



Bucklodge Forest Conservation Park

Management Plan
June 2002

The Maryland-National Capital Park & Planning Commission
Montgomery County Department of Park & Planning
Countywide Planning Division, Park Planning & Resource Analysis
Natural Resources Division, Natural Resources Management
Northern Region, Black Hill Area
Park Police

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BUCKLODGE FOREST CONSERVATION PARK

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I. Introduction and Purpose

In October of 2000, the Bucklodge Forest Conservation Park became the first acquisition by Montgomery County through its Legacy Open Space program, a new initiative to identify and protect thousands of acres of exceptional open land and historic resources throughout the County. To meet the objectives of the program, the County Council approved funding in the amount of \$44 million dollars over an eight-year period beginning in July of 2000 for the purchase of land and easements.

The Legacy Open Space Functional Master Plan, which establishes the program as part of the General Plan for Montgomery County, identified the Bucklodge Forest Conservation Park site as a significant natural resource in need of protection. The Park was purchased primarily to protect and preserve groundwater resources, especially recharge areas. It is located in a significant landscape position, providing groundwater recharge for three different drainage areas. The ultimate headwaters of Bucklodge Branch are located within the southern portion of the Park, and the majority of the land in the Park drains to that stream. The northern portion and a small area on the eastern edge of the Park drain to Ten Mile Creek. A very small part of the western edge of the Park drains to the Little Monocacy River. Additionally, the drainage area for Little Bennett Creek is located within one-quarter mile of the Park. Maintaining this forested site in an undeveloped condition will contribute to the maintenance of base flow and to good water quality in the headwaters of the three streams. The Park was also purchased to preserve the large contiguous regenerative forest that covers the entire 215-acre property. Although this forest is significantly impacted by exotic invasive plant species, there are scattered stands of high quality forest within the Park.

The Bucklodge Forest Conservation Park Management Plan has been developed to implement the stewardship goals for acquired conservation parkland that are set forth in both the Legacy Open Space Plan, and the County's Park, Recreation, and Open Space (PROS) Master Plan. The Plan envisions future protection of the Park's critical groundwater recharge areas by establishing a program for preservation and enhancement of the contiguous forest that covers the entire Park site and providing public access to the Park for passive recreation only.

The goals of the Management Plan are listed below.

Identify and map the Park's existing natural, recreational, and cultural resources along with existing operational issues.

Provide a plan for how best to manage the Park's natural, recreational and cultural resources.

Facilitate compliance with Montgomery County's Environmental Guidelines during the planning, development and operation of the Park.

Assure public access to the Park for passive recreation in a manner that leaves environmentally sensitive portions of the site undisturbed.

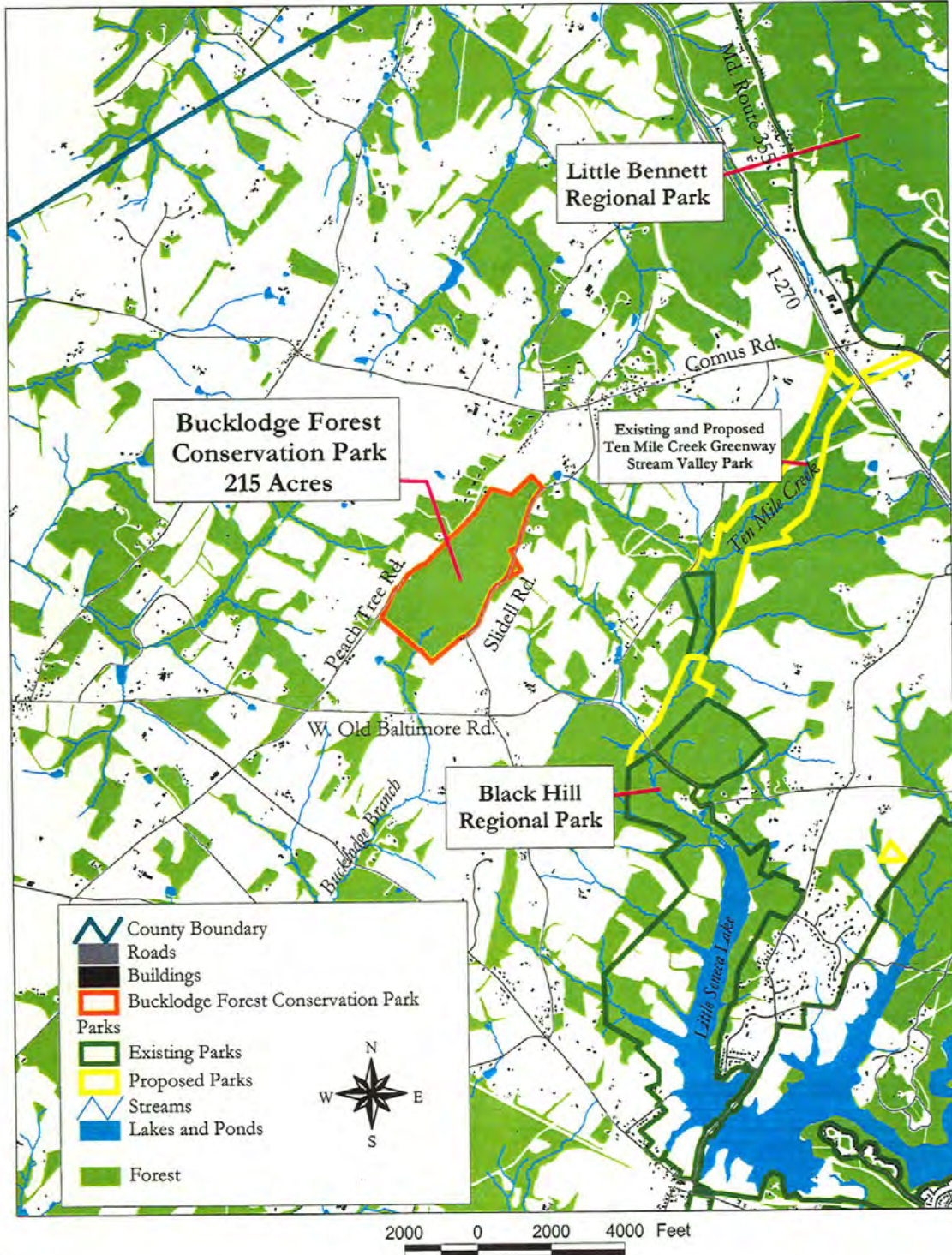
Provide a plan for the Park's operation that specifies both one-time improvements and on-going maintenance tasks.

Provide estimated budget impacts of Plan recommendations.

Present Plan recommendations in a Geographic Information System (GIS) mapped format for field use.

The information provided by the Management Plan should also serve as the starting point for future Park planning and management efforts.

Map 1 Bucklodge Forest Conservation Park Locational Map



II. Existing Conditions

The Bucklodge Forest Conservation Park is approximately 215 acres in size and is located in the northwest section of Montgomery County south of Comus Road in the vicinity of Barnesville (see Map 1 on page 2). Slidell Road borders the Park to the east and Peach Tree Road borders the site to the west. A brief overview of the Park's natural, recreational, and cultural resources is provided below along with an identification of operational issues. This analysis is based on staff field inspections of the Park conducted in the late fall of 2000 just after purchase of the site by the County, as well as in the spring and summer of 2001.

A. Geology

The Bucklodge Forest Conservation Park is located within the Piedmont physiographic province of Maryland. The underlying bedrock of the park is primarily quartzite and schist.

B. Soils

The predominant soil types found on the Bucklodge Forest Park site are Linganore-Hyattstown channery silt loams and the Brinklow-Blocktown channery silt loams. Hydric soils and soils with hydric inclusions are indicated on the attached Management Plan map (Map 4 in Map Pocket 1).

C. Topography

In general, the topography of the Park slopes gently from the sides toward the center of the property, and then southerly in the direction of the Bucklodge Branch. A small part of the north section of the Park slopes in a northeasterly direction. There are some small areas of steep slopes (greater than 15% but less than 25%) located in the east section of the site. The topography is represented on the attached Management Plan map.

D. Vegetation

The Park is entirely covered with a young forest consisting primarily of tulip poplar and red maple. There are small high quality stands of oak-hickory, especially toward the northwest corner of the Park. In addition, a high quality stand of American beech is located in the east section of the Park. Many pin oaks were identified in the wetland area that is located in the south section of the property. Many of the Park's mature oaks have died as a result of repeated defoliation by gypsy moths approximately 10 years ago. There is also evidence of past logging activities on the site. Staff has identified several specimen trees (trees greater than 24 inches in diameter at breast height) on the site that are represented on the Management Plan map. A forest stand map is also attached. Non-native invasive vegetation dominates much of the forest understory, most notably in the south section of the Park. Common non-native species include multi-flora rose, Japanese honeysuckle, and bittersweet. Overall there is little herbaceous cover and not much evidence of forest regeneration. Staff suspects this is due to the effects of heavy browsing by white-tailed deer. A species listing of the vegetation found in the Park is attached in the Appendix to this Plan.

E. Wildlife

Staff conducted four site visits during 2000 and 2001 to inventory wildlife at the Park. The resulting species list is attached in the Plan's Appendix. Additional species will likely be recorded for this Park as future surveys are conducted. The closed forest canopy of the site creates potential habitat for forest interior birds. Signs of a high deer population were observed on the property that will require direct reduction management.

F. Water

The Park is located within the Little Seneca Creek watershed. The headwaters of the Bucklodge Branch, which is a tributary of the Little Seneca Creek, are located within the Park, and the stream flows south from the property to the Little Seneca Creek. A small portion of the northern end of the Park drains toward the Ten Mile Creek. The Bucklodge Branch is a Water Use Category I stream as designated by the Maryland Department of the Environment. Use I waters are suitable for water contact sports, fishing, the growth and propagation of fish (other than trout) and other aquatic life and wildlife, as well as agricultural and industrial water supply. A stream monitoring site has been established along the Bucklodge Branch, on Park property, by the County's Department of Environmental Protection (DEP), as part of its on-going monitoring program. Five samples of macro-invertebrates were observed on the site. No fish were observed in the Bucklodge Branch at the time of field inspections. The attached Management Plan map shows the stream and wetland buffers. A number of vernal pools have formed within existing trails, which are also shown on the Management Plan map.

G. Trails

There is an extensive system of informal natural surface trails found throughout the Bucklodge Forest Conservation Park, with several access points on both Slidell Road and Peach Tree Road. Most of the trails are wide and in generally good condition. The trails are used primarily by equestrians who access the site from adjoining properties. Both trail riding and traditional fox chasing on horseback are activities that take place on the site. In the past, hunters also used the trails for access to the interior of the site. All of the existing trails have been surveyed and are depicted on the attached Management Plan map.

As part of this Plan, the system of trails was examined from a stewardship perspective and a maintenance perspective. Certain trails are poorly located with regard to wetlands and the potential for erosion. Maintaining trail accessibility is desirable so people may enjoy the beauty of the Park.

H. Cultural Resources

A Phase I pedestrian survey for archaeological resources within Bucklodge Forest Conservation Park was conducted by the Department of Park and Planning staff archaeologists in accordance with the "Standards and Guidelines for Archaeological Investigations in Maryland" (Maryland Historical Trust Technical Report Number 2, 1994).

One prehistoric site was discovered during the survey. Named the Kawecki III Site, it contained the tip and medial portion of a broken meta-rhyolite biface point. Meta-rhyolite is a metamorphosed igneous rock whose nearest outcrops are in northwestern Frederick County. Its presence on a Montgomery County site hints at long distance hikes for resource procurement or localized trade networks. Probably utilized in the Late Archaic Period (3500 B.C. to 1000 B.C.) just before nomadic bands turned to sedentary agriculture in the Early Woodland Period, the site is typical of the small upland camps used for seasonal short-term stays along well-traveled stream valley trails.

Originally patented in 1763, the Park is part of Wilson's Inheritance (1199 acres), which was a resurvey of the 1754 patent of Happy Choice and Dow Harbor. By the beginning of the nineteenth century, Benjamin Hershey, or Harshey, had purchased some 600 of those acres. Both the Martinet and Bond Map of 1864 and the Hopkins Atlas show various Hershey houses in the vicinity. This family was the source name of the Hershey Spring, a spigoted water source at the south end of the Park.

It is increasingly evident that a valuable record of Montgomery County's pre-historic and historical past is preserved in undisturbed areas of the County's Park system. The results of surveys in Bucklodge Forest Conservation Park, as well as other parks in the County system have shown the importance of perennial springs to prehistoric populations.

I. Operational Issues

At the time of purchase by the County, the Bucklodge Forest Conservation Park site contained two junked cars and several trash dumps. Soon after purchase, Black Hill Area and Central Maintenance Division staff removed the cars and some of the trash dumps. The prior owner of the site had intended to develop the property for an 18-hole golf course. The proposed golf course tees, landings, and greens were surveyed and marked on the site with plastic poles that are about 10 feet in height. There are approximately 53 of these poles scattered throughout the Park. There are also several tree stands that were used in the past by hunters. In addition, there are ten groundwater monitoring wells situated on the site that are associated with the proposed golf course development. Black Hill Area staff has posted "No Hunting" signs around the entire border of the Park, and they have secured the caps of groundwater monitoring wells. The Park's operational issues are depicted on the attached Management Plan map.

III. Management Recommendations

A listing of staff's recommendations for managing the Bucklodge Forest Conservation Park's natural, recreational, and cultural resources is provided below. Implementation of the recommendations is the responsibility of Natural Resources Management staff, Park Planning and Resource Analysis staff, and the Black Hill Area staff.

A. Vegetation

- There must be no further fragmentation of the existing forest within the Park, to be accomplished by restricting all improvements to the edges of the Park.
- Coordinate with Black Hill Area staff to reforest existing trails and access points that are identified on the Management Plan map as recommended for closure.
- Manage exotic invasive plants only within the higher quality oak-hickory and beech forest stands located in the north and east sections of the Park, as follows:
 - A. Delineate area to be managed;
 - B. Identify target species for management;
 - C. Develop a species specific management protocol;
 - D. Recruit and train volunteer "weed warrior" group;
 - E. Develop work program for "weed warrior" group;
 - F. Annually monitor and evaluate work program efforts;

B. Wildlife

- Maintain a closed forest canopy to protect the habitat of forest interior birds by minimizing trail widths and restricting all improvements to the edges of the Park.
- Develop a comprehensive deer management program for the Park as outlined below.
 - A.** Assess the impact of white-tailed deer in and around Bucklodge Forest Conservation Park as follows:
 1. Examine deer-auto collisions reported by the Montgomery County Police Department, M-NCPPC Park Police, and the County's Animal Control Unit on Peach Tree Road, Old Hundred Road, and Comus Road adjacent to the Park;
 2. Record and map citizen complaints regarding white-tailed deer around the Park;
 3. Record and map Deer Management Permit's issued for locations around the Park;
 4. Measure the availability of woody browse in the Park.
 - B.** Determine if the level of white-tailed deer related impacts have exceeded acceptable levels as follows:
 1. Examine county-wide map overlays of deer-related incidents to determine if an area of concentration or "hot-spot" is evident around the park;
 2. If a hot-spot is evident, rank it relative to others in the County.

C. Monitor the population density of white-tailed deer in and around the park.

D. In accordance with the Comprehensive Management Plan for White-tailed Deer in Montgomery County, develop site-specific management recommendations as follows:

Non-lethal

1. Continue efforts in educating the public about deer issues, particularly on available non-lethal methods to reduce deer damage to personal property;
2. Continue efforts through the Montgomery County Department of Public Works and Transportation to make improvements of road fencing and signage to reduce deer-auto collisions around the park.

Lethal

1. Continue and expand efforts to encourage effective deer population management on large parcels of private property around the park;
2. Develop and implement a population reduction program for Bucklodge Forest Conservation Park.

E. Monitor and evaluate management efforts on an annual basis.

- Conduct additional faunal surveys, to include amphibians and reptiles. These should take place during the spring and early summer and include a call survey for frogs and toads, an examination of vernal pools for amphibian egg masses, and transect surveys for reptiles.

C. Water

- As necessary coordinate with Black Hill Area staff to move trails outside the wetland buffers unless placed on a boardwalk.
- Assess the status of fish in the Bucklodge Branch.
- As necessary coordinate with Black Hill Area staff to close or realign trails to protect vernal pools and other wet areas identified on the Management Plan map.

D. Trails and Public Access

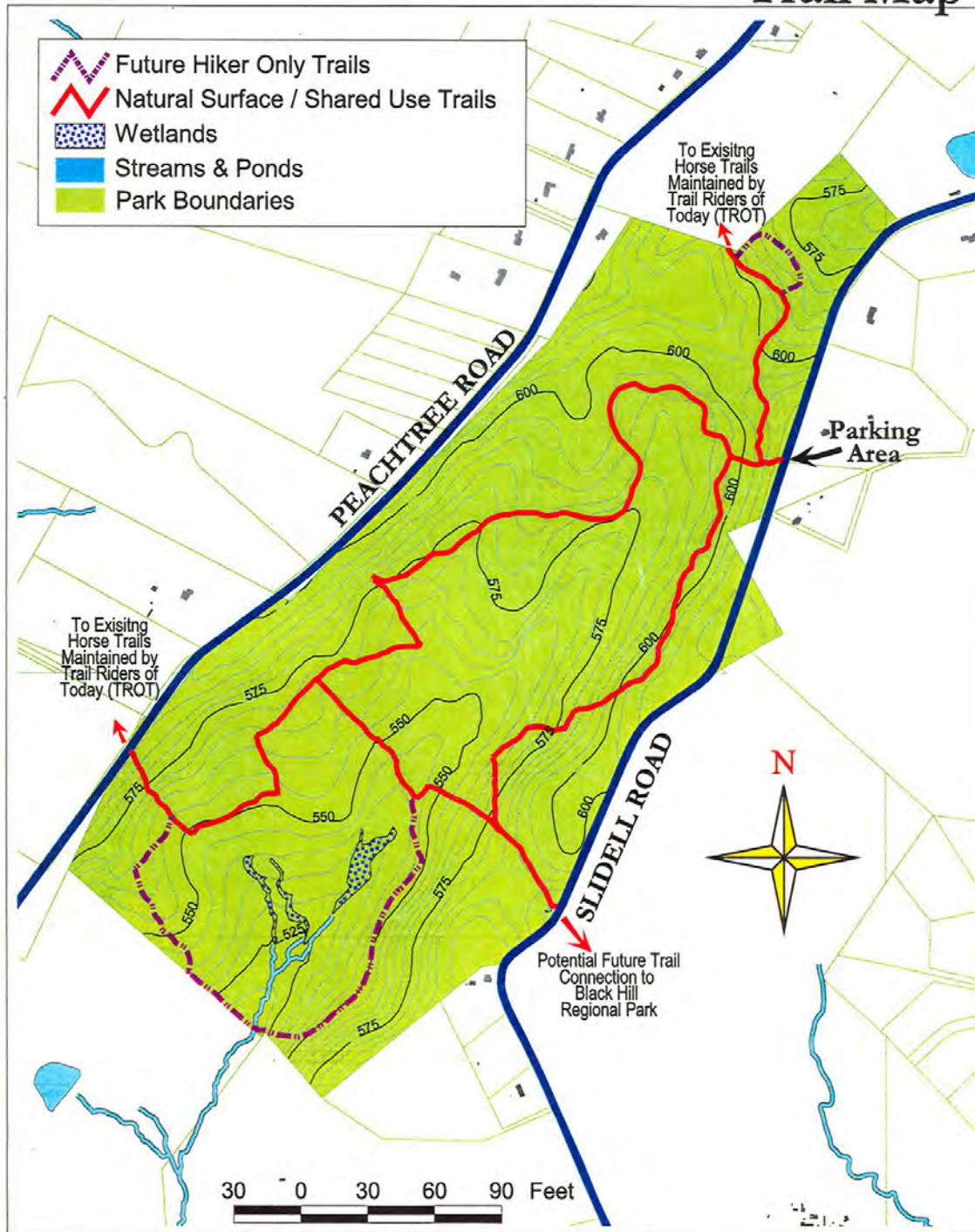
The trails plan for the Park is shown in Map 2 on page 11, as well as in the attached Management Plan map. The trail network was created by utilizing the existing set of natural surface trails on the site that are used primarily by equestrians from the Park's surrounding neighborhood. No new trails are to be constructed, no existing trails are to be widened, and several of the existing trails will be closed off. The trails plan identifies trails which should be signed and maintained for public use and recommends closing trails which are located in more environmentally sensitive areas of the Park.

The trail layout:

- provides a trail loop within the interior of the Park which is accessible from Slidell Road, where a trail head with a gravel parking lot for up to six cars and a horse trailer is proposed;
- identifies trail access points on the northern and western side of the Park to allow non-motorized access from the surrounding community;
- identifies interpretative trails for hikers only near wetland areas and in high quality forest;
- encourages the use of public use easements to foster connectivity between the trails in Bucklodge Forest Conservation Park, the Clarksburg Greenway trail system in Ten Mile Creek, and Black Hill Regional Park.

The natural surface trails in Bucklodge Forest Conservation Park will be open to all non-motorized uses, including bicycles and equestrians. In addition, use of the trails for traditional fox chasing on horseback will be allowed in the Park subject to the terms of a special permit issued by the Director of Montgomery Parks. The exception to this policy applies to the interpretive trails that are located in the more environmentally sensitive portions of the Park. These trails will be signed for hikers only. Trail use designations are subject to change due to seasonal conditions or future consideration according to the judgment of the park manager in consultation with other M-NCPPC staff. A map of existing and proposed equestrian trail corridors in Montgomery County that were approved by the Planning Board is shown in Map 3 on page 12. The map indicates the location of Bucklodge Forest Conservation Park in relation to potential trail corridor links to other parks.

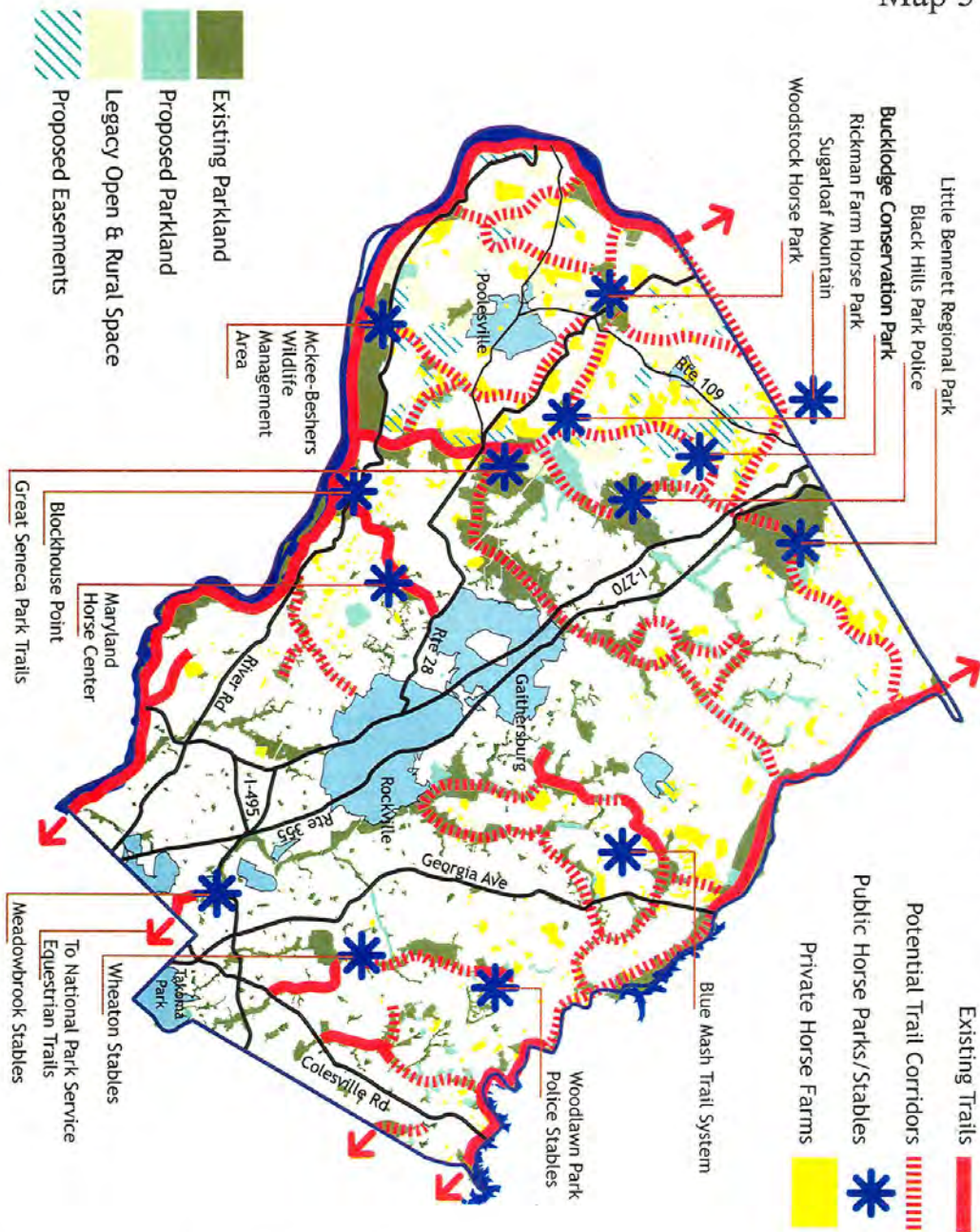
Bucklodge Forest Conservation Park Trail Map



Bucklodge Forest Conservation Park Management Plan

Equestrian Trail Corridors in Montgomery County, MD

Map 3



Bucklodge Forest Conservation Park Management Plan

E. Cultural Resources

A more intensive archaeological survey of impacted areas should be conducted if any development takes place on the knolls above the springs.

F. Implementation Cost Estimates

Table 1.

Natural Resources Division, Natural Resources Management	Onetime Costs: Set up invasive plant management program Setup deer management program	Annual Costs: Management of Invasive Plants; Deer Management Program
Personnel Services	\$2,500	\$1,450
Supplies and Materials	\$350	\$50
Other Services & Charges	\$0	\$220
Capital Outlay	\$0	\$0
Chargeback	\$0	\$0
Total expenditure	\$2,850	\$1,720
Workyears	0.05	0.03

Note: Cost estimates for trail reforestation are included under the section for Operational Plan Implementation Cost Estimates.

Table 2.

County-wide Planning Division, Park Planning and Resource Analysis	Onetime Costs: Fish survey	Annual Costs: None
Personnel Services	\$480	\$0
Supplies and Materials	\$0	\$0
Other Services & Charges	\$0	\$0
Capital Outlay	\$0	\$0
Chargeback	\$0	\$0
Total expenditure	\$480	\$0
Workyears	0.01	0

IV. Operational Plan

A. Park Start-up

The following are one-time start-up projects to be implemented by Black Hill Area staff in coordination with Central Maintenance Division and Natural Resources Management staff, as well as surveyors from the Park Development Division. Operational recommendations are also indicated on the attached Management Plan map.

Construct a gravel parking lot at the main entrance to the Park along Slidell Road as indicated on the attached Management Plan map. The parking lot will accommodate four to six vehicles as well as a horse trailer, but will not exceed an area of 5,000 square feet.

Install typical park style metal gates (sizes to be determined) at the main entrance to the Park along Slidell Road and the maintenance entrance along Peach Tree Road. Cable shut the other two trail entrances from Slidell and Peach Tree Roads.

Install standard M-NCPPC signs at the main entrance to the Park along Slidell Road and at the maintenance entrance along Peach Tree Road.

Close off and reforest undesirable roads and people's choice trails, and reroute desired trails in some sections as indicated on the Management Plan map. If possible, use a volunteer group to perform this work, under direction of Black Hill Area staff. Natural Resources Management staff will provide planting material as needed. This will be the most elaborate job needed in this Plan, and may need to be done in stages for that reason. Label remaining trails with signs.

Conduct "points on line" survey of the Park boundary and install standard M-NCPPC "green and white" poles around entire Park boundary.

Remove hunting stands from trees.

Remove white PVC poles used to designate golf course landmarks.

Place sign at main entrance to Park along Slidell Road advising visitors to carry out their own trash when leaving the Park. To reduce maintenance costs trash cans are not being made available at the Park. Black Hill Area staff will monitor effectiveness of this policy and re-valuate as necessary.

B. Annual Maintenance Program

The annual maintenance program for Bucklodge Forest Conservation Park is described in the following table. Black Hill Area staff is responsible for implementing the identified maintenance tasks.

Table 3.

MAINTENANCE TASKS TO BE COMPLETED	FREQUENCY OF TASK	MATERIALS NEEDED	# OF PEOPLE TO DO TASK	HOURS NEEDED PER PERSON TO DO TASK	TOTAL # OF MAN HOURS PER YEAR	MAINTENANCE STANDARDS
Trash dump removal	2 X year	None	3	4	24	1) Park will be inspected for dumpsites consisting of construction trash, household trash, abandoned vehicles. Sites will be removed no less than twice a year, or sooner if necessary for safety reasons. 2) Monitor trash left by visitors to the Park.
Trail maintenance	4 X year (includes 2 X year inspection by Natural Resources Mgmt. & Park Planning and Resource Analysis staff, once in late spring and once in late summer)	None	5	8	128	1) Trail surfaces and adjacent areas will be visually inspected for hazards, excessive wear and tear, vandalism, washouts, etc., and be repaired as appropriate. Twice per year inspection for negative impacts of trail use on vegetation, wildlife, and water quality by Natural Resources Management and Park Planning and Resource Analysis staff. 2) Trees adjacent to trails will be inspected for dead trees and hazardous limbs, and tree crew will be contacted for removal of dead trees or hazardous limbs. Where appropriate dead trees will be pruned in a manner that allows one-third of the trunk to remain standing for bird habitat.
Repairs to gravel parking lot	2 X year winter only	Approx. 22 tons of gravel each time	1	8	16	1) Potholes, ruts and other disturbed areas in the gravel parking lot will be replenished with gravel and re-graded.
Spraying for weeds in parking area	2 X year winter only	Round-up Pro	1	2	4	1) A pre/post emergent herbicide will be used to treat weeds within the gravel parking lot area as well as around the guardrails and parking blocks. This is a preventative measure to keep vegetation from taking over.
Repair and repaint signs	1 x year winter only	Paint	1	8	8	1) All signs will be legible, secure and maintained as originally designed. 2) Damaged or missing signs will be repaired or replaced. 3) Wood signs will be repainted. 4) Vegetation will be removed from signs or posts. 5) Sign posts will be secured and straightened. 6) Dirt will be removed from signs.

C. Park Police

Park Police Division’s Patrol Section staff is responsible for patrolling Bucklodge Forest Conservation Park. Since the Park is classified as a conservation park with few built amenities, it is not expected to attract a large number of patrons. However, the park will require “calls for service” from the Park Police based on other factors such as hunting, trespassing, and the like. Park Police estimates that the park will require approximately 5% of a patrol officer’s function per year.

D. Implementation Cost Estimates

The following estimates were prepared by Park Planning and Resource Analysis staff in close consultation with Montgomery County Parks staff.

Table 4.

Northern Region, Black Hill Area	Onetime Costs: Construct gravel parking lot Install entry gates Install park signs Close and reforest undesirable trails, and label desirable trails with signs Remove hunting stands Remove PVC pipes	Annual Costs: Trash dump removal Trail maintenance Repairs to parking lot Spray for weeds in parking lot Repair and repaint signs
Personnel Services	\$2,300	\$3,600
Supplies and Materials	\$3,200	\$290
Other Services & Charges	\$0	\$0
Capital Outlay	\$0	\$0
Chargeback	\$0	\$0
Total expenditure	\$5,500	\$3,890
Workyears	0.06	0.07

Table 5.

Central Maintenance Division, Trades/Construction Group	Onetime Costs: Construct gravel parking lot Install entry gates	Annual Costs: None
Personnel Services	\$10,320	\$0
Supplies and Materials	\$2,000	\$0
Other Services & Charges	\$0	\$0
Capital Outlay	\$0	\$0
Chargeback	\$0	\$0
Total expenditure	\$12,320	\$0
Workyears	0.03	0

Table 6.

Park Development Division, Engineering Section Surveyors	Onetime Costs: Survey park boundary and install "green-and-whites"	Annual Costs: None
Personnel Services	\$6,000	\$0
Supplies and Materials	\$2,000	\$0
Other Services & Charges	\$0	\$0
Capital Outlay	\$0	\$0
Chargeback	\$0	\$0
Total expenditure	\$8,000	\$0
Workyears	0.06	0

Table 7.

Natural Resources Division, Natural Resources Management	Onetime Costs: Close and reforest undesirable trails	Annual Costs: 1. Trail maintenance
Personnel Services	\$350	\$400
Supplies and Materials	\$100	\$0
Other Services & Charges	\$0	\$0
Capital Outlay	\$0	\$0
Chargeback	\$0	\$0
Total expenditure	\$450	\$400
Workyears	0.01	0.01

Table 8.

Park Police Division, Patrol Section	Onetime Costs: None	Annual Costs:
Personnel Services	\$0	\$14,020
Supplies and Materials	\$0	\$320
Other Services & Charges	\$0	\$0
Capital Outlay	\$0	\$0
Chargeback	\$0	\$0
Total expenditure	\$0	\$14,340
Workyears	0	0.05*

*Note: Workyears estimate represents 5% of a patrol officer's workyear which is 8,760 hours.

Table 9.

Countywide Planning Division, Park Planning and Resource Analysis	Onetime Costs: None	Annual Costs: 1. Trail maintenance
Personnel Services	\$0	\$320
Supplies and Materials	\$0	\$0
Other Services & Charges	\$0	\$0
Capital Outlay	\$0	\$0
Chargeback	\$0	\$0
Total expenditure	\$0	\$320
Workyears	0	0.01

V. Summary of Implementation Cost Estimates Across Montgomery Parks Operating Divisions*

Table 10.

Total of Plan Implementation Cost Estimates	Onetime Costs:	Annual Costs:
Personnel Services	\$21,950	\$19,790
Supplies and Materials	\$7,650	\$660
Other Services & Charges	\$0	\$220
Capital Outlay	\$0	\$0
Chargeback	\$0	\$0
Total expenditure	\$29,600	\$20,670
Workyears	0.22	Park Police: 0.05 All Other Staff: 0.12

** Northern Region, Central Maintenance Division, Park Development Division, Natural Resources Division, Park Police Division, and Countywide Planning Division – Park Fund*

Appendix A

Bucklodge Forest Conservation Park Plant Species List

PLANT LIST
BUCKLODGE FOREST CONSERVATION PARK

Species	Common	Comments
Trees		
<i>Acer negundo</i>	box elder	
<i>Acer rubrum</i>	red maple	
<i>Ailanthus altissima</i>	tree of heaven	non-native invasive
<i>Carpinus caroliniana</i>	musclewood	
<i>Carya glabra</i>	pignut hickory	
<i>Carya tomentosa</i>	mockernut hickory	
<i>Castanea dentata</i>	American chestnut	Watchlist
<i>Castanea pumila</i>	Allegheny chinkapin	Watchlist
<i>Cornus florida</i>	flowering dogwood	
<i>Diospyros virginiana</i>	persimmon	
<i>Fagus grandifolia</i>	American beech	
<i>Fraxinus americana</i>	white ash	
<i>Fraxinus pennsylvanica</i>	green ash	
<i>Ilex opaca</i>	American holly	
<i>Juniperus virginiana</i>	eastern red cedar	
<i>Liriodendron tulipifera</i>	tulip tree	
<i>Nyssa sylvatica</i>	black gum	
<i>Pinus virginiana</i>	Virginia pine	
<i>Platanus occidentalis</i>	American sycamore	
<i>Prunus avium</i>	bird cherry	non-native invasive
<i>Prunus serotina</i>	black cherry	
<i>Quercus alba</i>	white oak	
<i>Quercus falcata</i>	southern red oak	
<i>Quercus imbricaria</i>	shingle oak	Watchlist
<i>Quercus palustris</i>	pin oak	
<i>Quercus prinus</i>	chestnut oak	
<i>Quercus rubra</i>	red oak	
<i>Quercus velutina</i>	black oak	
<i>Robinia pseudoacacia</i>	black locust	
<i>Sassafras albidum</i>	sassafras	
<i>Ulmus rubra</i>	slippery elm	
Shrubs		
<i>Alnus serrulata</i>	hazel alder	
<i>Elaeagnus angustifolia</i>	Russian olive	non-native invasive
<i>Lindera benzoin</i>	spicebush	
<i>Lonicera spp.</i>	bush honeysuckle	non-native invasive
<i>Rhus typhina</i>	staghorn sumac	
<i>Rosa multiflora</i>	multiflora rose	non-native invasive
<i>Rubus phoenicolasius</i>	wineberry	non-native invasive

M-NCPPC Natural Resources Management Forest Ecology - Contact Carole Bergmann 301-949-2818 Report run 6/11/02

PLANT LIST
BUCKLODGE FOREST CONSERVATION PARK

Species	Common	Comments
<i>Rubus spp.</i>	blackberry/raspberry	
<i>Vaccinium vacillans</i>	lowbush blueberry	
<i>Viburnum acerifolium</i>	mapleleaf viburnum	
<i>Viburnum dentatum</i>	arrowwood viburnum	
<i>Viburnum prunifolium</i>	black haw viburnum	
Vines		
<i>Celastrus orbiculatus</i>	asiatic bittersweet	non-native invasive
<i>Lonicera japonica</i>	Japanese honeysuckle	non-native invasive
<i>Mitchella repens</i>	partridge berry	
<i>Parthenocissus quinquefolia</i>	Virginia creeper	
<i>Rhus radicans</i>	poison ivy	
<i>Smilax rotundifolia</i>	roundleaf greenbrier	
<i>Vitis spp.</i>	wild grape	
Herbs		
<i>Achillea millefolium</i>	yarrow	
<i>Agrimonia parviflora</i>	small-flowered agrimony	
<i>Alliaria petiolata</i>	garlic mustard	non-native invasive
<i>Allium vineale</i>	field garlic	
<i>Ambrosia artemisiifolia</i>	common ragweed	
<i>Anemone virginiana</i>	thimbleweed	
<i>Antennaria plantaginifolia</i>	plantain-leaved pussytoes	
<i>Aplectrum hyemale</i>	puttyroot	
<i>Apocynum cannabinum</i>	dogbane	
<i>Aristolochia serpentaria</i>	Virginia snakeroot	Watchlist
<i>Aster divaricatus</i>	white wood aster	
<i>Boehmeria cylindrica</i>	false nettle	
<i>Chimaphila maculata</i>	spotted wintergreen	
<i>Cichorium intybus</i>	chicory	
<i>Circaea quadrisulcata</i>	enchanter's nightshade	
<i>Daucus carota</i>	Queen Anne's lace	
<i>Desmodium nudiflorum</i>	naked-flowered tick trefoil	
<i>Desmodium sp.</i>	tick trefoil	
<i>Duchesnea indica</i>	Indian strawberry	non-native invasive
<i>Galearis spectabilis</i>	showy orchis	
<i>Geranium maculatum</i>	wild geranium	
<i>Geum sp.</i>	avens	
<i>Glechoma hederacea</i>	ground ivy	non-native invasive
<i>Goodyera pubescens</i>	downy rattlesnake plantain	
<i>Houstonia purpurea</i>	large houstonia	
<i>Hypericum perforatum</i>	common St. Johnswort	
<i>Impatiens capensis</i>	jewelweed	

PLANT LIST
BUCKLODGE FOREST CONSERVATION PARK

Species	Common	Comments
<i>Isotria verticillata</i>	whorled pogonia	Uncommon
<i>Liparis lilifolia</i>	lily-leaved twayblade	
<i>Lobelia inflata</i>	Indian tobacco	
<i>Lycopus virginicus</i>	Virginia bugleweed	
<i>Muhlenbergia schreberi</i>	nimblewill	
<i>Oxalis stricta</i>	wood sorrel	
<i>Perilla frutescens</i>	beefsteak plant	non-native invasive
<i>Phryma leptostachya</i>	lopseed	
<i>Phytolacca americana</i>	pokeweed	
<i>Polygonum perfoliatum</i>	devil's tearthumb	non-native invasive
<i>Polygonum persicaria</i>	lady's thumb	
<i>Prunella vulgaris</i>	self heal	
<i>Senecio aureus</i>	golden ragwort	
<i>Solidago spp.</i>	goldenrod	
<i>Tovara virginiana</i>	Virginia knotweed	
<i>Uvularia perfoliata</i>	perfoliate bellwort	
<i>Uvularia sessilifolia</i>	sessile-leaved bellwort	
<i>Verbena urticifolia</i>	white vervain	
<i>Viola spp.</i>	Violet	

Grasses/Sedges/Rushes

<i>Dichanthelium clandestinum</i>	deer tongue grass	
<i>Microstegium vimineum</i>	Vietnamese stiltgrass	non-native invasive

Ferns/Mosses/liverworts

<i>Asplenium platyneuron</i>	ebony spleenwort	
<i>Dennstaedtia punctilobula</i>	hay-scented fern	
<i>Lycopodium complanatum</i>	ground cedar	
<i>Lycopodium flabelliforme</i>	ground cedar	
<i>Onoclea sensibilis</i>	sensitive fern	
<i>Polystichum acrostichoides</i>	christmas fern	

M-NCPPC Natural Resources Management Forest Ecology - Contact Carole Bergmann 301-949-2818

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Appendix B

Bucklodge Forest Conservation Park Fauna List

Appendix C

Bucklodge Forest Conservation Park Aquatic Macroinvertebrates List

Aquatic macroinvertebrates collected in Bucklodge Forest Conservation Park (Spring 2000)

Insects

Plecoptera (stoneflies)

Amphinemura sp.
Nemoura sp.
Eccoptera sp.
Isoperla sp.

Ephemeroptera (mayflies)

Ephemerella sp.
Eurylophella sp.
Stenonema sp.
Habrophlebia sp.
Habrophlebiodes sp.
Paraleptophlebia sp.
Ameletus sp.

Trichoptera (caddisflies)

Cheumatopsyche sp.
Diplectrona sp.
Wormaldia sp.
Polycentropus sp.
Heteroplectron sp.
Pycnopsyche sp.
Rhyacophila sp.

Megaloptera (dobsonflies, fishflies, and alderflies)

Nigronia sp.
Sialis sp.

Diptera (true flies)

Chrysops sp.
Tabanus sp.
Ceratopogon sp.
Probezzia sp.
Chironomidae
Prosimulium sp.
Simulium sp.
Stegopterna sp.
Dicranota sp.
Hexatoma sp.
Limnophila sp.
Prioncera sp.
Pseudolimnophila sp.
Tipula sp.

Coleoptera (beetles)

Agabus sp.
Oreodytes sp.
Helichus sp.
Optioservus sp.
Hydrochara sp.
Anchytarsus sp.

Odonata (dragonflies and damselflies)

Cordulegaster sp.
Stylogomphus sp.

Crustaceans

Decapoda (crayfish)

Cambaridae

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