-5600.

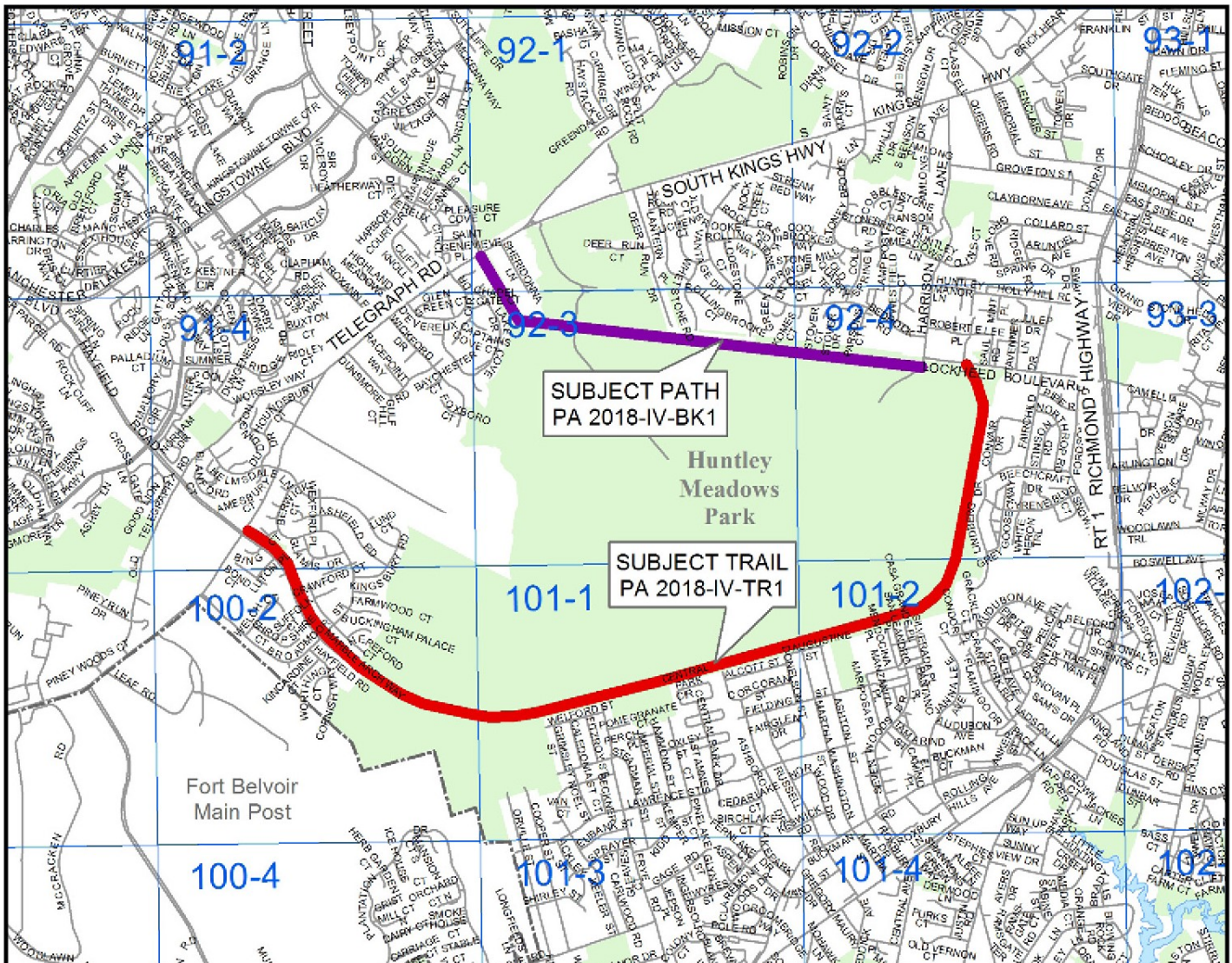
PLANNING COMMISSION PUBLIC HEARING:
Wednesday, January 9, 2019 @ 7:30 PM

BOARD OF SUPERVISORS PUBLIC HEARING:
Tuesday, January 22, 2019 @ 4:00 PM

**PLANNING STAFF DOES RECOMMEND
THIS ITEM FOR PLAN AMENDMENT**



Reasonable accommodation is available upon 48 hours notice. For additional information about accommodation call the Planning Commission office at (703) 324-2865, or the Board of Supervisors office at (703) 324-3151.



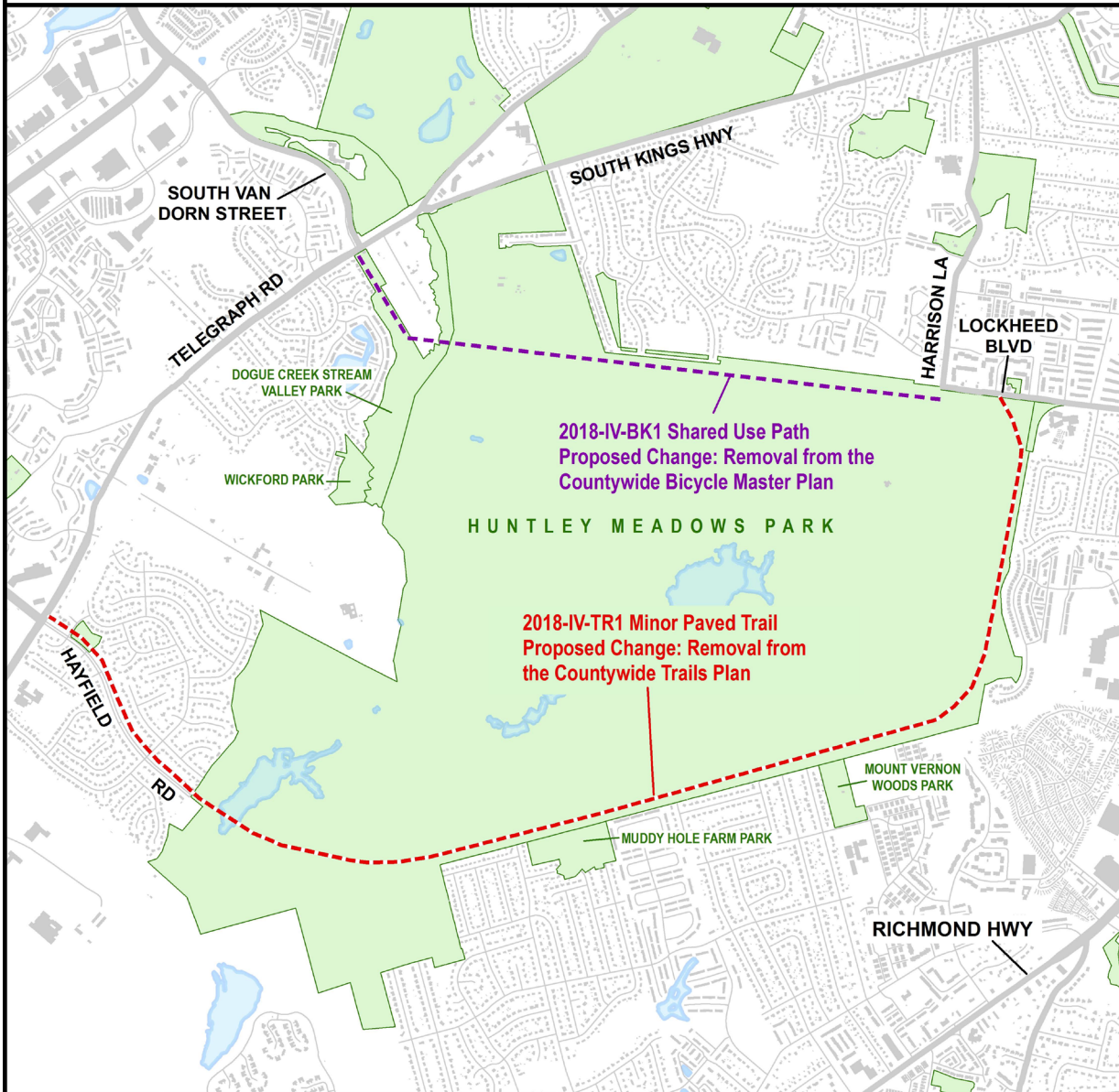
3000 FEET

PREPARED BY THE DEPARTMENT OF PLANNING AND ZONING USING FAIRFAX COUNTY GIS
Huntley Meadows Park Path combined with Huntley Meadows Park Trail



THIS PAGE INTENTIONALLY LEFT BLANK.

CURRENT PLAN & PROPOSED CHANGE
ITEM: PA 2018-IV-BK1 Huntley Meadows Park Path from Telegraph Road to Harrison Lane, combined with
ITEM: PA 2018-IV-TR1 Huntley Meadows Park Trail from Telegraph Road to Lockheed Boulevard



2000 FEET

PREPARED BY THE DEPARTMENT OF PLANNING AND ZONING USING FAIRFAX COUNTY GIS
BASE MAP INFORMATION CURRENT TO JUNE 2018
G:\projects\locp\pd\OTPA_GRAPHICS



THIS PAGE INTENTIONALLY LEFT BLANK.

STAFF REPORT FOR PLAN AMENDMENTS 2018-IV-BK1 and 2018-IV-TR1

BACKGROUND

Plan Amendment 2015-IV-MV1 (Embark Richmond Highway) established new Comprehensive Plan guidance for the Richmond Highway Corridor pertaining to enhanced multimodal transportation options, land use, parks and recreation, among other aspects. During the evaluation of the Plan amendment, a need was recognized to consider the removal of a planned minor paved trail and a shared use path adjacent to, but outside of the Richmond Highway Corridor study area, connecting to and going through Huntley Meadows Park. The planned minor paved trail and shared use path are shown on the Countywide Trails Plan and county's Bicycle Master Plan, respectively, which are components of the Comprehensive Plan. A minor paved trail is defined as a trail that is constructed with asphalt or concrete and is at least 4-feet wide, but less than 8-feet wide. A shared use path is defined as a paved path that is at least 10-feet wide and intended for use by both pedestrians and cyclists.

On March 20, 2018, following the adoption of the Embark Richmond Highway Plan Amendment, the Board of Supervisors (Board) authorized two plan amendments: PA 2018-IV-BK1 to consider the removal of the planned shared use path connecting Telegraph Road to Harrison Lane along the northern boundary of Huntley Meadows Park from the Fairfax County Bicycle Master Plan (Tax Maps 92-1, 92-3, and 92-4) and PA 2018-IV-TR1 to consider the removal of the planned minor paved trail segment connecting Telegraph Road to Lockheed Boulevard along the southern and eastern edges of Huntley Meadows Park and Hayfield Road from the Fairfax County Countywide Trails Plan (Tax Maps 91-4, 92-3, 92-4, 100-2, 101-1, and 101-2). On October 16, 2018, the Board expanded the scope of the Plan amendment to include revisions to the Area IV volume of the Comprehensive Plan, Rose Hill Planning District, Parks and Recreation sections that also pertain to the trails recommendations. Both planned facilities are located in the Rose Hill Planning District and Lee Supervisor District.

LOCATION AND CHARACTER

The majority of the planned trail facilities subject to this amendment would be built in Huntley Meadows Park. A 0.5-mile segment of the planned minor paved trail would be built along Hayfield Road.

Huntley Meadows Park

Huntley Meadows Park is a 1,559-acre public park owned by the Fairfax County Park Authority (FCPA) in the southeastern portion of Fairfax County, west of Richmond Highway, east of Telegraph Road, south of South Kings Highway, and north of U.S. Army Fort Belvoir. The park is home to diverse landscapes, including:

- Forests: mature hardwood forest, immature hardwood forest, mixed hardwood and conifer forest, and pure conifers; and,
- Wetlands: inland fresh meadow, inland shallow marsh, and wooded/shrub swamp.
- Open areas: meadows and successional habitat;

Forest covers approximately 1,340 acres or 86% of the park, as shown in Appendix 1. The U.S. Fish and Wildlife Service classifies 617 acres or 40% of the park as wetland, as shown in Appendix 2. Notably, wetlands include not only the central wetland, but forests and open areas.

Huntley Meadows Park provides habitat for nearly 500 species of plants, birds, mammals, reptiles, fish, and amphibians, including several species identified as rare in the Virginia Department of Conservation and Recreation (VDCR) Rare Plants of Virginia report or Rare Animals of Virginia report, including:

- Purple Milkweed;
- Brown Bog Sedge;
- Velvet Sedge;
- Wood Turtle;
- American Bittern;
- Common Gallinule;
- King Rail;
- Pied-billed Grebe;
- Virginia Rail;
- Yellow-crowned Night Heron; and
- Tricolored Bat.

Other species are identified as uncommon but not rare in the VDCR Watch List Plants of Virginia report or Watch List Animals of Virginia report, including:

- Woolly Sedge;
- Larger Blue Flag;
- Cooper's Hawk;
- Hoary Bat;
- Silver-haired Bat; and
- Northern River Otter.

The Spotted Turtle is on the International Union for Conservation of Nature (IUCN) Red List of Threatened Species and is currently under consideration for listing under the United States Endangered Species Act of 1973. More information about the species' Designation and Rank as well as Ecological Group/Management Units are in Appendix 3.

Huntley Meadows Park's central wetland, its defining feature, has changed both physically and ecologically since the park's inception in 1971 and transfer to FCPA ownership in 1975. In 1975 much of Huntley Meadows was wet meadow and wet forest, but within a few years, beavers created a large and healthy central wetland. Subsequently, areas around the park underwent significant development, putting pressure on its ecosystems and natural resources. FCPA identified three causes of environmental degradation of the park during the interim: 1) deposits of silt and debris, 2) colonization and spread of aggressive plant species, and 3) changing beaver activity. FCPA completed an extensive wetland rehabilitation project in 2014, which included an earthen berm, water control system, habitat pools, an expanded wetland footprint, and other

enhancements. This work cost roughly three million dollars and has significantly increased the habitat value, size, and health of the central wetland.

Huntley Meadows Park also contains facilities for passive recreation and other features, as shown on Figure 1. Existing recreation facilities include paved trails, stone dust trails, wetland boardwalks, wildlife viewing areas, a visitor center, and picnic facilities. Other existing non-recreation facilities include a maintenance yard for equipment storage and a major powerline right-of-way. Water and sewer easements and infrastructure run through the park as well, though they are not visually intrusive.

Huntley Meadows Park currently has two official entrances: a northwestern entrance on South Kings Highway near its intersection with Telegraph Road and a northeastern entrance at the intersection of Lockheed Boulevard and Harrison Lane. Both entrances feature driveways and parking lots for vehicles and minor paved trails for pedestrian and bicycle access. Pedestrians can access the northwestern park entrance from sidewalks and trails along South Kings Highway and Telegraph Road. Pedestrian access to the northeastern park entrance occurs through informal paths or from the roadway. Sidewalks and trails along Lockheed Boulevard and Harrison Lane are discontinuous. Informal access into and off-trail travel through Huntley Meadows Park are prohibited by FCPA.

There are two existing trail systems within the park: the northwestern system includes a concrete sidewalk and a paved asphalt trail and the northeastern system includes an asphalt trail, crushed stone dust trail, and boardwalk. The pathways for these trails are shown in Figure 1. Both trail systems provide access to the park interior and central wetland, but they are not connected. Park visitors using the South Kings Highway entrance do not have pedestrian access to the visitor center, picnic facilities, boardwalks, and northeastern trail system. Park visitors using the Lockheed Boulevard and Harrison Lane entrance do not have pedestrian access to the northwestern trail system.

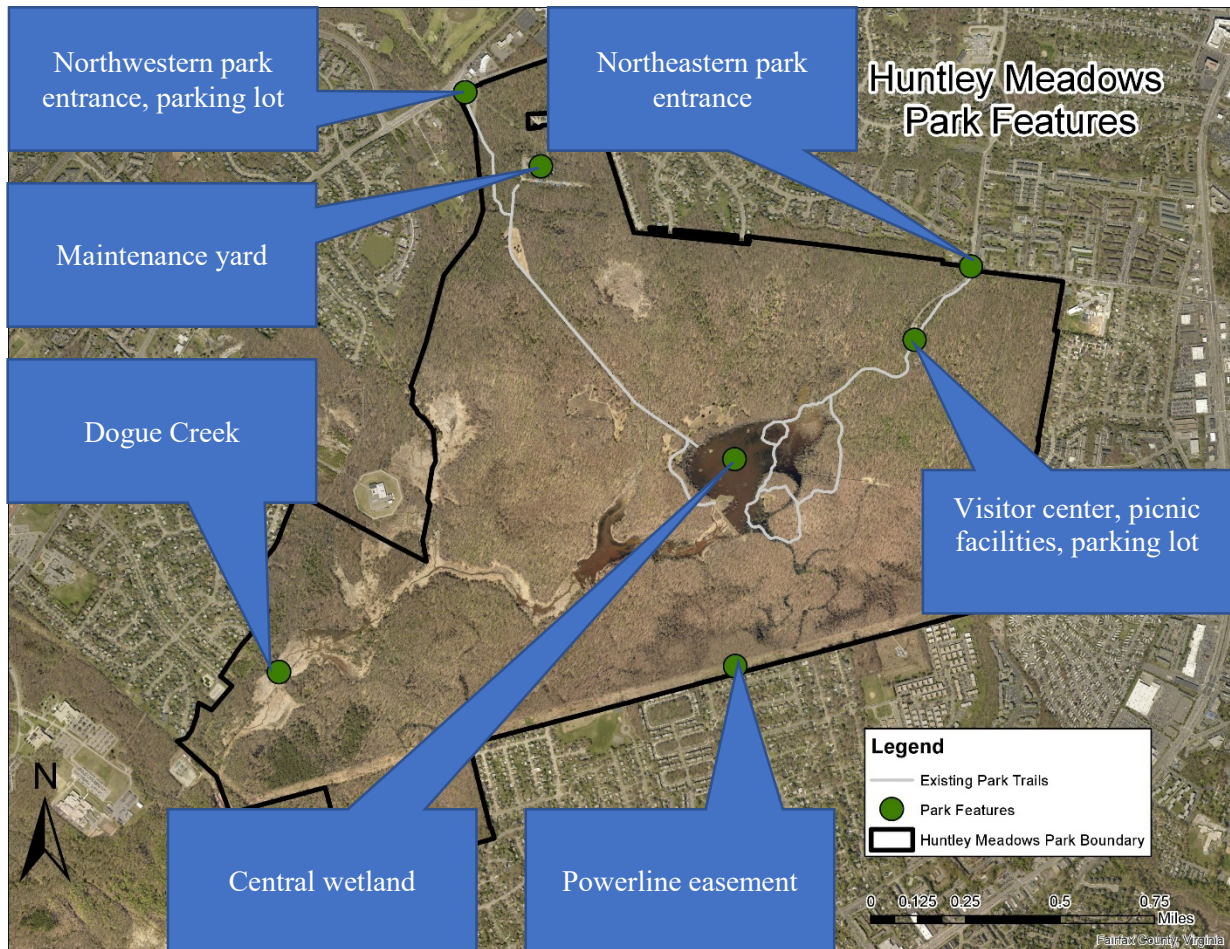


Figure 1: Huntley Meadows Park Features

The planned shared use path would be built mostly on parkland that is currently forested, as shown on Figure 2 and in Appendix 1, and approximately 20% on wetlands, as shown in Appendix 2. The planned minor paved trail would be built on parkland, much of which is currently forested, managed meadow under a powerline easement, and the Dogue Creek and its Environmental Quality Corridor (EQC) as shown in Figures 3 and 4; approximately 25% is wetlands, as shown in Appendix 2.



Figure 2: Woods along Planned Shared Use Path Route



Figure 3: Dogue Creek along Planned Minor Paved Trail Route



Figure 4: Powerline Easement along Planned Minor Paved Trail Route

Hayfield Road

A half-mile segment of the planned minor paved trail runs along Hayfield Road, in its right-of-way, between its intersection with Telegraph Road and its terminus at a cul-de-sac near the border of Huntley Meadows Park. This section of the trail exists as a 4-foot concrete sidewalk and is fronted by single-family detached homes within the Hayfield Farm subdivision, as shown on Figure 5. There are currently sidewalks on both sides of the road, but there is no existing access into Huntley Meadows Park.



Figure 5: Hayfield Road along Existing Minor Paved Trail Route

CHARACTER OF THE SURROUNDING AREA

Many single-family and multi-family residential neighborhoods are adjacent to Huntley Meadows Park, as well as a few commercial developments. A U.S. Coast Guard station and Fort Belvoir also border the park to the west and south-west. Major roads include Richmond Highway (Route 1) to the east and south, Jeff Todd Way to the southwest, Telegraph Road (Route 611) to the west, and South Kings Highway (Route 633) to the north. Nearby on-road bicycle facilities include shared roadways on Ashton Street, Lawrence Street, and Frye Road, a bike lane on Telegraph Road and a climbing lane on Vantage Drive and Bedrock Road, as shown on Figure 6. Nearby trails include the shared use paths along Jeff Todd Way and Telegraph Road (this facility is discontinuous), and minor paved trails along Pole Road, South Kings Highway, Harrison Lane, and South Van Dorn Street, also shown on Figure 6.



Figure 6: Existing On-Road Bicycle Facilities and Trails near Huntley Meadows Park

PLANNING HISTORY

The minor paved trail on the southern and eastern portion of the Huntley Meadows Park has been shown on the Countywide Trails Plan Map for over 30 years. The recommendation was retained in the update adopted on October 28, 2014. Plan language in the Rose Hill Planning District discouraging development of trails in the Dogue Creek EQC and encouraging the deletion or relocation of the minor paved trail has been part of the Comprehensive Plan since 1991.

The recommendation for the shared use path on the northern portion of Huntley Meadows was adopted on October 28, 2014 as part of Fairfax County's first Countywide Bicycle Master Plan Map. Prior to the path recommendation, a connector road was recommended on the northern portion of Huntley Meadows Park; this road was removed from the Comprehensive Plan in 1991.

ADOPTED COMPREHENSIVE PLAN

Minor Paved Trail

The Countywide Trails Plan Map, as amended through October 28, 2014, recommends a minor paved trail along the southern and eastern edges of Huntley Meadows Park, continuing along Hayfield Road to its intersection with Telegraph Road. This minor paved trail would connect with a planned minor paved trail along Lockheed Boulevard at the eastern extent, a major paved trail along Telegraph Road and a minor paved trail along Hayfield Road northwest of its intersection with Telegraph Road at its western extent, and a minor paved trail on Kidd Street and a minor paved trail on Mendocina Place at its southern extent, as shown in Figure 7.

Fairfax County Comprehensive Plan, 2017 Edition, Area IV, Rose Hill Planning District, as amended through March 20, 2018, Overview, Public Facilities, Page 15, discourages building trails in the Dogue Creek EQC, where the minor paved trail is planned:

- “The Dogue Creek Stream Valley on the western boundary of Huntley Meadows Park is also a sensitive area due to flooding and unconsolidated soils. Any development, including trails, should therefore be excluded in this portion of the EQC.”

Fairfax County Comprehensive Plan, 2017 Edition, Area IV, Rose Hill Planning District, as amended through March 20, 2018, RH7-Huntley Meadows Community Planning Sector, Parks and Recreation, Recommendations, Page 95, recommends relocating or removing the southern and western segments of the minor paved trail:

- “Due to ecological and engineering constraints including flooding and unconsolidated soils, development of the proposed perimeter trail on the western and southern boundaries of Huntley Meadows Park would not be prudent. This portion of the trail should either be relocated or deleted from the countywide trail system.”

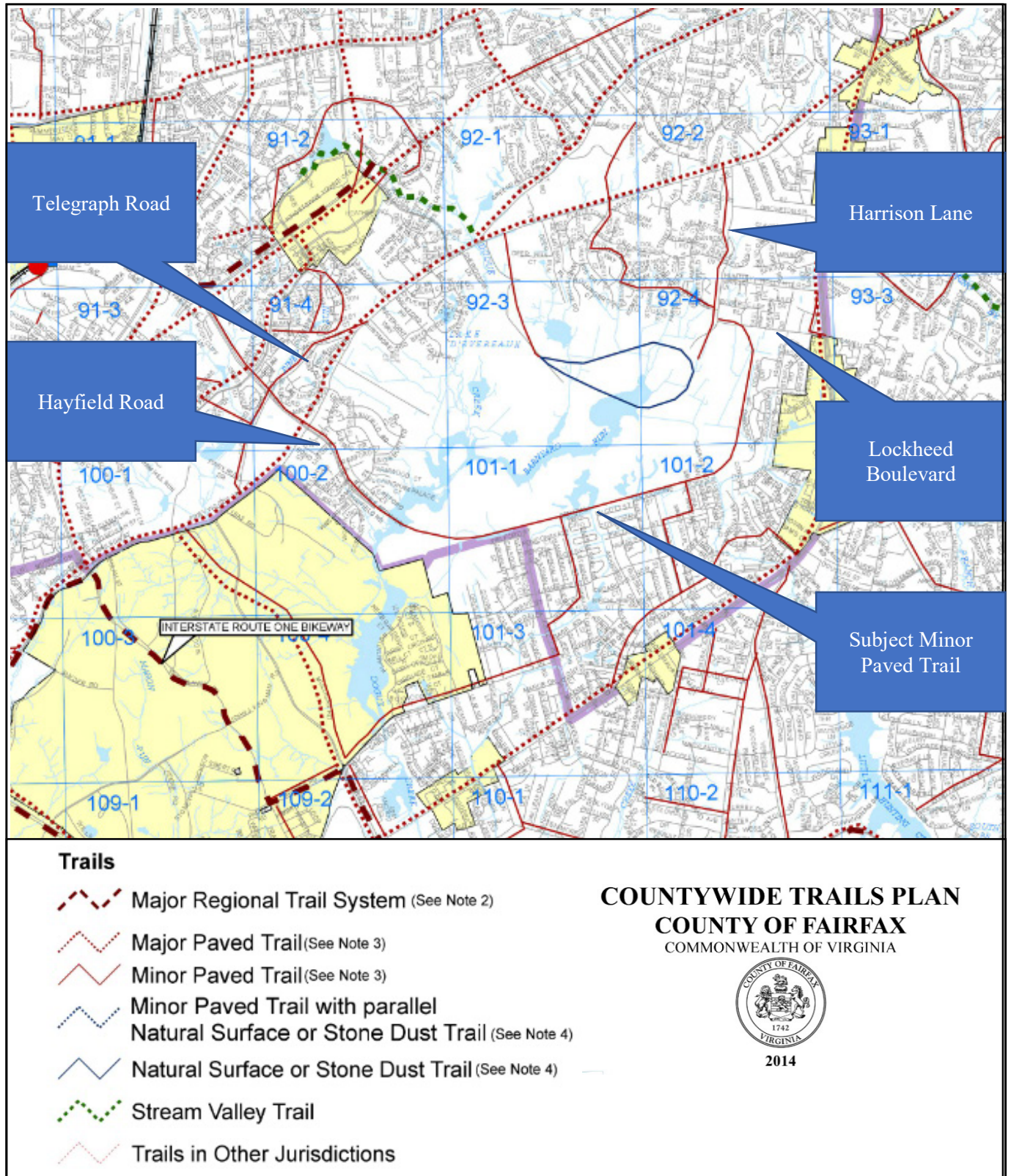


Figure 7: Excerpt of Countywide Trails Plan Map near Huntley Meadows Park

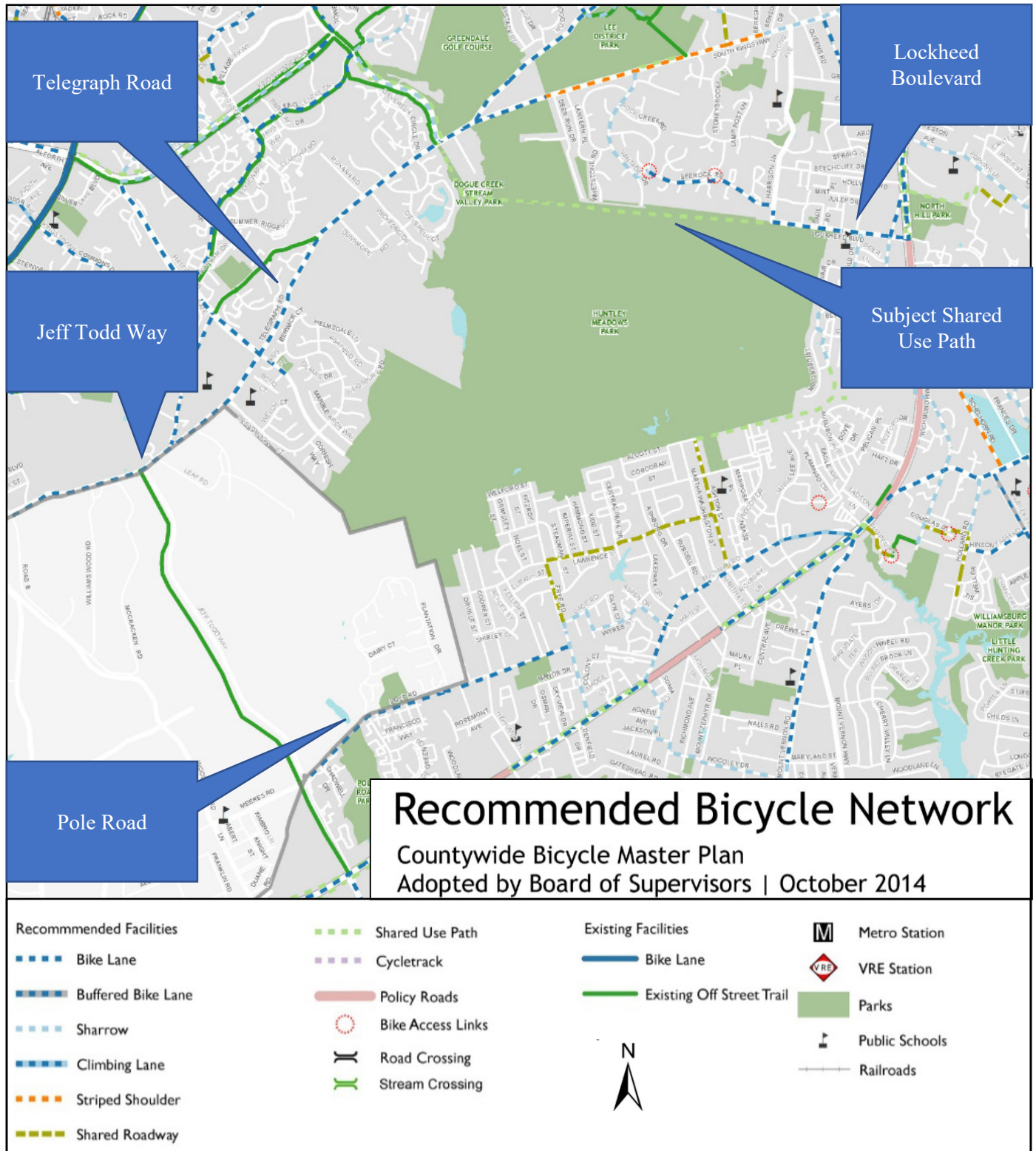


Figure 8: Excerpt of Recommended Bicycle Network near Huntley Meadows Park

Shared Use Path

The Fairfax County Bicycle Master Plan, as adopted in October 2014, recommends a shared use path connecting Telegraph Road to Harrison Lane/Lockheed Boulevard through the northern part of Huntley Meadows Park. This shared use path would connect a planned bike lane and sidewalk on Lockheed Boulevard and a planned bike lane on Harrison Lane to the east with a planned bike lane and sidewalks on Telegraph Road and an existing off street trail on South Van Dorn Street to the west, as shown on Figure 8.

Policy Plan

The Fairfax County Comprehensive Plan, Policy Plan Parks and Recreation and Transportation elements contain language relevant to this Plan amendment. The Parks and Recreation element supports managing Resource-based Parks, like Huntley Meadows, in a way that protects their biodiversity and other resources. Further definition of Resource-based Parks is provided in the Analysis section. The Transportation element recommends creating a connected network of on-road and off-road bicycle facilities and providing non-motorized access to parks. See Appendices 4, 5, and 6 for full citations.

The Fairfax County Comprehensive Plan, Policy Plan Environment element establishes EQCs, environmentally-sensitive lands that are identified and recommended for protection, like those present in the Huntley Meadows Park. Areas are recommended for inclusion within EQCs based on the criteria as provided in the policy, and the ability to achieve any of the stated purposes of EQCs including habitat quality, especially for species that have been identified as rare by state or federal agencies, connectivity, hydrology/stream buffering/stream protection, and pollutant reduction. These networks of the county's natural landscapes can also provide passive recreation opportunities, including trails. See Appendix 7 for full citations.

Resource Protection Areas (RPAs) are defined and delineated under the Chesapeake Bay Preservation Ordinance, which was adopted by the county per the requirements of Virginia's Chesapeake Bay Preservation Act in order to protect the Chesapeake Bay and other waters of Virginia from degradation resulting from runoff pollution. RPAs are corridors of environmentally sensitive land located alongside or near the shorelines of streams, rivers, and other waterways and are designated on 61% of Huntley Meadows Park, as shown in Appendix 8. Land-disturbing activities are generally prohibited in RPAs, but recreation uses such as trails are permitted by-right.

PROPOSED PLAN AMENDMENT

PA 2018-IV-BK1 considers the removal of the planned shared use path connecting Telegraph Road and Harrison Lane in the northern portion of Huntley Meadows Park from the Fairfax County Bicycle Master Plan (Tax Maps 92-1, 92-3, and 92-4). PA 2018-IV-TR1 considers the removal of the minor paved trail connecting Telegraph Road to Lockheed Boulevard near the southern and eastern edges of Huntley Meadows Park and along Hayfield Road from the Fairfax County Countywide Trails Plan (Tax Maps 91-4, 92-3, 92-4, 100-2, 101-1, and 101-2) and related text within the Parks and Recreation section of the Rose Hill Community Planning Sector, Area IV volume of the Comprehensive Plan.

ANALYSIS

General Park Considerations

The FCPA acquired Huntley Meadows Park from the Federal Government in 1975 under the “Legacy of Parks” program and was augmented by subsequent acquisitions. The transfer committed the County to manage the property as both a “General Outdoor Recreation Area” and a “Natural Environment Area” where passive recreation is encouraged based on both man-made facilities and the natural environment.

The Comprehensive Plan and the Huntley Meadows Park Master Plan, a document adopted by the FCPA board and separate from the county’s Comprehensive Plan, classify Huntley Meadows Park as a Resource-based Park. The designation, as defined in the Parks and Recreation section of the Policy Plan within the Comprehensive Plan, is based on the exemplary natural and/or cultural features and is intended to primarily preserve, protect, and interpret natural and/or cultural resources. Development of public sites and recreation may be acceptable in these parks, but overall restoration and protection of these areas are the primary concern. Opportunities for public education and enjoyment of the park resources, such as visitor centers, nature watching stations, and trail connections, need to avoid adversely affecting these resources. The guidance within Rose Hill Planning District underscores these recommendations by identifying and protecting Huntley Meadows Park as one of the major planning objectives for the district.

The Huntley Meadows Park Master Plan was published in 1976 as part of the transfer and recommends development of major features such as:

- Visitor center at Harrison Lane/Lockheed Boulevard,
- Boardwalk and observation platform,
- Marsh and pond development,
- Maintenance yard,
- Service road upgrades, and,
- Paved perimeter trail with access to adjacent subdivisions

Except for the perimeter trails and subdivision access, these recommendations have been implemented. The master plan acknowledges that much of the park has soils that are poor or marginal for development and states that proposed trails be reviewed to “minimize degrading effects” on natural resources. Since the adoption of the plan, changes in circumstance and new information have emphasized the importance of this consideration. The hydrology in the park has experienced significant physical and ecological changes, as described previously in the Location and Character section of the report, and the county has made substantial investments to extensively rehabilitate the park’s wetland areas; locations of existing wetlands are shown in Appendix 2. Further, the FCPA is currently conducting an update to the park’s Natural Resource Management Plan (NRMP) that has provided new information about the sensitivity of the species and ecosystem within the park not available during the most recent update of the Trails Plan and adoption of the Bicycle Master Plan in 2014. The FCPA intends to revise the park’s master plan to consider the removal of the perimeter trail recommendations following the completion of the NRMP update.

Planned Shared Use Path

Transportation

The planned shared use path in the northern portion of the park would provide an east-west bicycle and pedestrian connection from the existing minor paved trail along South Van Dorn Street, a planned major paved trail along Telegraph Road, and an existing bike lane on Telegraph Road on the western extent of the trail to a planned bike lane on Lockheed Boulevard at Harrison Lane and the planned cycle track along Richmond Highway Corridor to the east. However, an alternative is available to make these connections via the existing sidewalks and climbing lanes north of Huntley Meadows Park on Bedrock Road and Vantage Drive, as shown on Figure 8. This route has a slightly greater travel distance between Lockheed Boulevard/Harrison Lane and Telegraph Road/South Van Dorn Street (approximately two miles versus 1.7 miles).

Park Access and Recreation

The path would connect the existing minor paved trails in the park and provide bicycle and pedestrian access between the two entrances. This would provide access to the visitor center and boardwalk for park visitors from South Kings Highway. Removal of the path itself would not significantly impact recreation because there are already several recreational trails accessible from the South Kings Highway and Lockheed Boulevard/Harrison Lane entrances.

Natural Resources

Constructing and operating the planned shared use path would likely have significant impact on natural resources in the park. Clearing trees and construction of the paved path would directly reduce the amount of habitat for uncommon or rare species and disrupt plant communities, diminishing their health. Land in much of the planned trail path has a permanently high water table and frequent flooding, which are engineering constraints not conducive to trail construction. Construction of the paved path on the wetlands present on approximately 20% of the planned route, as shown in Appendix 2, could also disrupt the hydrology and indirectly impact other parts of the park. Because of the configuration of the wetlands, it may be possible to reduce the wetland area impacted, but not to eliminate it entirely.

Formerly part of a military installation, Huntley Meadows Park was acquired through the Federal Lands to Parks Program and its wetlands are therefore regulated by Section 404 of the Clean Water Act. The path project would be subject to Federal review and permitting, which would increase project cost and complexity.

Cultural Resources

Constructing the planned shared use path could have significant impacts on archaeological resources in the park. A Phase I Archaeological Survey would be required prior to any trail development. There is a high probability that a Phase I study would discover additional sites that would need to undergo additional archaeological testing to determine significance, eligibility for inclusion on the National Register of Historic Places, and preservation strategies such as avoidance or data recovery. If there is federal funding or impacts to wetlands, the path project would have to comply with Section 106 of the National Historic Preservation Act, in consultation with the Virginia Department of Historic Resources.

Planned Minor Paved Trail

Transportation

The planned minor paved trail along the southern and eastern perimeter of the park and Hayfield Road would provide an east-west bicycle and pedestrian connection between a planned major paved trail on Telegraph Road, an existing minor paved trail on Hayfield Road, the northeastern park entrance minor paved trail, and the planned minor paved trail on the south side of Lockheed Boulevard. Assuming the planned trail would connect through access points to neighborhood roads south of the park and to the Hybla Valley/Gum Springs Community Business Center (CBC), the planned trail would offer users a travel option between Hayfield Road, the CBC, and the planned Richmond Highway cycle track by walking or bicycling less than three miles. The trail, if constructed, would be a significantly shorter route over the current alternative connecting via planned facilities on Jeff Todd Way to Pole Road through the neighborhoods to the south of the park, which extends a distance of approximately six miles, or to planned facilities along Richmond Highway. Additional alternatives outside of Huntley Meadows Park will be considered during the next countywide trails plan update.

Park Access and Recreation

The planned trail may connect to the neighborhood roads south of the park and the Hybla Valley/Gum Springs CBC; if so, the trail would improve pedestrian and bicycle access to recreational trails and to Huntley Meadows Park for neighborhoods to the west, south, and east of the park. Traveling on the planned minor paved trail in the park and the minor paved trail on Lockheed Boulevard, residents of those neighborhoods would be able to access the northeastern park entrance by walking or bicycling less than a mile compared to two miles under planned conditions without the trail. Because Huntley Meadows Park is a regional attraction, these trails would also provide recreational benefits to residents of other neighborhoods.

Natural Resources

Constructing and operating the planned minor paved trail would likely have significant impacts on natural resources in the park. Clearing trees and construction of a paved trail would directly reduce the amount of habitat for uncommon or rare species and disrupt plant communities, diminishing their health. Land in much of the planned trail path has a permanently high water table, frequent flooding, long periods of standing water, and unconsolidated soils, which are engineering constraints not conducive to trail construction. Construction of the paved path on the wetlands present on approximately 25% of the planned route, as shown in Appendix 2, could also disrupt the hydrology and indirectly impact other parts of the park. Because of the configuration of the wetlands, it may be possible to reduce the wetland area impacted, but not to eliminate it entirely.

Formerly part of a military installation, Huntley Meadows Park was acquired through the Federal Lands to Parks Program and its wetlands are therefore regulated by Section 404 of the Clean Water Act. The path project would be subject to Federal review and permitting, which would increase project cost and complexity.

The most environmentally sensitive areas traverse the planned trail path and could not be avoided: the Dogue Creek Stream Valley and the wet meadows in the powerline easement. Previous planning efforts in the early 1990s determined that the environmental risk from the construction

of the western and southern sections of the minor paved trail was unacceptable and recommended that they be relocated or deleted from the Countywide Trails Plan.

Cultural Resources

Building and operating the planned minor paved trail would have significant impacts on archaeological resources in the park. Multiple sensitive archaeological resources exist within the planned trail's path including the nationally significant northern boundary markers of George Washington's estate, which are eligible for listing on the National Register of Historic Places and double ditches with earthen berms also associated with George Washington's Muddy Hole Farm.

Due to these and other resources within the location of the planned trail, a Phase I Archaeological Survey would be required prior to any trail development. There is a high probability that a Phase I study will discover additional sites that will need to undergo additional archaeological testing to determine significance, eligibility for inclusion on the National Register of Historic Places, and preservation strategies which may include avoidance or data recovery. If there is federal funding or impacts to wetlands, the path project would have to comply with Section 106 of the National Historic Preservation Act, in consultation with the Virginia Department of Historic Resources.

Public Safety

It is likely that Munitions and Explosives of Concern (MECs), specific categories of military munitions present in high enough concentrations to pose an explosive hazard¹, are present within some of the planned minor paved trail route near Fort Belvoir and would require treatment to reduce risk to the public. Nearby areas of Fort Belvoir believed to have similar levels of MECs have been remediated and developed with housing and other land uses and are considered safe. Others have been subjected to land use controls, which rely on access control and behavior modification to reduce risk. Remediation or an alternative treatment would need to be undertaken to reduce risk if the trail is to be constructed. This remediation would increase project cost and complexity.

CONCLUSION

The Analysis section of the staff report presents a variety of considerations for the proposed amendments related to a diverse set of goals in the Rose Hill Planning District and overall County policy that encourage the provision of bicycle and pedestrian facilities, improved access to parks, and the protection of environmental and cultural resources. The planned shared use path within the northern portion of Huntley Meadows Park would offer transportation benefits as a potential direct east-west, pedestrian and bicycle connection from Telegraph Road to Lockheed Boulevard and the Richmond Highway Corridor area; however, this connection may be closely replicated at least in terms of distance by an alternative connection through nearby neighborhood roadways. The planned minor paved trail along Hayfield Road and the southern and eastern perimeter of the park also presents mobility and access benefits for the neighborhoods to the south to the park and

¹ US Army. (2016, September). *Fort Belvoir proposed plan for military munitions response program*. Retrieved from <http://www.belvoir.army.mil/docs/envirodocs/9-20-16%20Five%20Sites%20Final%20PP.pdf>

improved east-west connectivity, which are difficult to replicate in terms of distance with the current alternative connections.

At the same time, Huntley Meadows Park is designated as a significant resource in the county with unique and valuable natural and cultural resources that would be negatively affected by the planned trail and shared use path facilities subject to this amendment. The recent survey work completed in preparation for the Natural Resource Management plan update has expanded the inventory of sensitive species greater than that which was known in 2014, when the Bicycle Master Plan was adopted and the Trails Plan was last amended. The need to protect these resources from the disturbance of the construction and operation of the trail connections outweigh the mobility and access benefits afforded by the planned connections.

Therefore, staff recommends that the planned shared use path connecting Telegraph Road to Harrison Lane within the northern portion of the park and minor paved trail segment connecting Telegraph Road to Lockheed Boulevard along Hayfield Road and the southern and eastern edges of the park be removed from the Fairfax County Bicycle Master Plan Map and Countywide Trails Map. Related text also should be deleted from the Rose Hill Planning District Comprehensive Plan guidance. As this need was identified during the Embark process and more recent survey work underscore the need, the removal of the trails should be addressed presently, even though no construction plans for the trails are imminent. Staff supports future consideration of alternative routes or facilities to provide improved east-west connectivity in this area that do not significantly impact natural or cultural resources.

RECOMMENDATION

Staff recommends the Comprehensive Plan be modified as shown below. Text proposed to be added is shown as underlined and text proposed to be deleted is shown with a ~~striketrough~~. Text shown to be replaced is noted as such.

DELETE: Fairfax County Comprehensive Plan, 2017 Edition, Area IV, Rose Hill Planning District, as amended through March 20, 2018, RH7-Huntley Meadows Community Planning Sector, Parks and Recreation, Recommendations, page 95:

~~“Due to ecological and engineering constraints including flooding and unconsolidated soils, development of the proposed perimeter trail on the western and southern boundaries of Huntley Meadows Park would not be prudent. This portion of the trail should either be relocated or deleted from the countywide trail system.”~~

COMPREHENSIVE LAND USE PLAN MAP:

The Comprehensive Land Use Plan Map will not change.

COUNTYWIDE TRANSPORTATION PLAN MAP:

The Countywide Transportation Plan Map will not change.

BICYCLE MASTER PLAN MAP:

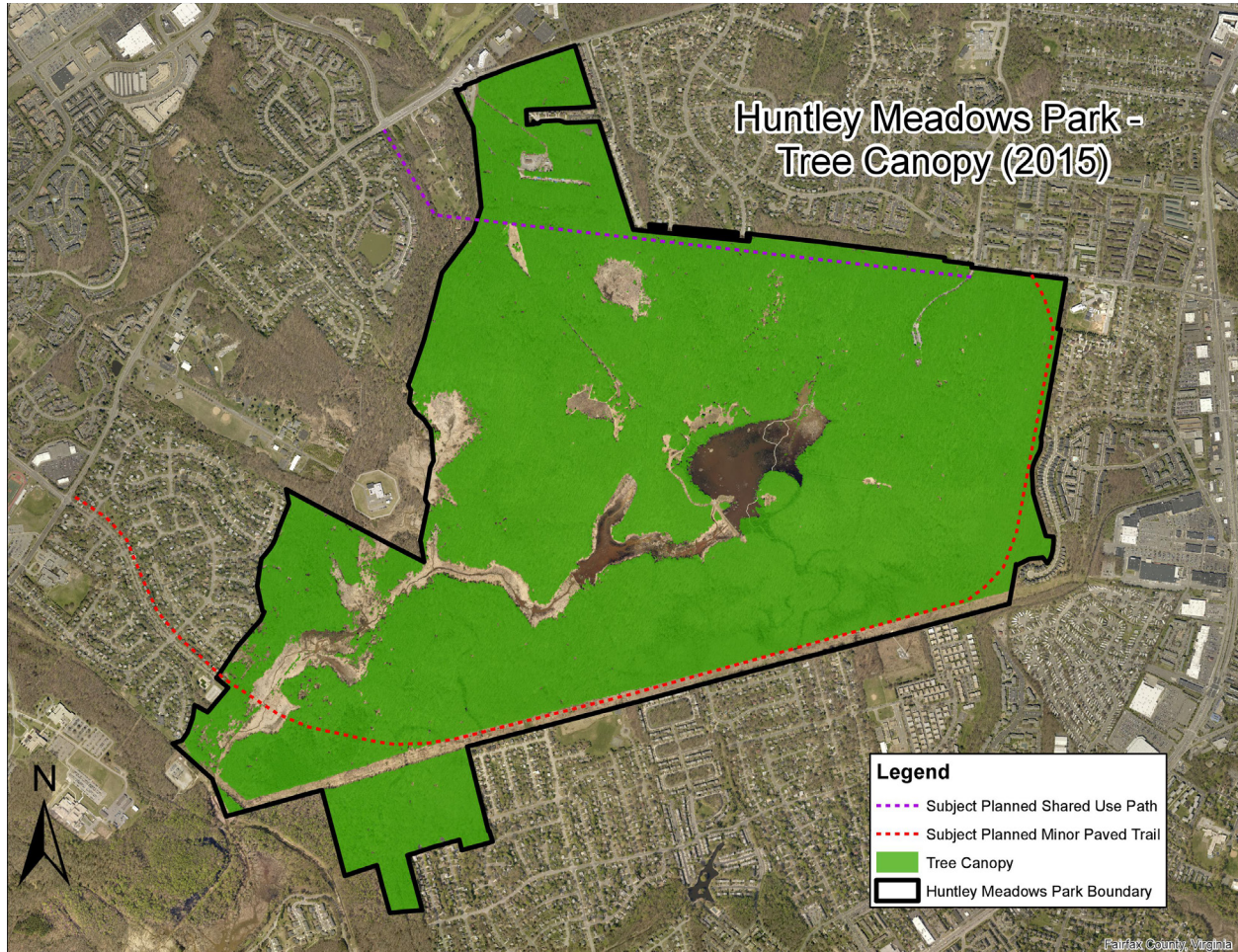
Delete the Shared Use Path in Huntley Meadows Park from the Bicycle Master Plan Map.

COUNTYWIDE TRAILS PLAN MAP:

Delete the minor paved trail segments near the southern and eastern edges of Huntley Meadows Park and along Hayfield Road from its intersection with Lockheed Boulevard to its intersection with Telegraph Road.

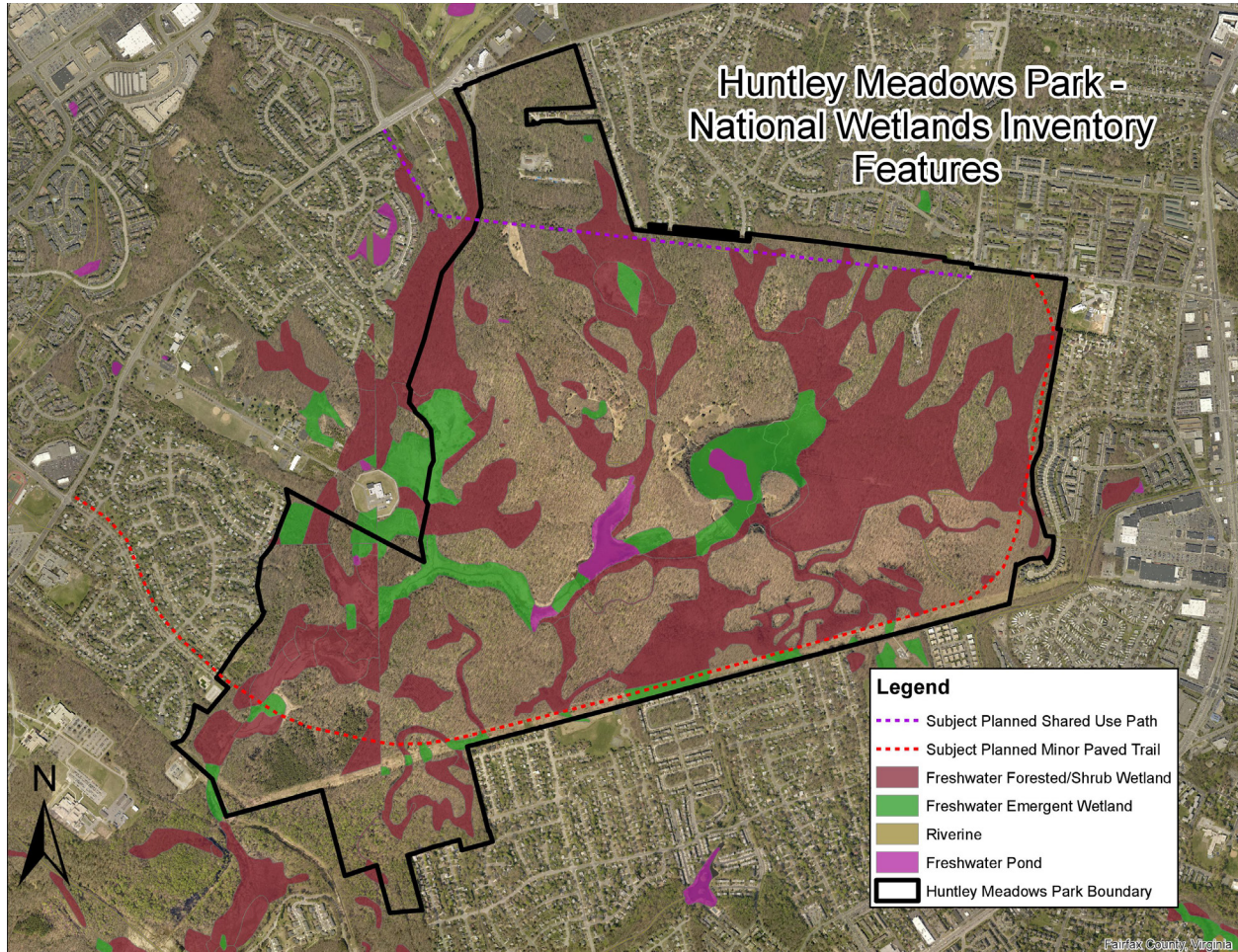
APPENDIX 1

Original map of tree cover in Huntley Meadows Park based on Fairfax County's 2015 Tree Cover data.



APPENDIX 2

Original map of wetland features in and near Huntley Meadows Park based on the U.S. Fish and Wildlife Service's National Wetland Inventory data.



APPENDIX 3

Species name	Designation and Rank	Ecological Group/Management Units
Purple Milkweed <i>Asclepias purpurascens</i>	Rare Plants of Virginia (2018) G5?S2	Acidic Oak-Hickory Forests
		Coastal Plain/Piedmont Bottomland Forests
		Coastal Plain Depression Wetlands
		Oak/Heath Forests
		Semipermanent Impoundments
		Successional/Modified Palustrine Forests
		Successional/Modified Terrestrial Forests
		Successional/Modified Terrestrial Herbaceous Vegetation
Brown Bog Sedge <i>Carex buxbaumii</i>	Rare Plants of Virginia (2018) G5S2	Coastal Plain Depression Wetlands
		Oak/Heath Forests
		Successional/Modified Terrestrial Herbaceous Vegetation
Velvet Sedge <i>Carex vestita</i>	Rare Plants of Virginia (2018) G5S2	Coastal Plain Depression Wetlands
		Oak/Heath Forests
		Successional/Modified Terrestrial Herbaceous Vegetation
Woolly Sedge <i>Carex pellita</i>	Watch List Plants of Virginia (2018) G5S3S4	Coastal Plain/Piedmont Bottomland Forests
		Successional/Modified Terrestrial Herbaceous Vegetation
Larger Blue Flag <i>Iris versicolor</i>	Watch List Plants of Virginia (2018) G5S3	Coastal Plain/Piedmont Bottomland Forests
		Coastal Plain Depression Wetlands
		Semipermanent Impoundments
Wood Turtle <i>Glyptemys insculpta</i>	Rare Animals of Virginia (2016) G3S2, State Threatened	Mapped park-wide
Spotted Turtle <i>Clemmys guttata</i>	IUCN Red List, Endangered	Mapped park-wide
American Bittern <i>Botaurus lentiginosus</i>	Rare Animals of Virginia (2016), G4 S1B/S2N	Mapped park-wide; Central Wetland

Common Gallinule <i>Gallinula galeata</i>	Rare Animals of Virginia (2016) G5 S1B/S1N	Mapped park-wide; Central Wetland
King Rail <i>Rallus elegans</i>	Rare Animals of Virginia (2016) G4 S2B/S3N	Mapped park-wide; Central Wetland
Pied-billed Grebe <i>Podilymbus podiceps</i>	Rare Animals of Virginia (2016) G5 S1S2B/S4N	Mapped park-wide; Central Wetland
Virginia Rail <i>Rallus limicola</i>	Rare Animals of Virginia (2016) G5 S2B/S3N	Mapped park-wide; Central Wetland
Yellow-crowned Night Heron <i>Nyctanassa violacea</i>	Rare Animals of Virginia (2016) G5 S2S3B/S3N	Mapped park-wide; Central Wetland
Cooper's Hawk <i>Accipiter cooperii</i>	Watch List Animals of Virginia (2016) G5 S3B/S3N	Virginia Breeding Bird Atlas 2
Tricolored Bat <i>Perimyotis subflavus</i>	Rare Animals of Virginia (2016) G3 S1S3, State Endangered	Acoustic record only
Hoary Bat <i>Lasiurus cinereus</i>	Watch List Animals of Virginia (2016) G4 SUB/S3N	Acoustic record only
Silver-haired Bat <i>Lasionycteris noctivagans</i>	Watch List Animals of Virginia (2016) SUB/S4N	Acoustic record only
Northern River Otter <i>Lontra Canadensis</i>	Watch List Animals of Virginia (2016) G4S4	No locational data available

APPENDIX 4

Fairfax County Comprehensive Plan, 2017 Edition, Parks and Recreation, as amended through March 4, 2014, Appendix 1 Park Classification System, Resource-Based Parks, Page 12:

“D. RESOURCE-BASED PARKS

Purpose

This classification includes parks that primarily preserve, protect, and interpret natural and/or cultural resources. Portions of these parks may be designated for recreation purposes.

Location and Access

The location for Resource-based Parks is determined by the location of the specific resources. Size and access can take many forms depending on the setting and type of resources. Access to stream valleys is primarily by trails; however trailheads with parking should be strategically located along trail routes. Management plans should give consideration to the resource and allow public use only as it is compatible with resource protection.

Character and Extent of Development

Resource-based Parks are selected for inclusion in the park system because of their exemplary natural and/or cultural features and are acquired, identified and preserved for stewardship and protection. Protection and stewardship of unique natural and cultural resources provide a variety of public benefits. These parks provide educational and interpretative opportunities relative to environmental and cultural resources. These lands may offer opportunities to restore degraded areas and to protect, increase and restore biodiversity of species that may inhabit these areas. In addition, recreation opportunities and facilities are also appropriate at these parks to the extent they are consistent and compatible with resource management within the park. Development which does not adversely affect resources and which enhances awareness of the resource values is appropriate. Development of public sites should include opportunities for public education and enjoyment. Interpretive (educational) facilities and structures may include visitor centers, nature centers, orientation kiosks, nature watching stations, demonstration areas, preserved buildings and gardens, hiking, biking and equestrian trails as designated. To the extent that they do not adversely impact the resources themselves, support amenities may also be developed such as picnicking areas, restrooms, signs, benches and parking. Trails and trail connections are a significant feature at these parks, especially along stream valleys and often serve as countywide trail connections.

Stream valleys are a predominant physiographic feature of Fairfax County and comprise the core of the county’s Environmental Quality Corridor (EQC) system. Parks located in and along the stream valleys encompass those segments of EQCs planned for public parkland and comprise the core elements of a greenway network that links areas notable for significant natural and cultural resources with residential and employment areas throughout the county. They may vary in size and character from steeply sloped corridors with cascading streams to broad floodplains; all are treated as sensitive environmental areas. Trails within stream valleys should be located to be sensitive to environmental conditions. In addition to trails, seating areas, small picnic and open play areas, landscaping and interpretive structures may also be developed, if they do not adversely impact the EQC or ecological functions.

The user experience at Resource-based Parks will be varied. These parks support nature, horticulture and history programs as well as more casual interests such as gardening, nature

watching and appreciation of local, regional, state and national history. Settings for quiet contemplation are appropriate in these parks. Recreation uses compatible with resource management may also be appropriate in these parks. Visitors may frequent these parks on a regular or occasional basis.

The Area Plans element of the Comprehensive Plan delineates the park classifications of all park sites in the county. The specific types of facilities and support amenities, such as parking, lighting and restrooms, to be developed at each Resource-based Park is determined by the managing agency with public participation through its Park Planning and Development process.”

APPENDIX 5

Fairfax County Comprehensive Plan, 2017 Edition, Transportation-Appendix, as amended through March 20, 2018, Fairfax County Bicycle Master Plan Vision and Goals. Page 49:

“Fairfax County Bicycle Master Plan Vision and Goals

The Master Plan articulates the vision, goals and objectives for bicycling in Fairfax County. The vision for bicycling in Fairfax County is:

Meeting the safety, access, and mobility needs of bicyclists today, while encouraging more people to bicycle in the future...making Fairfax County bicycle friendly and bicycle safe.

In order to attain this vision, the Master Plan includes the following goals:

1. Develop a safe and connected network of on-road and off-road (shared-use paths and trails) bicycle route options, and other supporting infrastructure, that serve all communities and destinations. This network will consist of shared-use paths, select sidewalks, park trails, neighborhood streets, and collector, arterial, and primary roadways as well as signed routes, bicycle parking facilities, and integration with public transit.
2. Plan, develop, design, construct, and maintain new facilities and accommodations, and upgrade existing facilities to safely and comfortably serve all bicyclists from 8 to 80+ years of age when cycling for transportation or recreation purposes.
3. Increase bicycle use for transportation, especially for non-commute trips, which account for approximately 75 percent of all transportation trips.
4. Establish and track annual progress towards goals for bicycle travel demand and provision of bicycling infrastructure as identified in the Plan.
5. Increase actual bicycling safety and the perception of safety for bicycling on roads and trails in Fairfax County.”

APPENDIX 6

Fairfax County Comprehensive Plan, 2017 Edition, Transportation-Appendix, as amended through March 20, 2018, Fairfax County Bicycle Master Plan, Benefits of Bicycling, Page 60:

“Expanding recreational opportunities for enjoyment and health: The most recent Needs Assessment Study conducted by the Fairfax County Park Authority found that 65 percent of the respondents use trails. Creating a countywide network of bikeways will increase the opportunities for close-to-home and affordable recreation opportunities for people of all ages, and enhance access to the County’s many public parks, trails, and other recreational venues. These include the W&OD Trail, Mount Vernon trail, Cross- County Trail, and mountain bike parks at Lake Fairfax, Laurel Hill, Wakefield, and Fountainhead Regional Park. Recreational bicycling also fulfills residents’ needs for improving and maintaining their health through routine exercise. The Center for Disease Control and Prevention recommends 30 minutes of moderate physical activity daily. Expanded and improved bicycle facilities and associated support programs will encourage and promote bicycling as transportation, recreation, and exercise.”

APPENDIX 7

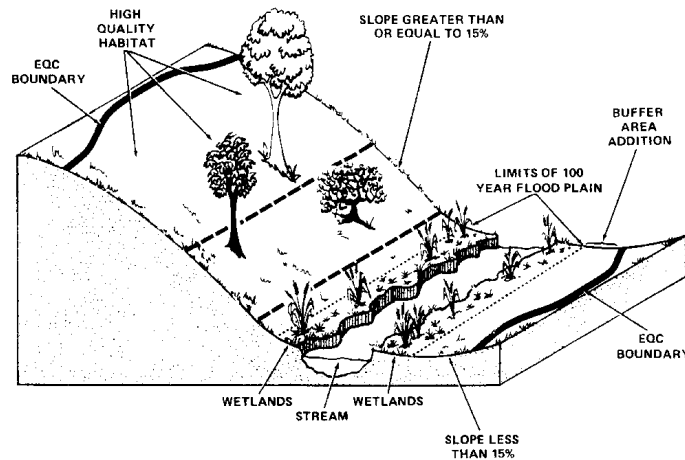
Fairfax County Comprehensive Plan, 2017 Edition, Environment, as amended through March 14, 2017, Countywide Objectives and Policies, Objective 9, Page 14:

“Objective 9: Identify, protect and enhance an integrated network of ecologically valuable land and surface waters for present and future residents of Fairfax County.

Policy a: Identify, protect and restore an Environmental Quality Corridor system (EQC). (See Figure 4.) Lands may be included within the EQC system if they can achieve any of the following purposes:

- **Habitat Quality:** The land has a desirable or scarce habitat type, or one could be readily restored, or the land hosts a species of special interest. This may include: habitat for species that have been identified by state or federal agencies as being rare, threatened or endangered; rare vegetative communities; unfragmented vegetated areas that are large enough to support interior forest dwelling species; and aquatic and wetland breeding habitats (i.e., seeps, vernal pools) that are connected to and in close proximity to other EQC areas.
- **Connectivity:** This segment of open space could become a part of a corridor to facilitate the movement of wildlife and/or conserve biodiversity. This may include natural corridors that are wide enough to facilitate wildlife movement and/or the transfer of genetic material between core habitat areas.
- **Hydrology/Stream Buffering/Stream Protection:** The land provides, or could provide, protection to one or more streams through: the provision of shade; vegetative stabilization of stream banks; moderation of sheet flow stormwater runoff velocities and volumes; trapping of pollutants from stormwater runoff and/or flood waters; flood control through temporary storage of flood waters and dissipation of stream energy; separation of potential pollution sources from streams; accommodation of stream channel evolution/migration; and protection of steeply sloping areas near streams from denudation.
- **Pollution Reduction Capabilities:** Preservation of this land would result in significant pollutant reductions. Water pollution, for example, may be reduced through: trapping of nutrients, sediment and/or other pollutants from runoff from adjacent areas; trapping of nutrients, sediment and/or other pollutants from flood waters; protection of highly erodible soils and/or steeply sloping areas from denudation; and/or separation of potential pollution sources from streams.

The core of the EQC system will be the county's stream valleys. Additions to the stream valleys should be selected to augment the habitats and buffers provided by the stream valleys, and to add representative elements of the landscapes that are not represented within stream valleys. The stream valley component of the EQC system shall include the following elements (See Figure 4):



A TYPICAL
ENVIRONMENTAL QUALITY CORRIDOR

Source: Fairfax County Office of Comprehensive Planning

FIGURE 4

- All 100 year flood plains as defined by the Zoning Ordinance;
- All areas of 15% or greater slopes adjacent to the flood plain, or if no flood plain is present, 15% or greater slopes that begin within 50 feet of the stream channel;
- All wetlands connected to the stream valleys; and
- All the land within a corridor defined by a boundary line which is 50 feet plus 4 additional feet for each % slope measured perpendicular to the stream bank. The % slope used in the calculation will be the average slope measured within 110 feet of a stream channel or, if a flood plain is present, between the flood plain boundary and a point fifty feet up slope from the flood plain. This measurement should be taken at fifty foot intervals beginning at the downstream boundary of any stream valley on or adjacent to a property under evaluation.

Modifications to the boundaries so delineated may be appropriate if the area designated does not benefit any of the EQC purposes as described above. In addition, some disturbances that serve a public purpose such as unavoidable public infrastructure easements and rights of way may be appropriate. Disturbances for access roads should not be supported unless there are no viable alternatives to providing access to a buildable portion of a site or adjacent parcel. The above disturbances should be minimized and occur perpendicular to the corridor's alignment, if practical, and disturbed areas should be restored to the greatest extent possible

In general, stormwater management facilities should not be provided within EQCs unless they meet one of the following conditions:

- They are consistent with recommendations of a watershed management plan that has been adopted by the Fairfax County Board of Supervisors; or
- They will:
 - Either:
 - Be more effective in protecting streams and better support goals of watershed management plans than stormwater management measures that otherwise would be provided outside of EQCs; or
 - Contribute to achieving pollutant reduction necessary to bring waters identified as impaired into compliance with state water quality standards or into compliance with a Municipal Separate Storm Sewer System (MS4) permit in a manner that would be more effective and/or less environmentally-disruptive than approaches that would be pursued outside of EQCs;

and

- Replace, enhance and/or be provided along with other efforts to compensate for any of the EQC purposes, as described above, that would be affected by the facilities.

When stormwater management facilities within the EQC are determined to be appropriate, encourage the construction of facilities that minimize clearing and grading, such as embankment-only ponds, or facilities that are otherwise designed to maximize pollutant removal while protecting, enhancing, and/or restoring the ecological integrity of the EQC.

The following efforts within EQCs support the EQC policy and should be encouraged:

- Stream stabilization and restoration efforts where such efforts are needed to improve the ecological conditions of degraded streams. Natural channel design methods should be applied to the greatest extent possible and native species of vegetation should be used.
- Replanting efforts in EQCs that would restore or enhance the environmental values of areas that have been subject to clearing; native species of vegetation should be applied.
- Wetland and floodplain restoration efforts.
- Removal of non-native invasive species of vegetation from EQCs to the extent that such efforts would not be in conflict with county ordinances; such efforts should be pursued in a manner that is least disruptive to the EQCs.

Other disturbances to EQCs should only be considered in extraordinary circumstances and only where mitigation/compensation measures are provided that will result in a clear and substantial net environmental benefit. In addition,

there should be net benefits relating to most, if not all, of the EQC purposes listed above that are applicable to the proposed disturbances.

Preservation should be achieved through dedication to the Fairfax County Park Authority, if such dedication is in the public interest. Otherwise, EQC land should remain in private ownership in separate undeveloped lots with appropriate commitments for preservation. The use of protective easements as a means of preservation should be considered.

When preservation of EQC land is achieved through the development process it is appropriate to transfer some of the density that would otherwise have been permitted on the EQC land to the non-EQC portion of the property to provide an incentive for the preservation of the EQC and to achieve the other objectives of the Plan. The amount of density transferred should not create an effective density of development that is out of character with the density normally anticipated from the land use recommendations of the Plan. For example, town homes should not normally be built adjacent to an EQC in an area planned for two to three dwelling units per acre. Likewise, an increase in the effective density on the non EQC portion of a site should not be so intense as to threaten the viability of the habitat or pollution reduction capabilities that have been preserved on the EQC portion of the site.

Policy b. To provide an incentive for the preservation of EQCs while protecting the integrity of the EQC system, allow a transfer of some of the density from the EQC portion of developing sites to the less sensitive areas of these sites. The increase in effective density on the non-EQC portion of a site should be no more than an amount which is directly proportional to the percentage of the site that is preserved. Overall site yield will decrease as site constraints increase. Maximum density should be determined according to a simple mathematical expression based upon the ratio of EQC land to total land. This policy is in addition to other plan policies which impact density and does not supersede other land use compatibility policies.

The retention of environmental amenities on developed and developing sites is also important. The most visible of these amenities is the county's tree cover. It is possible to design new development in a manner that preserves some of the existing vegetation in landscape plans. It is also possible to restore lost vegetation through replanting. An aggressive urban forestry program could retain and restore meaningful amounts of the county's tree cover."

APPENDIX 8

Original map of RPAs in Huntley Meadows Park based on Fairfax County's 1993 RPAs, 2003 RPAs, and 2003 (Rev) RPAs data.

