Attachment B

CORRESPONDENCE

rtk47@verizon.net
Monday, June 17, 2013 9:58 AM
Elsasser, Marian
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nicholas.benz@fda.hhs.gov; jet1@nrc.gov; stevet44@gmail.com; jvittone@frb.gov;
sarah@vittone.com
Hiker-Biker Trail Extension

Good morning, Ms. Elsasser. On behalf of the North Creek community and civic association, we would like to express our strong support for the hiker-biker trail extension to be discussed by the Montgomery County Department of Parks/Planning Commission on Thursday, June 27. North Creek is located off Emory Lane, near Muncaster Mill Road. Residents currently have no direct access to the Rock Creek/North Branch bike trail. Walking/biking the path which parallels the ICC leaves an extremely treacherous stretch of Needwood Road to be navigated to access the Rock Creek trail.

Should you need more information, please contact me at <u>rtk47@verizon.net</u> or 301-801-6160. Thank you for conveying the interest of North Creek residents.

Rich Kopanda

From:	jfreedy@netzero.net
Sent:	Saturday, June 15, 2013 9:55 AM
To:	Elsasser, Marian
Subject:	Re: Planning Board Meeting on the proposed North Branch Trail

Dear Marian S. Elsasser,

I am sorry I can not attend this meeting due to a mandatory meeting for me from 9:00 until 12:30. I would like to let you know that I am in favor of this proposed plan and look forward to future information updates. Best Regards, James G. Freedy

From:	Ethan Cohen <nate2003dc@yahoo.com></nate2003dc@yahoo.com>	
Sent:	Saturday, June 15, 2013 12:28 PM	
To:	Elsasser, Marian	
Subject:	Re: Planning Board Meeting on the proposed North Branch Trail	

Marian:

Does the Meadowside Nature Center know about what is going on? It seems they are a critical stakeholder.

Quite frankly at the moment, I have seen virtually no change in the amount of bike traffic on this path...which is next to nil.

THis could change if they add the next section, but I personally think making the next section another asphalt path will disenfranchise more hikers, than aid bikers. Then we have the polyaromatic cyclic hydrocarbon issue of building an asphalt path right next to a water source. One thing I do see at Lake Frank is a lot of fisherman (fisherpersons?). The countly even made a bill banning the stuff in driveway sealant...love to see their answer to this one.

http://www6.montgomerycountymd.gov/content/council/pdf/bill/2012/Packets/20120717_7.pdf

Ethan.

From:	Chris Moriarity <chrismor@cpcug.org></chrismor@cpcug.org>	
Sent:	Thursday, June 13, 2013 8:59 PM	
То:	Elsasser, Marian	
Subject:	Re: Planning Board Meeting on the proposed North Branch Trail	

I am pleased that Montgomery County is proposing initiatives that expand recreational space for pedestrians and bicyclists in our county. I am pleased that this proposed trail would make connections between existing pedestrian/bicyclist areas. I recommend that the North Branch Trail be constructed.

thank you Chris Moriarity 200 Spring Avenue Takoma Park, MD 20912

On 06/13/2013 09:05 AM, Elsasser, Marian wrote:

> To all,

>

> Attached is the notice for the Montgomery County Planning Board

> Meeting for the North Branch Hiker-Biker Trail to be held on June 27, 2013.

> Please send to me any correspondence that you would like included in

> the Planning Board Packet. If you would like to testify, please see

> meeting notice for instructions. Next week, staff report will be

> posted at http://www.montgomeryplanningboard.org/meetings_archive/

>

> Sincerely,

>

> Marian S. Elsasser

> Landscape Architect

> Park Development Division

> Montgomery County Department of Parks

> M-NCPPC

> Parkside Headquarters

> 9500 Brunett Avenue

> Silver Spring, MD 20901

> *www.ParkProjects.org* <<u>http://www.ParkProjects.org</u>>

From:	Lauren Farah <laurenf0808@gmail.com></laurenf0808@gmail.com>	
Sent:	Friday, May 17, 2013 3:05 PM	
То:	Elsasser, Marian	
Subject:	Fwd: Opposed to proposed extension of North Branch Trail & Kirk Lane	

------ Forwarded message ------From: Lauren Farah <<u>laurenf0808@gmail.com</u>> Date: Fri, May 17, 2013 at 1:53 PM Subject: Opposed to proposed extension of North Branch Trail & Kirk Lane To: <u>sam.arora@house.state.md.us</u> Cc: <u>marian.elsassor@montgomeryparks.org</u>, <u>bfalcigno@goca.org</u>

Dear Delegate Arora:

As residents of 17600 Kirk Lane since December 2008, my family and I are adamantly opposed to the proposed extension of the North Branch Trail Bike Path through/to Kirk Lane and or Ridge Road as well as the proposed paving and parking lot. My Husband, Frederick, and I chose to move to this hidden gem of a neighborhood largely due to the abundance of privacy and the serene ambiance. The unpaved gravel stretches of Ridge Road and Kirk Lane add to the charm and character of our oasis and now as the parents to toddlers, we take comfort in knowing that if we hear or see a vehicle pass by it is most likely a neighbor or an infrequent delivery. Conventionally such projects result with a cost that would be levied in some capacity on the owners of this community. This will render our ability to stay in our home a practical impossibility. The sales price will plummet as no one would want to buy an encumbered property. We fervently object to and reject this and any other proposal which would change the quality of life we chose and immensely enjoy. Thank you for your time and efforts in helping our neighborhood voice our opposition to this "improvement".

Sincerely,

Lauren Farah 443-865-9705

P.S Please add my email address to the group email list. Thank you.

From: Sent: To: Subject: Attachments: Elizabeth Azarian <eazarian713@gmail.com> Wednesday, April 10, 2013 6:57 PM Elsasser, Marian GOCA Meeting Remarks Scan0003.jpg

Hi Marianne

After hearing the proposal tonight, there is great concern about our natural wetlands and forest protection back, here. There are designated forest preservation areas clearly marked, that the Parks has given easements already to some when building permits were obtained. Also paving Kirk would have to include Brooks, Stone, and Kirk as they are all connected. Also there would have to be fairness to Olney Lane. We were promised if these homes were built further development would be limited. There is a huge sediment control issue with a paved road. The builder of Rock Creek Preserve should not have any say in what happens in my neighborhood. There are many things that need to be taken into consideration before offering residents a road free of charge. Sounded like a bribe when it was announced that they would pave the road free of charge. I was here when they paved Ridge, and now it is about \$200 a foot for front footage assessed fee. Also of note there is a road between Ridge and Olney Lane that is actually on the map but not cut yet. As you know Kirk is a "non dedicatied" road. It would have to be brought to county standards and culverts would need to be re[placed, and widened, many trees along the entire road would have to come down and this would ruin the quiet, rustic character we enjoy now Also we were told today by a mcps employee that the road connection to The Preserve at Rock Creek was the real plan and they were just using the trail. Some of the things mentioned last night makes me believe this as it was suggested parking could be at Sequoyah, that along with the dangers of Bready did not resignate with anyone and went unanswered. Also bike riding is legal in Olney so if the trail was really the issue there are much better routes economically and less damaging of the wetlands. I am attaching a large turtle laying eggs at the bottom of Kirk. The loss of many other wildlife will be terribly disturbed. When they built Norbeck Grove the streams were affected and never recovered because of the run off of the silt that caused. It might also be mentioned that this is all well and septic back here and the water will be affected. We will be looking for more information on Kirk Lane and possibly consulting an attorney as this is much more than just a bike trail extension. Thank you Elizabeth Azarian (Kirk), Joe Villella (Brooks, Stone and Kirk), Keith Hall(Kirk), Steve Santaiti (Kirk), Gretchen and Vasili Triantos (Brooks and Kirk), Joe and Nancy Mornini (Stone and Kirk). George Paxton (Kirk), Mike Chakwin Ridge and Kirk), Ann and Gary Culver (Ridge), Paul and Marianne Strieziac(Ridge)(, Linda Morgan (Kirk) Harold White Kirk Ridge. There are others that were not given flyers to and we are informing them also. .

From:	Vicki Dabbondanza <vickidab@hotmail.com></vickidab@hotmail.com>	
Sent:	Monday, April 08, 2013 11:38 AM	
То:	Elsasser, Marian	
Subject:	Response to North Branch Trail	

Dear Marian Elsasser,

Our family is responding to the possible connection of the North Branch Trail to either Kirk Rd or Ridge Rd. We have lived in our neighborhood for 27 years. We purchased the land and built our house in this area because of the dead end streets. We wanted to have an enclosed neighborhood with not a lot of traffic. We have enjoyed living this way for all these years. We totally reject any connection of other roads coming into our community. We want to keep it safe from unnecessary traffic and pollution. Please do not disturb what is working well. Figure our something else. Thank you.

Sincerely, Louis Dabbondanza Vicki Dabbondanza Carolyn Brinkman (our mother living with us) 17619 Ridge Dr.

From:	Hraber, Michael T <michael.t.hraber@schinnerer.com></michael.t.hraber@schinnerer.com>		
Sent:	Thursday, January 10, 2013 11:26 AM		
То:	Elsasser, Marian; Kines, Charles; councilmember.andrews@montgomerycountymd.gov		
Cc:	councilmember.andrews@montgomerycountymd.gov		
Subject:	North Branch Trail		

As an avid hiker living in Rockville, I am very excited about the North Branch Trail project. I am writing to strongly support connecting the north end of the trail being built by the developers of the Preserve at Rock Creek to Ridge Road or Kirk Lane, which will make the trail so much more useful. Please make that short connection now rather than some distant time in the future.

1

Thanks,

Mike

Michael T. Hraber, CPCU, RPLU

Senior Account Executive Victor O. Schinnerer & Co., Inc. | Two Wisconsin Circle | Chevy Chase, MD 20815 Phone: 301-951-5492 | Fax: 301-951-5444 | Mobile: 301-312-9407

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From:	Phillip Staub <ptstaub@gmail.com></ptstaub@gmail.com>
Sent:	Monday, October 15, 2012 4:40 PM
To:	Elsasser, Marian
Subject:	North Branch Hiker Biker Train
Follow Up Flag:	Follow up
Flag Status:	Completed

First of all, thank you for the informative materials posted at the Montgomery Parks website. I'm very excited to see progress toward a much-anticipated project for my neighborhood and many others in Olney. What we hope for is a safe riding/walking option from Barnsley Manor Estates & Olney Mill to Freeman Fields, Needwood (and it's trails) and Olney Manor Park. Portions of this network exist. For example, there is paved bike trail that winds through Olney Mill (south of 108), then Norbeck Grove, but dead-ends on Bowie Mill Road, near Bluebell Lane. Although this is tantalizingly close to Bowie Mill Park--one and a half miles--the only current option is not really an option: to continue on busy and narrow Bowie Mill Rd. Integrating the neighborhood trail with the paths you are working on would greatly increase the number of people who could access your trails.

Please add me to the mailing list for project developments, if there is one.

Thanks again, Phill Staub

From:	Frits Wybenga <fwybenga@dgac.org></fwybenga@dgac.org>
Sent:	Wednesday, September 19, 2012 8:10 PM
То:	Elsasser, Marian
Subject:	Lake Frank trail

Marian - I am sorry I could not make your meeting this evening. I and my two adult chidren jog around Lake Frank on a daily basis and we are concerned about the next phase of construction. I have been jogging this path for some 27 years. We are concerned about how the construction work and ultimately the completed path will impact our daily activities.

When the first part was being done we were able to make do with the construction work because it did not directly affect the lake trail. The construction workers were very considerate and safety conscious in watching out for us and we respected their need to be on the path.

Concerning the extension of the path to Bowie Mill Park - we are opposed. Bikers already have easy access to the bike trail to Washington. But I assume that decision has already been made as the biker lobby seems to be very strong and there is little citizens who walk and jog can do to resist.

We are concerned that the new construction will affect our running trail directly and will disturb our activities for the extended period the trail will be under construction. In addition we believe having pedestrians on a biker path - with bikers usually in a hurry comuting to Washington - will pose serious safety concerns, particularly at the time we are out - early in the morning with low light conditions at this time of year. It is our opinion that there should be separate paths so that both can use the park safely. I hope you will address this as you make your plans.

Sincerely, Frits Wybenga



Barbara Falcigno President Olney Oaks

John Webster Executive Vice President MANOR OAKS

Howard Greif First Vice President Norbeck Grove

Kathy Curtis Second Vice President LAKE HALLOWELL

Mark Hill Recording Secretary CAMELBACK VILLAGE

Greg Intoccia Corresponding Secretary AshLey Hollow

Ruth Laughner Treasurer WilliamsburgVillage June 12, 2013

P.O. Box 212 • Olney, Maryland • 20830 www.goca.org

Marian Elsasser Park Development Division Montgomery County Department of Parks 9500 Brunett Avenue Silver Spring, MD 20901

Dear Ms Elsasser:

The Greater Olney Civic Association (GOCA) met on June 11, 2013 and unanimously approved the following motion:

GOCA supports the original master plan alignment for the North Branch Trail between the Preserve at Rock Creek Trail and Bowie Mill Road. There was a proposal to cross the stream further south and connect directly to either Kirk Lane or Ridge Road. GOCA does not support this proposed route for several reasons. First, there is no cost savings due to the steep topography of the stream area which will require a large bridge. The extensive wetlands in the area will also require much of the trail to be elevated. In addition, GOCA feels the trail route should stay off of area roads which do not have a shoulder or sidewalk making it unsafe for users.

Connecting the trail is important to the Olney community as it is a missing piece of a larger network. GOCA feels the master plan alignment that keeps the trail within the natural area is preferred over directing users onto roads. Although a connection to Kirk or Ridge Road is shorter, it is not less expensive and therefore there is no advantage of this proposed route.

Sincerely,

Barbara Falcígno

Barbara Falcigno President Greater Olney Civic Association

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Attachment C

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NRI / FSD REPORT AND PLAN

Forest Stand Delineation Report for

North Branch Trail



GPI Project Number: 20011040.01

Prepared for: M-NCPPC

Marian Elsasser 9500 Brunett Avenue Silver Spring, Maryland 20901

> Prepared by: **GPI**

GREENMAN AND PEDERSEN, INC. 10977 Guilford Road Annapolis Junction, Maryland 20701

January, 2013

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I. INTRODUCTION

This forest stand delineation report has been prepared as part of the planning, engineering, surveying, and environmental studies associated with construction of a hiker-biker trail. Impervious surface removal will also be part of this project in an area where an unused parking lot will be eliminated and the area not used for the trail will be reforested. The site is zoned RZ and is located on Montgomery County Tax Map Number HS21 and HS23.

The project area is within a Montgomery County Regional Park. Rock Creek Regional Park includes Meadowside Nature Center, Smith Environmental Center, and one historic site, Muncaster Mill, to the south of Muncaster Mill Road. Lake Bernard Frank and Rock Creek North Branch are hydrological features in the park. The segment of the park north of Muncaster Mill Road is in the Rock Creek Special Protection Area. The trail in this area will connect to an existing hiker/ biker trail along MD 200 (ICC) and terminating at a proposed trail in The Preserve at Rock Creek development to the north.

Numerous existing paved and natural surface trails exist within the park. Some of the existing trails are connected to bike trails outside the park in the south, west and north as well as smaller connections to adjacent residential areas around the park. Topography at the project site is sloped from the east and west draining into Rock Creek North Branch and Lake Bernard Frank. The lake is dammed at the southern end.

The purpose of this forest stand delineation report is to document forested habitats located within the project boundaries that are subject to the *State Forest Conservation Technical Manual, Third Edition, 1997* pursuant to the Maryland Forest Conservation Act, 1990.

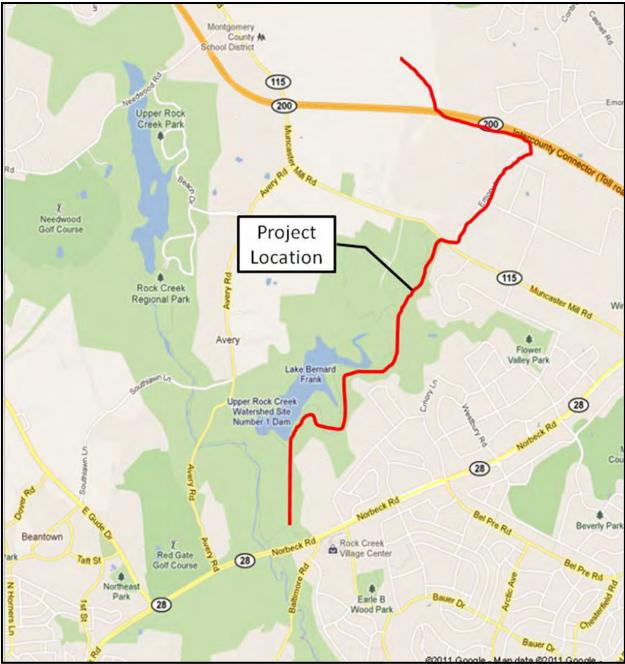


Figure 1: Map of Project Location

II. METHODOLOGY

The forest stands delineated in the field were performed in accordance with the methodology described in the *State Forest Conservation Technical Manual, Third Edition, 1997* pursuant to the Maryland Forest Conservation Act, 1990. The biotope analysis includes the delineation of mapped soil types, hydrologic resources, upland and bottomland areas, and slope aspects. On-site wetland investigations for this site were also done and included in this report.

Our initial office investigation was performed using available aerial photography, GIS information, and the *Soil Survey of Montgomery County, Maryland*. Preliminary sampling points were identified in random locations for use during the on-site investigation.

The on-site forest stand investigation involved the verification of the field mapping and the delineation of forest stand areas based on the composition, stand density, stand age, and biotope. In each forest stand, sampling was conducted to estimate the number of trees per acre and the average tree diameter at breast height (DBH = 4.5 feet above ground level) for the stand. Data for random sample plots were collected using the tenth acre circle sampling method.

The following data were compiled and recorded for each sample point forest stand on the Forest Stand Determination Data Sheets located in Appendix B:

- Area Description,
- Stand Designation,
- Vegetative Species Profile,
- Dominance and Co-dominance Ranking of Each Species,
- Frequency and Average Class Range, and
- Understory Layer Description.

The forest structure for each stand was assessed and a value calculated by recording canopy coverage, herbaceous ground cover, downed woody debris, invasive or exotic plant cover, and qualitative evaluation of the shrub layer. The forest structure value is beneficial in determining the retention potential of the stand. The preservation potential of a stand is based on those areas that produce the highest environmental functional values. The forest structure forms are included as Appendix D.

Specimen tree candidates were selected by size. The trunk diameter should be at least 30 inches at breast height or 75 percent of the DBH of a County, State, or National Champion Tree.

A list of all specimen tree candidates observed on site is included on the Forest Stand Delineation Map and provided in Appendix A. The specimen tree candidates are evaluated on three (3) criteria established by Greenman-Pedersen foresters.

1. The tree should be in very good health.

To determine if a tree is in very good health, it was examined for condition that would contribute to mechanical failure or mortality. Indicators of conditions that would contribute to mechanical failure of a tree, such as limb breakage and blow-down, are as follows:

- A lean greater than 10 degrees;
- The wind firmness of the tree (this includes consideration of the species and its typical rooting pattern, the crown shape and size, the location of the tree on the slope, the direction of prevailing winds, and the relationship between the trunk and crown diameter); and
- Evidence of disease (this includes indicators such as conks, and other obvious signs of decay that would not necessarily cause death, but would predispose the tree or a limb to breakage).

Indicators of conditions that would contribute to the mortality of the tree are:

- Evidence of disease, such as conks, butt swelling, weeping, disconfiguration, carpenter ants, and holes;
- Signs of insect infestation, including insects or woodpecker activity; and
- Crown vigor This was evaluated based on the percentage of dieback as follows:

<u>Rating</u>		Percentage of Dieback
Excellent	-	less than 15
Good	-	16-25
Fair	-	26-35
Unacceptable	-	greater than 35

2. The tree should have a wide and reasonably balanced crown. Dominant trees with crowns less than 30 feet in diameter were not considered in the Specimen Tree Determination. Trees with smaller crown diameters would probably not be able to withstand the addition sunlight and wind loading that they would be subject to after the removal of adjacent trees. In addition, trees with crowns containing Y-branching that potentially would result in instability

were rejected. The angles of the branches in the crown were also considered. Branching at a 60-90 degree angle from the trunk results in a more unstable crown than branching at less than a 60-degree angle from the trunk; therefore, trees with branching at higher angles were rejected.

 The species of the tree should be considered. Some tree species are more suitable to be left standing through and after development because they are relatively less sensitive to construction damage and site changes.

To be selected as specimen trees, further evaluation should be conducted on each tree, and consideration given to (1) the probability of the tree surviving at least 20 years, risk of damage; (2) injury from the tree relative to the proposed use of the property and adjacent property, and the tree's present and expected post-construction condition; (3) the contribution of the tree to overall property values; (4) the area required to preserve the tree; and (5) costs of preservation and maintenance over the expected life of the tree compared to replacement/additional trees.

III. FOREST STAND DETERMINATION

III.A. OFF-SITE DETERMINATION

An office investigation was conducted to determine the potential number of forest stands, surrounding land uses, and the presence of any wetlands or waters of the US within the study area.

III.A.1. Hydrology

The Montgomery Topographic Map, the National Wetlands Inventory (NWI) map, and the USDA Natural Resources Conservation Service, Soil Survey of Montgomery County (Soils Map), identify the presence of Lake Bernard Frank, Rock Creek North Branch and several wetlands. Wetlands and waterways are shown on the available mapping.

III.A.2. Soil Characteristics

A review of the Montgomery County Soil Survey revealed the presence of numerous types of soils. The project area is largely within the Blocktown channery silt loam and Gaila silt loam soils (Figure 2). Table 1 identifies the soils and their characteristics. Further descriptions of the soils in relationship to the forest stands identified on site can be found in the forest stand descriptions.

Soil Name	Highly Erodible	Prime Farmland	Hydric	Infiltratable
Gaila silt loam, 3 to 8 percent slopes (1B)	No	Yes	Partial	Yes
Gaila silt loam, 8 to 15 percent slopes (1C)	No	No	Partial	Yes
Glenelg silt loam, 3 to 8 percent slopes (2B)	No	Yes	Partial	Yes
Glenelg silt loam, 8 to 15 percent slopes (2C)	No	No	Partial	Yes
Glenelg-Urban Land Complex, 0 to 8 percent slopes (2UB)	No	No	Partial	No
Glenville silt loam, 0 to 3 percent slopes (5A)	No	No	Partial	No
Baile silt loam, 0 to 3 percent slopes (6A)	No	No	Yes	No
Brinklow-Blocktown channery silt loams, 8 to 15 percent slopes (16C)Yes	No	No	Partial	Yes
Brinklow-Blocktown channery silt loams, 15 to 25 percent slopes (16D)	Yes	No	Partial	Yes
Occoquan loam, 8 to 15 percent slopes (17C)	No	No	Partial	Yes
Neshaminy silt loam, 3 to 8 percent slopes (27B)	No	Yes	No	Yes
Hatboro silt loam, 0 to 3 percent slopes, frequently flooded (54A)	No	No	Yes	No
Blocktown channery silt loam, 8 to 15 percent slopes, very rocky, (116C)	No	No	Partial	No
Blocktown channery silt loam, 15 to 25 percent slopes, very rocky, (116D)	No	No	Partial	No
Blocktown channery silt loam, 25 to 45 percent slopes, very rocky, (116E)	Yes	No	Partial	No

TABLE 1. SOIL CHARACTERISTICS*

* Soil information has been obtained from the *Soil Survey of Montgomery County and the USDA Natural Resources Conservation Service*. Date accessed: January 10, 2013.

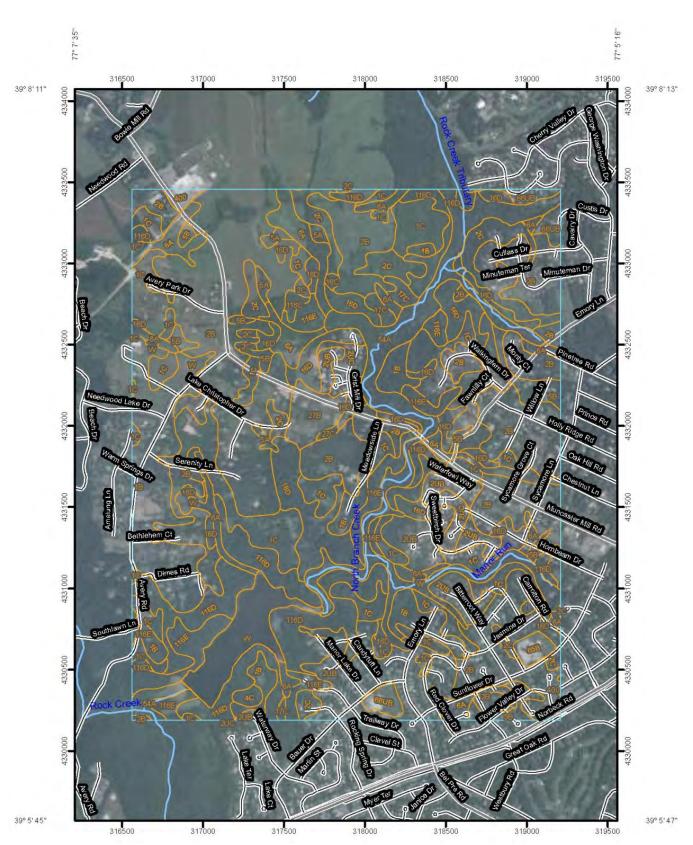


Figure 2: Soils within and near the Study Area. United States Department of Agriculture, Web Soil Survey.

III.A.3. Vegetation

Available aerial photography from the US Department of Agriculture Web Soil Survey, and National Wetlands Inventory, both identify primarily forested cover with small areas of nonforested vegetative cover. On-site analysis will verify the extent of the existing forest cover.

III.A.4. Results

The results of the off-site forest stand investigation determined that the project area is likely forested on both sides of the Lake Bernard Frank and that these areas are likely to be upland communities with shallow to moderate slopes and various slope aspects.

III.B. FOREST STAND DESCRIPTIONS

Twenty (20) different forest stands were identified during on-site investigations. Forest Stands 1-16 were investigated in December, 2012; Forest Stands 17-20 in July, 2012. These stands were delineated based on differences in the composition of tree species, understory layer, and herbaceous layer. Differences between the stands are described in the narratives that follow. Forest Stand 1 is near the southern end of our study area, and stand numbers generally increase in a northern direction. A total of 420 significant and specimen tree candidates were identified within the project study area. Of these, 167 significant tree candidates and 100 specimen tree candidates were identified within the forest stand boundaries.

Refer to the Forest Stand Delineation Map for forest stand boundaries, sample point locations, specimen tree candidate locations, and mapped soil boundaries.

III.B.1. FOREST STAND 1

Forest Stand 1 is an unmanaged early successional floodplain forest of approximately 0.55 acres. It is located along the southern edge of Lake Bernard Frank. The soil for this stand is Blocktown channery silt loam, 15 to 25 percent slopes (116D). Blocktown channery silt loam soils have a hydrologic classification of C, and are a very rocky, well-drained soil type.

Stand 1 has an estimated 3 tree species and 43 trees per acre. The average DBH of the dominant trees in this forest stand is 7-19.9" inches. Silver maple (*Acer saccharinum*) and Red maple (*Acer rubrum*) are both the dominant and a co-dominant species. Green ash (*Fraxinus pennsylvanica*) was the third tree species within the forest stand, but was observed far less frequently than the maples. The average cover of the understory was approximately 12% and consisted solely of Red maples. Herbaceous and woody ground coverage within Forest Stand 1

was about 62% and primarily composed of Japanese stiltgrass (*Microstegium vimineum*) and Multiflora rose (*Rosa multiflora*). The trees in Stand 1 appear to be in good condition. One (1) significant tree was identified within Stand 1; no specimen tree candidates were identified. This stand has a Good Forest Structure rating with a value of 9. This Good Forest Structural diversity and its value as a buffer qualifies Stand 1 as a Moderate priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.2. FOREST STAND 2

Forest Stand 2 is an unmanaged mid-successional upland forest with approximately 2.42acres within the study area borders. It is located near the southern end of the study area and borders Lake Bernard Frank on its western side. The soil for this stand is Blocktown channery silt loam, 15 to 25 percent slopes (116D). Blocktown channery silt loam soils have a hydrologic classification of C, and are a very rocky, well-drained soil type. Vegetation native to the area such as Red Oak (*Quercus rubra*), Tulip poplar (*Liriodendron tulipifera*), Ironwood (*Carpinus caroliniana*), American beech (*Fagus grandifolia*), and Mockernut hickory (*Carya alba*) were observed during the site inspection.

Stand 2 has an estimated 12 tree species and 387 trees per acre. The average DBH of the dominant trees in this forest stand is greater than 20 inches. Tulip poplar and Sycamore (*Platanus occidentalis*) comprise the dominant species in Forest Stand 2. Tulip poplar and Red oak are the co-dominant species. Numerous Blackgum (*Nyssa sylvatica*), American beech, and Hickories (*Carya* spp.) are also present. Understory species include Ironwood, American beech, and American holly (*Ilex opaca*), but this layer is relatively lacking in this forest stand, with an average coverage of only 16 percent. Herbaceous and woody ground cover was primarily composed of Japanese honeysuckle (*Lonicera japonica*), Japanese barberry (*Berberis thunbergii*), Partridgeberry (*Michella repens*), and Japanese stiltgrass.

The trees in Stand 2 appear to be in a good condition. A total of 4 specimen tree candidates and an additional 17 significant trees were identified within Stand 2. This stand has a Priority Forest Structure rating with a value of 12. This Priority Forest Structural diversity and the presence of significant and specimen tree candidates within the project study area qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.3. FOREST STAND 3

Forest Stand 3 is an unmanaged mid-successional upland forest with approximately 1.97acres within the study area borders. It is located near the southern end of the study area and borders Lake Bernard Frank on its western side. The soil for this stand is Blocktown channery silt loam, 15 to 25 percent slopes (116D). Blocktown channery silt loam soils have a hydrologic classification of C, and are a very rocky, well-drained soil type. Vegetation native to the area such as Tulip poplar, Red oak, and White oak (*Quercus alba*) were observed during the site inspection.

Stand 3 has an estimated 10 tree species and 360 trees per acre. The average DBH of the dominant trees in this forest stand is greater than 20 inches. White oak and Tulip poplar are the dominant species in Forest Stand 3; Red oak and White oak are the co-dominant species. The understory was relatively sparse (on average coverage was 36%) and mainly consisted of Ironwood, Flowering dogwood (*Cornus florida*), and Red maple. The sparse herbaceous and woody ground cover within Forest Stand 3 was primarily composed of Japanese honeysuckle and Multiflora rose.

The trees in Stand 3 appear to be in a good condition. A total of 12 specimen tree candidates and an additional 11 significant trees were identified within Stand 3. This stand has a Priority Forest Structure rating with a value of 12. This Priority Forest Structural diversity and the presence of significant and specimen tree candidates within the project study area qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.4. FOREST STAND 4

Forest Stand 4 is an unmanaged mid-successional upland forest with approximately 2.34acres within the study area borders. It is located near the southern end of the study area and borders Lake Bernard Frank on its western side. The majority of the soil for this stand is Blocktown channery silt loam, 15 to 25 percent slopes (116D). Blocktown channery silt loam soils have a hydrologic classification of C, and are a very rocky, well-drained soil type. This Stand has a relatively less dense canopy, a lot of downed woody debris, and a scrub/shrub layer that includes many invasive plant species. Stand 4 has an estimated 8 tree species and 235 trees per acre. The average DBH of the dominant trees in this forest stand is greater than 20 inches. Tulip poplar is the dominant species in Forest Stand 4. Other tree species present included Virginia pine (*Pinus virginiana*), Mockernut hickory, Red maple, and Ironwood. The understory was relatively sparse (on average coverage was 36%) and mainly consisted of American beech, American holly, Spicebush (*Lindera benzoin*), and Viburnums. The herbaceous and woody ground coverage within Forest Stand 4 was primarily composed of Viburnums and Japanese barberry.

The trees in Stand 4 appear to be in a good condition. A total of 8 specimen tree candidates and an additional 22 significant trees were identified within Stand 4. This stand has a Priority Forest Structure rating with a value of 12. This Priority Forest Structural diversity and the presence of significant and specimen tree candidates within the project study area qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.5. FOREST STAND 5

Forest Stand 5 is an unmanaged mid-successional upland forest with approximately 4.12acres within the study area borders. The majority of soil for this stand is Gaila silt loam, 3 to 8 percent slopes. Gaila silt loam has a B classification and is a very deep, well-drained soil. This stand has a canopy of predominantly Tulip poplars, much downed woody debris due to wind damage in storms, and areas that include many vines and invasives. Stand 5 has an estimated 3 tree species and 233 trees per acre. The average DBH of the dominant trees in this forest stand is 7-19.9 inches. Tulip poplar is both the dominant and co-dominant species. The next most common tree species in Stand 5 is Osage orange (*Maclura pomifera*). Species observed in the understory include Flowering dogwood, Spicebush, and Osage orange. The herbaceous and woody ground coverage was on average 68% within Forest Stand 5 was primarily composed of Multiflora rose and Japanese honeysuckle.

The trees in Stand 5 appear to be in a good condition. A total of 8 specimen tree candidates and an additional 8 significant trees were identified within Stand 5. This stand has a Good Forest Structure rating with a value of 9. This Good Forest Structural diversity and the presence of significant and specimen tree candidates within the project study area qualify this as

a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.6. FOREST STAND 6

Forest Stand 6 is an unmanaged early to mid-successional area with approximately 1.87acres within the study area borders. It is mostly a low-lying area containing an intermittent stream (WUS E). The soils for this area are Baile silt loam, 0 to 3 percent slopes (6A) and Occoquan loam 8 to 15 percent slopes (17C). Baile silt loams have a hydrologic classification of D, and Occoquan loam is classified as a B soil. Baile silt loam is poorly drained soil type, and Occoquan loam is well drained.

Stand 6 has an estimated 8 tree species and 255 trees per acre. The average DBH of the dominant trees in this forest stand is greater than 20 inches. Sycamores are scattered throughout as a dominant in the canopy. Red maple, Silver maple, and Green ash are abundant. Species observed in the understory include Spicebush, Osage orange, and Multiflora rose. The herbaceous and woody ground coverage was on average 68% within Forest Stand 5 was primarily composed of Japanese honeysuckle and grasses that were unidentifiable due to time of year.

The trees in Stand 6 appear to be in a good condition. A total of 3 specimen tree candidates and an additional 5 significant trees were identified within Stand 6. This stand has a Priority Forest Structure rating with a value of 11. This Priority Forest Structural diversity, the presence of an intermittent stream, and the presence of significant and specimen tree candidates within the project study area qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.7. FOREST STAND 7

Forest Stand 7 is an unmanaged mid-successional upland forest with approximately 0.65acres within the study area borders. It begins just north of the entrance at Trailway Drive. The soil for this stand is Blocktown channery silt loam, 15 to 25 percent slopes (116D). Blocktown channery silt loam soils have a hydrologic classification of C, and are a very rocky, well-drained soil type. In this Stand, tree, understory, and herbaceous and woody ground cover layers are all present. Mature Tulip poplars and Sycamores are scattered throughout the area. Stand 7 has an estimated 15 tree species and 240 trees per acre. The average DBH of the dominant trees in this forest stand is greater than 20 inches. Tulip poplar is the both the dominant and co-dominant species. The next most common tree species in Stand 5 is Sycamore. Species observed in the understory include Flowering dogwood, Spicebush, Ironwood and White oak. The herbaceous and woody ground coverage was on average 30% within Forest Stand 7 was primarily composed of Multiflora rose and Japanese honeysuckle.

The trees in Stand 7 appear to be in a good condition. A total of 2 specimen tree candidates and an additional 2 significant trees were identified within Stand 5. This stand has a Priority Forest Structure rating with a value of 13. This Priority Forest Structural diversity, the presence of significant and specimen tree candidates within the project study area qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.8. FOREST STAND 8

Forest Stand 8 is an unmanaged mid-successional upland forest with approximately 7.39acres within the study area borders. It is a large forest stand on either side of the existing trail on the east side at the head of Lake Bernard Frank. The majority of the soil for this property is Blocktown channery silt loam, 15 to 25 percent slopes (116D). Blocktown channery silt loam soils have a hydrologic classification of C, and are a very rocky, well-drained soil type. In this Stand tree, understory, and herbaceous and woody ground cover layers are all present. Mature Tulip Poplars and Red Oaks are scattered throughout the area. Recent wind damage added to woody debris on ground.

Stand 8 has an estimated 14 tree species and 310 trees per acre. The average DBH of the dominant trees in this forest stand is greater than 20 inches. Tulip poplar is the dominant species with Red oak the co-dominant species. Numerous Hickories were also observed. Species observed in the understory include Ironwood, American holly, Mountain laurel (*Kalmia latifolia*) and Eastern red cedar (*Juniperus virginiana*). The herbaceous and woody ground coverage was on average 5% within Forest Stand 8 and was primarily composed of Japanese barberry.

The trees in Stand 8 appear to be in a good condition. A total of 21 specimen tree candidates and an additional 46 significant trees were identified within Stand 8. This stand has a Priority Forest Structure rating with a value of 12. This Priority Forest Structural diversity and

the presence of significant and specimen tree candidates within the project study area qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.9. FOREST STAND 9

Forest Stand 9 is an unmanaged mid-successional upland forest with approximately 1.35acres within the study area borders. It is an upland area east of Rock Creek North Branch. The soils for this stand are Blocktown channery silt loam, 15 to 25 percent slopes (116D) and Gaila silt loam, 8 to 15 percent slopes (1C). Blocktown channery silt loam soils have a hydrologic classification of C and Gaila silt loam has a B classification. Blocktown channery silt loam is a very rocky, well-drained soil type and the Gaila silt loam is a very deep, well drained soil.

Stand 9 has an estimated 7 tree species and 210 trees per acre. The average DBH of the dominant trees in this forest stand is greater than 20 inches. Tulip poplar and Sycamore are the dominant species with Tulip poplar and Green ash the co-dominant species. This stand has a rather open canopy, a scrubby understory and herbaceous and woody ground cover is made up of many invasives such as Japanese barberry, Multiflora rose, Japanese stiltgrass, and Smilax (*Smilax rotundifolia*). There is a high presence of vines such as Poison ivy (*Toxicodendron radicans*) and Grape (*Vitis* spp.). Other species observed in the understory include Ironwood, Flowering dogwood, and Spicebush.

The trees in Stand 9 appear to be in a good condition. One (1) specimen tree candidate and an additional 2 significant trees were identified within Stand 8. This stand has a Priority Forest Structure rating with a value of 12. This Priority Forest Structural diversity qualifies this as a Moderate priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.10. FOREST STAND 10

Forest Stand 10 is an unmanaged early to mid-successional upland forest with approximately 0.78-acres within the study area borders. It is an upland area east of Rock Creek North Branch. The soil for this stand is Blocktown channery silt loam, 15 to 25 percent slopes (116D). Blocktown channery silt loam soils has a hydrologic classification of C and is a very rocky, well-drained soil type.

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Stand 10 has an estimated 6 tree species and 230 trees per acre. The average DBH of the dominant trees in this forest stand is 7-19.9 inches. Tulip poplar is the dominant and co-dominant species. This stand has a rather open canopy, a scrubby understory and herbaceous and woody ground cover is made up of many invasives such as Japanese barberry, Multiflora rose, and Smilax. There is a high presence of vines such Grape. Other species observed in the understory include Ironwood, Flowering dogwood, American holly and Autumn-olive (*Elaeagnus umbellata*).

The trees in Stand 10 appear to be in fair to good condition. A total of 2 specimen tree candidates and an additional 3 significant trees were identified within Stand 10. This stand has a Good Forest Structure rating with a value of 8. This Priority Forest Structural diversity qualifies this as a Moderate priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.11. FOREST STAND 11

Forest Stand 11 is an unmanaged mid-successional upland forest with approximately 2.15-acres within the study area borders. It is located on either side of the existing trail adjacent to Rock Creek North Branch. The soil for this stand is largely Blocktown channery silt loam, 15 to 25 percent slopes (116D) with a small section extending into Hatboro silt loam, 0 to 3 percent slopes (54A). Blocktown channery silt loam soils has a hydrologic classification of C and Hatboro silt loam is classified as a D soil. Blocktown channery silt loam is a very rocky, well-drained soil type and Hatboro is shallow soil that is frequently flooded. Tree, understory, and herbaceous and woody ground cover layers are all present in this stand.

Stand 11 has an estimated 9 tree species and 300 trees per acre. The average DBH of the dominant trees in this forest stand is greater than 20 inches. Tulip poplar and Red oak are the dominant species. Numerous Blackgum and Hickory trees were also observed. Species observed in the understory include Ironwood, Red maple, and American beech. The herbaceous and woody ground coverage was on average 64% within Forest Stand 11 and was primarily composed of Christmas fern (*Polystichum acrostichoides*) and Sedge (*Carex spp.*).

The trees in Stand 11 appear to be in a good condition. A total of 3 specimen tree candidates and an additional 25 significant trees were identified within Stand 11. This stand has a Priority Forest Structure rating with a value of 12. This Priority Forest Structural diversity, the

presence of a wetland in this stand, and the presence of significant and specimen tree candidates within the project study area qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.12. FOREST STAND 12

Forest Stand 12 is an unmanaged early-successional area of approximately 0.70-acres within the study area. It is located along Lake Bernard Frank north of Trailway Drive. The soil for this stand is largely Blocktown channery silt loam, 15 to 25 percent slopes (116D). Blocktown channery silt loam soils has a hydrologic classification of C soil. Blocktown channery silt loam is a very rocky, well-drained soil type. The canopy is thin and dominated by very few large trees, such as Black cherry (*Prunus serotina*) and Tulip poplar, which are sparsely scattered. Understory/co-dominants of Red maple, Eastern red cedar and other early successional tree species are common. Groundcover mainly consists of Japanese honeysuckle. Stand 12 has an estimated 7 tree species and 280 trees per acre. The average DBH of the dominant trees in this forest stand is 7-19.9 inches.

The trees in Stand 12 appear to be in a good condition. One (1) specimen tree candidate and an additional 2 significant trees were identified within Stand 12. This stand has a Good Forest Structure rating with a value of 7. This Good Forest Structural diversity, its value as a buffer, and the presence of significant and specimen tree candidates within the project study area qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.13. FOREST STAND 13

Forest Stand 13 is an unmanaged mid-successional upland forest with approximately 3.51-acres within the study area borders. The soil for this stand is Blocktown channery silt loam, 25 to 45 percent slopes (116E) and Hatboro silt loam, 0 to 3 percent slopes (54A). Blocktown channery silt loam soils has a hydrologic classification of C and Hatboro silt loam is classified as a D soil. Blocktown channery silt loam is a very rocky, well-drained soil type and Hatboro is shallow soil that is frequently flooded.

Stand 13 contains large dominant mature White oaks in the canopy along with Tulip poplars, Mockernut hickory and Blackgums. The understory is comprised of numerous American beech, Ironwood, and some Mountain laurel. The herbaceous and woody ground coverage was sparse. Stand 13 has an estimated 8 tree species and 280 trees per acre. The average DBH of the dominant trees in this forest stand is greater than 20 inches.

The trees in Stand 13 appear to be in a good condition. A total of 7 specimen tree candidates and an additional 16 significant trees were identified within Stand 13. This stand has a Priority Forest Structure rating with a value of 11. This Priority Forest Structural diversity and the presence of significant and specimen tree candidates within the project study area qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.14. FOREST STAND 14

Forest Stand 14 is an unmanaged mid-successional upland forest with approximately 2.26-acres within the study area borders. The soil for this stand is Blocktown channery silt loam, 15 to 25 percent slopes (116D) and Hatboro silt loam, 0 to 3 percent slopes (54A). Blocktown channery silt loam soils has a hydrologic classification of C and Hatboro silt loam is classified as a D soil. Blocktown channery silt loam is a very rocky, well-drained soil type and Hatboro is shallow soil that is frequently flooded.

Stand 14 is predominantly Tulip poplars with some large mature Oaks and Sycamores scattered within. The understory is comprised of Ironwood, Flowering dogwood, Spicebush, and Eastern red cedars, and species observed in the herbaceous and woody groundcover include Japanese barberry and Sedge. Stand 14 has an estimated 11 tree species and 307 trees per acre. The average DBH of the dominant trees in this forest stand is 7-19.9 inches.

The trees in Stand 14 appear to be in a good condition. A total of 15 specimen tree candidates and an additional 10 significant trees were identified within Stand 14. This stand has a Priority Forest Structure rating with a value of 11. This Priority Forest Structural diversity and the presence of significant and specimen tree candidates within the project study area qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.15. FOREST STAND 15

Forest Stand 15 is an unmanaged early-successional upland area with approximately 1.56-acres within the study area borders. The soils for this stand are Blocktown channery silt loam, 15 to 25 percent slopes (116D) and Gaila silt loam, 8 to 15 percent slopes (1C). Blocktown

channery silt loam soils have a hydrologic classification of C and Gaila silt loam has a B classification. Blocktown channery silt loam is a very rocky, well-drained soil type and the Gaila silt loam is a very deep, well-drained soil.

Stand 15 has a rather open canopy and is comprised mostly of Eastern red cedars, with some dominant Tulip poplars and Sycamores scattered throughout. Downed woody debris and vines present such as Grape and Poison ivy are abundant. Species observed in the understory include Spicebush and Japanese barberry. Species observed in the herbaceous and woody groundcover include unidentifiable grasses and invasives such as Japanese stiltgrass, Japanese honeysuckle, and Garlic mustard (*Alliaria petiolata*). Stand 15 has an estimated 7 tree species and 350 trees per acre. The average DBH of the dominant trees in this forest stand is 7-19.9 inches.

The trees in Stand 15 appear to be in a fair condition. A total of 2 specimen tree candidates and an additional 3 significant trees were identified within Stand 14. This stand has a Good Forest Structure rating with a value of 9. This Good Forest Structural diversity qualifies this as a Moderate priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.16. FOREST STAND 16

Forest Stand 16 is an unmanaged early-successional floodplain forest with approximately 0.92-acres within the study area borders. The soil for this stand is largely Blocktown channery silt loam, 25 to 45 percent slopes (116E) and Hatboro silt loam, 0 to 3 percent slopes (54A). Blocktown channery silt loam soils has a hydrologic classification of C and Hatboro silt loam is classified as a D soil. Blocktown channery silt loam is a very rocky, well-drained soil type and Hatboro is shallow soil that is frequently flooded.

Stand 16 has a rather open canopy and is comprised mostly of Red maples and Green ash, with some dominant Sycamores scattered without. Species observed in the understory include Spicebush and Japanese barberry. The herbaceous and woody groundcover is predominantly unidentifiable grasses and Japanese honeysuckle. Stand 16 has an estimated 7 tree species and 280 trees per acre. The average DBH of the dominant trees in this forest stand is greater than 20 inches.

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The trees in Stand 16 appear to be in a good condition. Three (3) specimen tree candidates and no significant trees were identified within Stand 14. This stand has a Priority Forest Structure rating with a value of 11. This Priority Forest Structural diversity, and the presence of an intermittent stream (WUS A) and Wetland AA and their respective buffers qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.17. FOREST STAND 17

Forest Stand 17 is an unmanaged early-successional forest with approximately 1.60-acres within the study area borders. The soil for this stand is largely Blocktown channery silt loam, 15 to 25 percent slopes (116D) and Occoquan loam, 8 to 15 percent slopes (17C). Blocktown channery silt loam soils has a hydrologic classification of C and Occoquan loam is classified as a B soil. Blocktown channery silt loam is a very rocky, well-drained soil type and Occoquan loam is well drained.

Red maple and Black cherry are the dominant species in the canopy of Stand 17. Species observed in a sparse understory include Spicebush, Green ash, and Japanese barberry. The herbaceous and woody groundcover is predominantly Garlic mustard and Japanese stiltgrass. There is a rather high presence of vines such as Wisteria and Grape smothering trees in this stand. Stand 16 has an estimated 11 tree species and 260 trees per acre. The average DBH of the dominant trees in this forest stand is 7-19.9 inches.

The trees in Stand 17 appear to be in a good condition. A total of 6 specimen tree candidates and an additional 2 significant trees were identified within Stand 17. This stand has a Good Forest Structure rating with a value of 11. This Good Forest Structural diversity, and the presence of an intermittent stream and wetland and their respective buffers qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.18. FOREST STAND 18

Forest Stand 18 is an unmanaged mid-successional forest with approximately 0.32-acres within the study area borders. Wetlands A and B are within this stand. The soil for this stand is Hatboro silt loam, 0 to 3 percent slopes (54A) and Occoquan loam, 8 to 15 percent slopes (17C). Hatboro silt loam soils have a hydrologic classification of D and Occoquan loam is classified as a B soil. Hatboro is shallow soil that is frequently flooded and Occoquan loam is well drained.

Box elder (*Acer negundo*) and Green ash are the dominant species and Red maple is a codominant species in the canopy of Stand 18. Species observed in a sparse understory include Shingle oak (*Quercus imbricaria*) and Red maple. The herbaceous and woody groundcover is predominantly Common woodreed (*Cinna arundinacea*), Garlic mustard, and Japanese stiltgrass. Stand 18 has an estimated 3 tree species and 185 trees per acre. The average DBH of the dominant trees in this forest stand is 7-19.9 inches.

The trees in Stand 18 appear to be in a good condition. Two (2) specimen tree candidates and no significant trees were identified within Stand 18. This stand has a Good Forest Structure rating with a value of 8. This Good Forest Structural diversity and the presence of Wetland A and its buffer qualify this as a High priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.19. FOREST STAND 19

Forest Stand 19 is an unmanaged mid- successional forest of approximately 0.50-acres within the study area. The soil for this stand is Blocktown channery silt loam, 15 to 25 percent slopes (116D) and Glenelg silt loam, 8 to 15 percent slopes (2C). Blocktown channery silt loam soils has a hydrologic classification of C and Glenelg silt loam is classified as a B soil. Blocktown channery silt loam is a very rocky, well-drained soil type and Glenelg is well drained.

Red maple and Black cherry are the dominant species in Stand 19. Species observed in the understory include Spicebush, Japanese barberry, and Flowering dogwood. The herbaceous and woody groundcover is predominantly Virginia creeper (*Parthenocissus quinquefolia*) and Grape. Stand 19 has an estimated 6 tree species and 350 trees per acre. The average DBH of the dominant trees in this forest stand is 7-19.9 inches.

The trees in Stand 19 appear to be in good condition. No specimen tree candidates or significant trees were identified within Stand 19. This stand has a Good Forest Structure rating with a value of 9. This Good Forest Structural diversity qualifies this as a Moderate priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.B.20. FOREST STAND 20

Forest Stand 20 is an unmanaged mid-successional forest of approximately 0.85-acres within the study area. The soil for this stand is Blocktown channery silt loam, 15 to 25 percent slopes (116D) and Glenelg silt loam, 8 to 15 percent slopes (2C). Blocktown channery silt loam

soils has a hydrologic classification of C and Glenelg silt loam is classified as a B soil. Blocktown channery silt loam is a very rocky, well-drained soil type and Glenelg is well drained.

Kentucky coffeetree (*Gymnocladus dioicus*) and Honey locust (*Gleditsia triacanthos*) are the dominant species and Black walnut (*Juglans nigra*) is a co-dominant species in the canopy of Stand 20. Species observed in the understory include Japanese barberry, Spicebush, and Bush honeysuckle (*Lonicera maackii*). The herbaceous and woody groundcover is predominantly Garlic mustard and Japanese stiltgrass. Stand 20 has an estimated 6 tree species and 250 trees per acre. The average DBH of the dominant trees in this forest stand is 7-19.9 inches.

The trees in Stand 20 appear to be in a good condition. One (1) significant tree was identified within Stand 20. This stand has a Good Forest Structure rating with a value of 13. This Good Forest Structural diversity qualifies this as a Moderate priority area by Montgomery County standards outlined in Trees: Approved Technical Manual.

III.C. WETLAND INVESTIGATION

According to the National Wetlands Inventory (NWI) maps, four (4) wetlands were within our study area. Our on-site investigation determined that of these, two (2) were confirmed as wetlands, and an additional six (6) wetlands were present, to make a total of eight (8) wetlands within the project study area. Each Wetland is briefly described below. See Forest Stand Delineation Map for locations. Wetlands were classified according to the Cowardin system. The wetland identification procedures were conducted in accordance with the US Army Corps of Engineers Wetland Delineation Manual (USACE 1987) and the Regional Supplement for Eastern Mountains and Piedmont Region (USACE EMP). USACE EMP Wetland Determination Forms were filled out for each upland and wetland sample location and are presented in Appendix E of this report

III.C.1. WETLAND A

While not identified on the NWI map, our on-site investigation determined that Wetland A met all three wetland criteria (Appendix E). Wetland A is classified as a palustrine, broadleaved deciduous forest system with mineral soil that is intermittently flooded/temporary (PFO1Wn). It is a floodplain wetland near a stream remnant, soil saturation was present in the test pit at a depth of about 15 inches. The dominant vegetation includes Common woodreed (*Cinna arundinacea* FACW) and Skunk-cabbage (*Symplocarpus foetidus* OBL). The hydric soil indicator is a thin dark surface (S9).

III.C.2. WETLAND B

Wetland B was not identified on the NWI map, but our on-site investigation determined that it met all three wetland criteria (Appendix E). Wetland B is classified as a palustrine, persistent emergent system with mineral soil that is intermittently flooded/temporary (PEM1Wn). Skunk-cabbage (OBL) is the dominant plant species. The hydric soil indicator is a thin dark surface (S9).

III.C.3. WETLAND C

Wetland C was not identified on the NWI map, but our on-site investigation determined that it met all three wetland criteria (Appendix E). Wetland C is classified as a palustrine, broad-leaved deciduous forest system with mineral soil that is seasonally flooded/saturated (PFO1En). Dominant vegetation includes Arrow-leaf tearthumb (*Persicaria sagittata* OBL), Sweet wood-reed (FACW), and Broad-leaf cat-tail (*Typha latifolia* OBL). Free water was observed in the soil test pit at about 14 inches as were oxidized rhizopheres on living roots. The hydric soil indicator is sandy redox (S5).

III.C.4. WETLAND AA

Wetland AA was not identified on the NWI map, but our on-site investigation determined that it met all three wetland criteria (Appendix E). Wetland AA is classified as a palustrine, broad-leaved deciduous forest system with mineral soil that is intermittently flooded/temporary (PFO1Wn). It is a low area in a floodplain that receives surface water from a back-water ox-bow along the toe of slope to the northwest. Dominant vegetation includes Red maple (FAC) and Deer-tongue grass (*Dichanthelium clandestinum* FAC). Hydrologic indicators present include oxidized rhizopheres on living roots and reduced iron in the soil. The hydric soil indicator is redox depressions (F8).

III.C.5. WETLAND BB

Wetland BB was not identified on the NWI map, but our on-site investigation determined that it met all three wetland criteria (Appendix E). Wetland BB is classified as a palustrine, broad-leaved deciduous forest system with mineral soil that is intermittently flooded/temporary (PFO1Wn). It is a small depression created by Park Drive. It collects run-off from Trailway Drive, which drains to a culvert under Park Drive. Dominant vegetation includes Red maple (FAC) and a grass that could not be positively indentified due to the time of investigation. Despite lack of identifiable hydric herbaceous indicators, the strong hydrologic and soil indicators with the tree species indicated this area is a wetland. Hydrologic indicators present include surface water in the area, water-stained leaves, and drift deposits. Hydric soil indicators present are stratified layers (A5) and a depleted matrix (F3). Soil also exhibits evidence of historic hydric characteristics with water- born layering from more recent disturbance.

III.C.6. WETLAND CC

Wetland CC was identified on the NWI map and classified as a palustrine, persistent emergent system that is seasonally flooded and has been diked or impounded (PEM1Ch). Our on-site investigation confirmed this and determined that it met all three wetland criteria (Appendix E). It is a floodplain wetland running between the edge of Lake Bernard Frank and a steep slope along Park Drive. Dominant vegetation includes Red maple (FAC) and a grass that could not be positively indentified due to the time of investigation. Despite lack of identifiable hydric herbaceous indicators, the strong hydrologic and soil indicators with the tree species indicated this area is a wetland. Hydrologic indicators present include soil saturation at a depth of about 3 inches and free water in the soil pit of about 12 inches, water-stained leaves, and drift deposits. Hydric soil indicator present is stratified layers (A5).

III.C.7. WETLAND DD

Wetland DD was identified on the NWI map and classified as a seasonally flooded lacustrine littoral system that had been diked or impounded with an unconsolidated shore (L2USCh). Our on-site investigation determined that it met all three wetland criteria (Appendix E). It is classified it as a palustrine, broad-leaved deciduous forest system with mineral soil that is intermittently flooded/temporary (PFO1Wn). It is a floodplain wetland. Dominant vegetation includes Black willow (*Salix nigra* OBL) and Arrow-leaf tearthumb (OBL). Hydrologic indicators present include saturation at the soil surface, water-stained leaves, and oxidized rhizopheres on living roots. Hydric soil indicators present are a hydrogen sulfide odor (A4) and a depleted matrix (F3).

III.C.8. WETLAND EE

Wetland EE was not identified on the NWI map. Our on-site investigation determined that it met all three wetland criteria (Appendix E), and classified it as a palustrine, broad-leaved deciduous forest system with mineral soil that is intermittently flooded/temporary (PFO1Wn). It is a floodplain wetland along the North Branch. Dominant vegetation includes Red maple (FAC) and Skunk-cabbage (OBL). Hydrologic indicators present include saturation at the soil surface, water-stained leaves, and oxidized rhizopheres on living roots. Hydric soil indicators present are a hydrogen sulfide odor (A4) and a depleted matrix (F3).

III.D. WATERS OF THE US INVESTIGATION

Wetlands and Waters of the US (WUS) were classified according to the Cowardin system and WUS were identified by name and hydrologic class.

III.D.1. WUS A

WUS A has traits common to a riverine, upper perennial (R3UB1) stream with an unconsolidated bottom and is identified as Rock Creek North Branch. The approximate average depth and width are 1 foot and 15 feet respectively. Much of the stream channel banks are well vegetated. The substrate of the stream channel generally consists cobble and gravel with some large boulders.

III.D.2. WUS B

WUS B has traits common to a riverine, intermittent stream (R4SB4). The approximate average depth and width are 3-6 inches and 4-5 feet respectively. Much of the stream channel banks are steep but well vegetated. The substrate of the streambed generally consists of sand with some gravel.

III.D.3. WUS C

WUS C has traits common to a riverine, intermittent stream (R4SB3). The approximate average depth and width are 6-12 inches and 15 feet respectively. Much of the stream channel banks are moderately incised but well vegetated. The substrate of the streambed generally consists of cobble- gravel with some boulders.

III.D.4. WUS D

WUS D has traits common to a riverine, intermittent stream (R4SB3). There was no water present at the time of the investigation. The average width is approximately 4 feet. Much

of the stream channel banks are incised and vertical and moderately vegetated. The substrate of the streambed generally consists of cobble-gravel.

III.D.5. WUS E

WUS E has traits common to a riverine, intermittent stream (R4SB3). There was no water present at the time of the investigation. The approximate average depth and width are 3-6 inches and 3-5 feet respectively. Much of the stream channel banks are incised, eroding, and poorly vegetated. The substrate of the streambed generally consists of cobble-gravel, but transitions to gravel-sand downstream.

III.D.6. WUS F

WUS F is a stream that begins at a culvert north of the ICC with traits common to a riverine, intermittent (R4SB4) stream. The approximate average depth and width are 1-3 inches and 1-3 feet respectively. Much of the stream channel banks are vegetated. The substrate of the stream channel generally consists of sand with some cobble and gravel.

IV. APPENDIX A – SIGNIFICANT AND SPECIMEN TREE CANDIDATE TABLE

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
1	28	Sycamore	Platanus occidentalis	Fair	Uneven crown, vines, 10 degree lean
2	28	Sycamore	Platanus occidentalis	Fair	Lots of vines, dead branches in crown, point taken 4' due S of tree
3	28	White oak	Quercus alba	Good	
4	41	White oak	Quercus alba	Fair	10 degree lean, dead branches, poison ivy
5	26	Sycamore	Platanus occidentalis	Fair	Covered in vines, but otherwise looks good, point taken 1' E
6	27	Sycamore	Platanus occidentalis	Fair	Greater than 10 degree lean, half of roots exposed in stream
7	29	Korean pine	Pinus koraiensis	Fair	Neighbor tree fell and took half of the limbs
8	24	Tulip poplar	Liriodendron tulipifera	Good	
9	44	Green ash	Fraxinus pennsylvanica	Mostly dead	11 main branch missing, covered in poison ivy
10	40	Black walnut	Juglans nigra	Fair	Covered in vines, dead branches throughout
11	27	Tulip poplar	Liriodendron tulipifera	Good	
12	47	Tulip poplar	Liriodendron tulipifera	Good	
13	32	Red oak	Quercus rubra	Poor	Half of crown missing, remainder has dead branches
14	26	Tulip poplar	Liriodendron tulipifera	Poor	Uneven crown, covered in ivy, 10 degree lean
15	26	Red maple	Acer rubrum	Good	
16	28	Tulip poplar	Liriodendron tulipifera	Good	
17	25	Cottonwood	Populus deltoides	Good	
18	45	Tulip poplar	Liriodendron tulipifera	Good	
19	26	Tulip poplar	Liriodendron tulipifera	Good	
20	29	Sycamore	Platanus occidentalis	Excellent	
21	26	Red maple	Acer rubrum	Good	
22	25	Tulip poplar	Liriodendron tulipifera	Fair	1 trunk of double, uneven crown, 5 degree lean
23	41	White oak	Quercus alba	Excellent	
24	44	White oak	Quercus alba	Poor	Poison ivy covered, 1 trunk dead
25	29	Red oak	Quercus rubra	Good	
26	32	White oak	Quercus alba	Good	
27	25	Sycamore	Platanus occidentalis	Good	
28	24	Sycamore	Platanus occidentalis	Good	
29	33	White oak	Quercus alba	Good	
30	33	White oak	Quercus alba	Good	
31	33	White oak	Quercus alba	Fair	Broken branches, leaning from growing under #29
32	44	Tulip poplar	Liriodendron tulipifera	Good	
33	35	Tulip poplar	Liriodendron tulipifera	Good	

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
34	28	Tulip poplar	Liriodendron tulipifera	Excellent	
35	24	Tulip poplar	Liriodendron tulipifera	Excellent	
36	40	Black walnut	Juglans nigra	Poor	Covered in ivy, broken branches
37	25	Sycamore	Platanus occidentalis	Fair	Covered in ivy
38	25	Sycamore	Platanus occidentalis	Fair	Covered in ivy, strong lean
39	26	Korean pine	Pinus koraiensis	Excellent	
40	24	Red maple	Acer rubrum	Fair	
41	27	Scarlet oak	Quercus coccinea	Good	
42	27	Scarlet oak	Quercus coccinea	Good	
43	25	Scarlet oak	Quercus coccinea	Fair	Strong lean from growing under #41
44	30	White oak	Quercus alba	Excellent	
45	27	White oak	Quercus alba	Fair	14 degree lean but otherwise healthy
46	26	Pignut hickory	Carya glabra	Fair	Hollow
47	25	White oak	Quercus alba	Good	
48	30	Red oak	Quercus rubra	Fair	Several dead branches in crown
49	33	White oak	Quercus alba	Good	
50	28	White oak	Quercus alba	Good	
51	31	Tulip poplar	Liriodendron tulipifera	Good	
52	25	Tulip poplar	Liriodendron tulipifera	Excellent	
53	27	Pignut hickory	Carya glabra	Good	
54	35	Korean pine	Pinus koraiensis	Excellent	
55	31	Korean pine	Pinus koraiensis	Excellent	
56	31	River birch	Betula nigra	Good	
57	36	Red oak	Quercus rubra	Excellent	
58	27	Korean pine	Pinus koraiensis	Good	
59	34	Korean pine	Pinus koraiensis	Poor	Trunk splitting and rotting to base
60	25	Tulip poplar	Liriodendron tulipifera	Good	
61	38	Southern red oak	Quercus falcata	Good	
62	29	White oak	Quercus alba	Excellent	
63	33	Scarlet oak	Quercus coccinea	Excellent	
64	31	Scarlet oak	Quercus coccinea	Excellent	
65	32	Mockernut hickory	Carya alba	Excellent	
66	25	Mockernut hickory	Carya alba	Fair	Lopsided crown, lean toward open water
67	27	Mockernut hickory	Carya alba	Fair	Broken branches in crown
68	26	Red oak	Quercus rubra	Poor	9 degree lean, uneven crown, broken branches in crown
69	27	Tulip poplar	Liriodendron tulipifera	Good	

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
70	27	Mockernut hickory	Carya alba	Excellent	
71	25	Tulip poplar	Liriodendron tulipifera	Good	
72	29	Pignut hickory	Carya glabra	Excellent	
73	29	Red maple	Acer rubrum	Good	
74	29	Red oak	Quercus rubra	Poor	Broken/dead branches in crown
75	25	Tulip	Liriodendron tulipifera	Good	
76	35	Red oak	Quercus rubra	Good	
77	26	Red oak	Quercus rubra	Fair	Dead branches in crown
78	37	Red oak	Quercus rubra	Good	
79	30	White oak	Quercus alba	Poor	Half of crown missing
80	26	Green ash	Fraxinus pennsylvanica	Good	
81	40	White oak	Quercus alba	Fair	Uneven crown, strong lean in crown
82	29	Red oak	Quercus rubra	Good	
83	31	Pignut hickory	Carya glabra	Fair	Double trunk above DBH
84	24	Tulip poplar	Liriodendron tulipifera	Good	
85	26	Tulip poplar	Liriodendron tulipifera	Good	
86	28	Tulip poplar	Liriodendron tulipifera	Good	
87	44	White oak	Quercus alba	Fair	Broken branches in crown
88	33	Red oak	Quercus rubra	Good	
89	30	Tulip poplar	Liriodendron tulipifera	Good	
			Liriodendron tulipifera	Good	
90	25	Tulip poplar	Linduentation taliphera		
90 91	25 31	Tulip poplar Red oak	Quercus rubra	Good	
91	31	Red oak	Quercus rubra	Good	
91 92	31 27	Red oak Tulip poplar	Quercus rubra Liriodendron tulipifera	Good Good	
91 92 93	31 27 24	Red oak Tulip poplar Mockernut hickory	Quercus rubra Liriodendron tulipifera Carya alba	Good Good Excellent	Strong lean, uneven crown
91 92 93 94	31 27 24 26	Red oak Tulip poplar Mockernut hickory Pignut hickory	Quercus rubra Liriodendron tulipifera Carya alba Carya glabra	Good Good Excellent Excellent	Strong lean, uneven crown
91 92 93 94 95	31 27 24 26 25	Red oak Tulip poplar Mockernut hickory Pignut hickory White oak	Quercus rubra Liriodendron tulipifera Carya alba Carya glabra Quercus alba	Good Good Excellent Excellent Fair	Strong lean, uneven crown
91 92 93 94 95 96	31 27 24 26 25 25	Red oak Tulip poplar Mockernut hickory Pignut hickory White oak Red oak	Quercus rubra Liriodendron tulipifera Carya alba Carya glabra Quercus alba Quercus rubra	Good Good Excellent Excellent Fair Good	Strong lean, uneven crown
91 92 93 94 95 96 97	31 27 24 26 25 25 25 29	Red oak Tulip poplar Mockernut hickory Pignut hickory White oak Red oak Tulip poplar	Quercus rubra Liriodendron tulipifera Carya alba Carya glabra Quercus alba Quercus rubra Liriodendron tulipifera	Good Good Excellent Excellent Fair Good Good	Strong lean, uneven crown
91 92 93 94 95 96 97 98	31 27 24 26 25 25 25 29 26	Red oak Tulip poplar Mockernut hickory Pignut hickory White oak Red oak Tulip poplar Pignut hickory	Quercus rubra Liriodendron tulipifera Carya alba Carya glabra Quercus alba Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Carya glabra	Good Good Excellent Excellent Fair Good Good Excellent	Strong lean, uneven crown
91 92 93 94 95 96 97 98 99	31 27 24 26 25 25 29 26 32	Red oak Tulip poplar Mockernut hickory Pignut hickory White oak Red oak Tulip poplar Pignut hickory Red oak	Quercus rubra Liriodendron tulipifera Carya alba Carya glabra Quercus alba Quercus rubra Liriodendron tulipifera Carya glabra Quercus rubra	Good Good Excellent Excellent Fair Good Excellent Good	
91 92 93 94 95 96 97 98 99 98 99 99	31 27 24 26 25 25 29 26 32 24	Red oak Tulip poplar Mockernut hickory Pignut hickory White oak Red oak Tulip poplar Pignut hickory Red oak White oak	Quercus rubra Liriodendron tulipifera Carya alba Carya glabra Quercus alba Quercus rubra Liriodendron tulipifera Carya glabra Quercus rubra Liriodendron tulipifera Quercus rubra Quercus rubra Quercus rubra Quercus alba	Good Good Excellent Fair Good Good Excellent Good Fair	
91 92 93 94 95 96 97 98 99 99 100	31 27 24 25 25 25 29 26 32 24 24 26	Red oak Tulip poplar Mockernut hickory Pignut hickory White oak Red oak Tulip poplar Pignut hickory Red oak White oak White oak	Quercus rubra Liriodendron tulipifera Carya alba Carya glabra Quercus alba Quercus rubra Liriodendron tulipifera Carya glabra Quercus rubra Liriodendron tulipifera Quercus rubra Quercus alba Quercus alba Quercus alba Quercus alba Quercus alba Quercus alba	Good Good Excellent Fair Good Excellent Good Excellent Fair Excellent	
91 92 93 94 95 96 97 98 99 99 100 101	31 27 24 26 25 25 29 26 32 24 24 26 25	Red oak Tulip poplar Mockernut hickory Pignut hickory White oak Red oak Tulip poplar Pignut hickory Red oak White oak White oak White oak	Quercus rubra Liriodendron tulipifera Carya alba Carya glabra Quercus alba Quercus rubra Liriodendron tulipifera Carya glabra Quercus rubra Liriodendron tulipifera Quercus rubra Quercus alba Quercus alba	Good Good Excellent Fair Good Excellent Good Fair Excellent Good	

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
106	24	Swamp white oak	Quercus bicolor	Good	
107	34	Red oak	Quercus rubra	Good	
108	34	White oak	Quercus alba	Fair	Double trunk above DBH, dead branches in crown
109	25	Red oak	Quercus rubra	Fair	Strong lean in canopy
110	30	Red oak	Quercus rubra	Good	
111	38	Tulip poplar	Liriodendron tulipifera	Good	
112	24	Tulip poplar	Liriodendron tulipifera	Good	
113	25	Tulip poplar	Liriodendron tulipifera	Good	
114	26	Tulip poplar	Liriodendron tulipifera	Good	
115	24	Tulip poplar	Liriodendron tulipifera	Fair	Uneven crown with broken branches
116	25	Tulip poplar	Liriodendron tulipifera	Good	
117	25	Tulip poplar	Liriodendron tulipifera	Good	
118	28	Tulip poplar	Liriodendron tulipifera	Good	
119	28	Tulip poplar	Liriodendron tulipifera	Fair	Uneven crown with strong lean
120	29/28	Tulip poplar	Liriodendron tulipifera	Good	
121	26	Tulip poplar	Liriodendron tulipifera	Excellent	
122	39	Sycamore	Platanus occidentalis	Fair	Leaning strongly
123	25	Red maple	Acer rubrum	Good	
124	32	Sycamore	Platanus occidentalis	Excellent	
125	33	Tulip poplar	Liriodendron tulipifera	Good	
126	25/21	Tulip poplar	Liriodendron tulipifera	Fair	Split trunk below DBH
127	32	Red maple	Acer rubrum	Fair	Strong lean, vines
128	36	Tulip poplar	Liriodendron tulipifera	Good	
129	37	Tulip poplar	Liriodendron tulipifera	Good	
130	26	Red maple	Acer rubrum	Good	
131	27	Tulip poplar	Liriodendron tulipifera	Fair	Uneven crown with dead branches
132	35	Tulip poplar	Liriodendron tulipifera	Fair	Vines, dead branches
133	31	Red oak	Quercus rubra	Excellent	
134	27	Red oak	Quercus rubra	Poor	
135	24	White oak	Quercus alba	Good	
136	26	Red maple	Acer rubrum	Good	
137	27	Tulip poplar	Liriodendron tulipifera	Good	
138	29	Tulip poplar	Liriodendron tulipifera	Good	
140	25/26/27	Red oak	Quercus rubra	Fair	Trunk damage, broken branches
141	32	Tulip poplar	Liriodendron tulipifera	Fair	Dead branches in crown
142	28	Tulip poplar	Liriodendron tulipifera	Good	

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
143	24	Tulip poplar	Liriodendron tulipifera	Good	
144	24	Tulip poplar	Liriodendron tulipifera	Fair	Strong lean, on stream bank
145	32	Sycamore	Platanus occidentalis	Fair	Uneven crown, vines
146	26	Tulip poplar	Liriodendron tulipifera	Good	
147	32	Tulip poplar	Liriodendron tulipifera	Good	
148	27/33	Red oak	Quercus rubra	Excellent	
149	30	White oak	Quercus alba	Fair	Uneven crown, trunk damage
150	26	White oak	Quercus alba	Fair	Trunk damage
151	26	White oak	Quercus alba	Good	
152	33	Tulip poplar	Liriodendron tulipifera	Good	
153	25	Tulip poplar	Liriodendron tulipifera	Fair	Broken branches in crown
154	27	Red oak	Quercus rubra	Good	
155	26	White oak	Quercus alba	Fair	Slight lean, trunk damage
156	27	White oak	Quercus alba	Poor	Uneven crown, trunk hollow
157	34	Red oak	Quercus rubra	Excellent	
158	39	Red oak	Quercus rubra	Fair	Dead branches, split trunk above DBH
159	29	White oak	Quercus alba	Fair	Dead branches, split trunk above DBH
160	35	Red oak	Quercus rubra	Good	
161	31	Red oak	Quercus rubra	Poor	Hollow base of trunk, broken branches
	•••		Quercus rubru		
162	41	Red oak	Quercus rubra	Fair	Dead/broken branches in crown
162	41	Red oak	Quercus rubra	Fair	
162 163	41 34/35	Red oak Tulip poplar	Quercus rubra Liriodendron tulipifera	Fair Good	Dead/broken branches in crown
162 163 164	41 34/35 29	Red oak Tulip poplar Tulip poplar	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera	Fair Good Fair	Dead/broken branches in crown
162 163 164 165	41 34/35 29 26	Red oak Tulip poplar Tulip poplar White oak	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba	Fair Good Fair Excellent	Dead/broken branches in crown
162 163 164 165 166	41 34/35 29 26 27	Red oak Tulip poplar Tulip poplar White oak Red oak	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba Quercus rubra	Fair Good Fair Excellent Good	Dead/broken branches in crown
162 163 164 165 166 167	41 34/35 29 26 27 25	Red oak Tulip poplar Tulip poplar White oak Red oak Tulip poplar	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba Quercus rubra Liriodendron tulipifera	Fair Good Fair Excellent Good Good	Dead/broken branches in crown Uneven crown, dead branches
162 163 164 165 166 167 168	41 34/35 29 26 27 25 27	Red oak Tulip poplar Tulip poplar White oak Red oak Tulip poplar Tulip poplar	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera	Fair Good Fair Excellent Good Good Fair	Dead/broken branches in crown Uneven crown, dead branches
162 163 164 165 166 167 168 169	41 34/35 29 26 27 25 27 28 29	Red oak Tulip poplar Tulip poplar White oak Red oak Tulip poplar Tulip poplar Red oak	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera	Fair Good Fair Excellent Good Fair Good	Dead/broken branches in crown Uneven crown, dead branches Dead/broken branches in crown
162 163 164 165 166 167 168 169 170	41 34/35 29 26 27 25 27 28 29	Red oak Tulip poplar Tulip poplar White oak Red oak Tulip poplar Tulip poplar Red oak Tulip poplar	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus rubra Liriodendron tulipifera Quercus rubra Liriodendron tulipifera	Fair Good Excellent Good Fair Good Poor	Dead/broken branches in crown Uneven crown, dead branches Dead/broken branches in crown
162 163 164 165 166 167 168 169 170 171	41 34/35 29 26 27 25 27 28 29 27	Red oak Tulip poplar Tulip poplar White oak Red oak Tulip poplar Tulip poplar Red oak Tulip poplar White oak	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Quercus rubra Liriodendron tulipifera Quercus rubra Liriodendron tulipifera Quercus rubra Liriodendron tulipifera Quercus alba	Fair Good Fair Excellent Good Fair Good Poor Good	Dead/broken branches in crown Uneven crown, dead branches Dead/broken branches in crown Dead/broken branches in crown
162 163 164 165 166 167 168 169 170 171 172	41 34/35 29 26 27 25 27 28 29 27 27 27	Red oak Tulip poplar Tulip poplar White oak Red oak Tulip poplar Tulip poplar Red oak Tulip poplar White oak	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Quercus rubra Liriodendron tulipifera Quercus rubra Quercus rubra Liriodendron tulipifera Quercus alba Quercus alba Quercus alba	Fair Good Fair Excellent Good Fair Good Poor Good Poor	Dead/broken branches in crown Uneven crown, dead branches Dead/broken branches in crown Dead/broken branches in crown Broken/dead branches in crown
162 163 164 165 166 167 168 169 170 171 172 173	41 34/35 29 26 27 25 27 28 29 27 27 27 27 25	Red oak Tulip poplar Tulip poplar White oak Red oak Tulip poplar Tulip poplar Red oak Tulip poplar White oak White oak Red oak Red oak	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Quercus rubra Liriodendron tulipifera Quercus rubra Liriodendron tulipifera Quercus alba Quercus alba Quercus rubra	Fair Good Fair Excellent Good Fair Good Poor Good Poor Fair	Dead/broken branches in crown Uneven crown, dead branches Dead/broken branches in crown Dead/broken branches in crown Broken/dead branches in crown
162 163 164 165 166 167 168 169 170 171 172 173 174	41 34/35 29 26 27 25 27 28 29 27 27 27 27 25 26	Red oak Tulip poplar Tulip poplar White oak Red oak Tulip poplar Red oak Tulip poplar White oak White oak Red oak White oak	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Quercus rubra Quercus alba Quercus alba Quercus alba Quercus rubra Quercus alba Quercus rubra Quercus alba Quercus alba Quercus rubra Quercus alba Quercus alba Quercus alba Quercus alba	Fair Good Fair Excellent Good Fair Good Poor Good Poor Fair Good	Dead/broken branches in crown Uneven crown, dead branches Dead/broken branches in crown Dead/broken branches in crown Broken/dead branches in crown
162 163 164 165 166 167 168 169 170 171 172 173 174 175	41 34/35 29 26 27 25 27 28 29 27 27 27 27 25 26 29	Red oak Tulip poplar Tulip poplar White oak Red oak Tulip poplar Tulip poplar Red oak Tulip poplar White oak White oak Red oak White oak Red oak Tulip poplar	Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Quercus alba Quercus rubra Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Liriodendron tulipifera Quercus rubra Liriodendron tulipifera Quercus alba Quercus alba Quercus alba Quercus alba Quercus alba Quercus alba Liriodendron tulipifera	Fair Good Fair Excellent Good Fair Good Poor Good Fair Good Fair Good	Dead/broken branches in crown Uneven crown, dead branches Dead/broken branches in crown Dead/broken branches in crown Broken/dead branches in crown

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
179	27	Red oak	Quercus rubra	Poor	Dead branches, uneven crown
180	29	Red oak	Quercus rubra	Good	
181	97	Red oak	Quercus rubra	Good	4 trunks above 4.5', larger than county & state champion
182	26	Tulip poplar	Liriodendron tulipifera	Good	
183	26	White oak	Quercus alba	Good	
184	28	Tulip poplar	Liriodendron tulipifera	Fair	Vines, dead branches
185	25	Tulip poplar	Liriodendron tulipifera	Good	
186	26	Tulip poplar	Liriodendron tulipifera	Good	
187	24	Tulip poplar	Liriodendron tulipifera	Good	
188	31	Tulip poplar	Liriodendron tulipifera	Fair	Uneven crown
189	26	Tulip poplar	Liriodendron tulipifera	Good	
190	25	Tulip poplar	Liriodendron tulipifera	Good	
191	24	Tulip poplar	Liriodendron tulipifera	Good	
192	25	Tulip poplar	Liriodendron tulipifera	Fair	Uneven crown
193	38	Tulip poplar	Liriodendron tulipifera	Good	
194	31	Tulip poplar	Liriodendron tulipifera	Fair	Uneven crown
195	32	Tulip poplar	Liriodendron tulipifera	Good	
196	29	Tulip poplar	Liriodendron tulipifera	Good	
197	30	Tulip poplar	Liriodendron tulipifera	Good	
198	24	Tulip poplar	Liriodendron tulipifera	Fair	Vines, uneven crown
199	28	Tulip poplar	Liriodendron tulipifera	Fair	Broken branches in crown
200	29	Tulip poplar	Liriodendron tulipifera	Good	
201	30	Tulip poplar	Liriodendron tulipifera	Good	
202	28	Tulip poplar	Liriodendron tulipifera	Good	
203	26	Tulip poplar	Liriodendron tulipifera	Fair	Broken branches in crown
204	39	Tulip poplar	Liriodendron tulipifera	Poor	Hollow trunk, broken branches in crown
205	32	Tulip poplar	Liriodendron tulipifera	Good	
206	26	Tulip poplar	Liriodendron tulipifera	Fair	Broken branches in crown
207	29	Tulip poplar	Liriodendron tulipifera	Excellent	
208	28	Tulip poplar	Liriodendron tulipifera	Good	
209	24	Tulip poplar	Liriodendron tulipifera	Good	
210	24	Tulip poplar	Liriodendron tulipifera	Good	
211	27	Green ash	Fraxinus pennsylvanica	Fair	Broken branches in crown
212	25	White oak	Quercus alba	Good	
213	35	White oak	Quercus alba	Good	
214	26	Tulip poplar	Liriodendron tulipifera	Excellent	

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
215	24	Tulip poplar	Liriodendron tulipifera	Good	
216	27	White oak	Quercus alba	Good	
217	29	Tulip poplar	Liriodendron tulipifera	Good	
218	25	White oak	Quercus alba	Good	
219	36	White oak	Quercus alba	Fair	Broken branches in crown
220	24	Green ash	Fraxinus pennsylvanica	Fair	Dead branches, vines
221	33	Sycamore	Platanus occidentalis	Fair	On streambank, roots exposed, lean
222	38	Tulip poplar	Liriodendron tulipifera	Fair	Vines
223	29	Tulip poplar	Liriodendron tulipifera	Poor	Strong lean, moss covered
224	40	Sycamore	Platanus occidentalis	Fair	Dead branches, vines
225	38	Tulip poplar	Liriodendron tulipifera	Fair	Vines
226	32	Tulip poplar	Liriodendron tulipifera	Good	
227	25	White oak	Quercus alba	Good	
228	31	White oak	Quercus alba	Fair	Broken branches in crown, vines
229	27	Sycamore	Platanus occidentalis	Fair	Stream bank, roots exposed
230	25	White oak	Quercus alba	Good	
231	32	Red oak	Quercus rubra	Good	
232	26	Tulip poplar	Liriodendron tulipifera	Good	
233	29	Tulip poplar	Liriodendron tulipifera	Good	
234	32	Red oak	Quercus rubra	Good	
235	25	White oak	Quercus alba	Good	
236	42	Tulip poplar	Liriodendron tulipifera	Good	
237	26	Tulip poplar	Liriodendron tulipifera	Good	
238	24	River birch	Betula nigra	Poor	Strong lean, on stream bank
239	31	Sycamore	Platanus occidentalis	Good	
240	26	Sycamore	Platanus occidentalis	Poor	Hollow trunk, crooked leader
241	32	Sycamore	Platanus occidentalis	Good	
242	35	Green ash	Fraxinus pennsylvanica	Fair	Dead branches, vines
243	25	Tulip poplar	Liriodendron tulipifera	Good	
244	42	White oak	Quercus alba	Good	
245	29	White oak	Quercus alba	Good	
246	34	White oak	Quercus alba	Good	
247	30	Tulip poplar	Liriodendron tulipifera	Good	
248	44	Red oak	Quercus rubra	Good	
249	29	White oak	Quercus alba	Good	
250	35	Tulip poplar	Liriodendron tulipifera	Fair	Hollow trunk

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
251	37	Tulip poplar	Liriodendron tulipifera	Good	
252	32	Sycamore	Platanus occidentalis	Good	
253	28	Sycamore	Platanus occidentalis	Fair	Dead branches in crown
254	27	Eastern red cedar	Juniperus virginiana	Poor	Hollow trunk, dead branches
255	25	Sycamore	Platanus occidentalis	Fair	Uneven crown, broken branches
256	24/25	Sycamore	Platanus occidentalis	Fair	Split
257	35	Sycamore	Platanus occidentalis	Good	
258	25	Sycamore	Platanus occidentalis	Poor	Uneven crown, broken branches
259	26	Tulip	Liriodendron tulipifera	Good	
260	39	Tulip	Liriodendron tulipifera	Good	
261	33	White oak	Quercus alba	Good	
262	33	Sycamore	Platanus occidentalis	Good	
263	25	Tulip	Liriodendron tulipifera	Poor	Split/hollow trunk, poison ivy
264	37	Tulip	Liriodendron tulipifera	Good	
270	30	Silver maple	Acer saccharinum	Excellent	
271	25	Silver maple	Acer saccharinum	Good	
272	24	Sycamore	Platanus occidentalis	Good	
273	26	Sycamore	Platanus occidentalis	Excellent	
274	32	Silver maple	Acer saccharinum	Fair	split into 3 @ 8'-1 part broken, covered in vines
275	34.5/34	Osage orange	Maclura pomifera	Good	
276	25	Tulip poplar	Liriodendron tulipifera	Good	
277	25	Tulip poplar	Liriodendron tulipifera	Good	
278	31	Tulip poplar	Liriodendron tulipifera	Fair	Topped in storm - no canopy
279	24	Tulip poplar	Liriodendron tulipifera	Poor	Topped in storm - no canopy
280	24	Tulip poplar	Liriodendron tulipifera	Poor	Topped in storm -no canopy
281	30	Tulip poplar	Liriodendron tulipifera	Fair	vines, small canopy, broken branches
282	35	Osage orange	Maclura pomifera	Fair	broken branches, leaning 45 degrees
283	31	Tulip poplar	Liriodendron tulipifera	Good	
284	30/ 26	Tulip poplar	Liriodendron tulipifera	Fair	
285	40	Tulip poplar	Liriodendron tulipifera	Excellent	
286	28	Pignut hickory	Carya glabra	Fair	uneven canopy, broken branches
287	32	Tulip poplar	Liriodendron tulipifera	Fair	uneven canopy, broken branches
288	30	Tulip poplar	Liriodendron tulipifera	Good	
289	27	Sycamore	Platanus occidentalis	Excellent	
290	24	Tulip poplar	Liriodendron tulipifera	Excellent	
291	26	Tulip poplar	Liriodendron tulipifera	Excellent	

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
292	25	Tulip poplar	Liriodendron tulipifera	Good	
293	24	Mockernut hickory	Carya alba	Dead	
294	28	Tulip poplar	Liriodendron tulipifera	Good	
295	28			Dead	
296	25	Tulip poplar	Liriodendron tulipifera	Good	
297	29	Red maple	Acer rubrum	Excellent	
298	25	Red maple	Acer rubrum	Good	
299	24	Mockernut hickory	Carya alba	Good	
300	27	White oak	Quercus alba	Fair	uneven canopy
301	25	White oak	Quercus alba	Good	
302	27	White oak	Quercus alba	Fair	uneven canopy, smooth patch disease
303	31	White oak	Quercus alba	Good	
304	26	White oak	Quercus alba	Fair	uneven canopy, dead branches
305	32	White oak	Quercus alba	Good	
306	28	Tulip poplar	Liriodendron tulipifera	Good	
307	26	White oak	Quercus alba	Good	
308	32	White oak	Quercus alba	Good	
309	27	White oak	Quercus alba	Excellent	
310	34	Tulip poplar	Liriodendron tulipifera	Good	
311	29	White oak	Quercus alba	Good	
312	25	Tulip poplar	Liriodendron tulipifera	Good	
313	32	Tulip poplar	Liriodendron tulipifera	Good	
314	32	Tulip poplar	Liriodendron tulipifera	Good	
315	26	Tulip poplar	Liriodendron tulipifera	Good	
316	24	Tulip poplar	Liriodendron tulipifera	Good	
317	31	Red oak	Quercus rubra	Good	
318	24	Tulip poplar	Liriodendron tulipifera	Poor	topped in storm
319	24.5/ 24.5	Sycamore	Platanus occidentalis	Excellent	
320	25	Red maple	Acer rubrum	Fair	dead branches, diseased
321	26	Tulip poplar	Liriodendron tulipifera	Good	
322	29	Tulip poplar	Liriodendron tulipifera	Excellent	
323	30	Tulip poplar	Liriodendron tulipifera	Good	
324	27	Tulip poplar	Liriodendron tulipifera	Good	
325	24	Sycamore	Platanus occidentalis	Excellent	
326	25	Tulip poplar	Liriodendron tulipifera	Poor	sparse canopy, dead branches
327	24	Tulip poplar	Liriodendron tulipifera	Good	

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
328	26	Tulip poplar	Liriodendron tulipifera	Excellent	
329	27	Red maple	Acer rubrum	Poor	sparse canopy, dead branches
330	25	Tulip poplar	Liriodendron tulipifera	Good	
331	28	Tulip poplar	Liriodendron tulipifera	Good	
332	29	Tulip poplar	Liriodendron tulipifera	Good	
333	24	Tulip poplar	Liriodendron tulipifera	Good	
334	29	Red oak	Quercus rubra	Good	
335	27	Tulip poplar	Liriodendron tulipifera	Fair	diseased
336	28	Tulip poplar	Liriodendron tulipifera	Excellent	
337	28	Red oak	Quercus rubra	Excellent	
338	28	Tulip poplar	Liriodendron tulipifera	Excellent	
339	33	Pignut hickory	Carya glabra	Good	
340	28	Tulip poplar	Liriodendron tulipifera	Good	
341	38	White oak	Quercus alba	Excellent	
342	24	Tulip poplar	Liriodendron tulipifera	Good	
343	35	White oak	Quercus alba	Good	
344	41	White oak	Quercus alba	Good	
345	28	White oak	Quercus alba	Fair	sparse canopy
346	31	White oak	Quercus alba	Fair	sparse canopy, dead branches, white patch disease
347	24	White oak	Quercus alba	Good	
348	31	White oak	Quercus alba	Fair	uneven canopy, broken branches
349	30	White oak	Quercus alba	Fair	choked by poison ivy
350	34	White oak	Quercus alba	Good	
351	50	Tulip poplar	Liriodendron tulipifera	Good	
352	25	Tulip poplar	Liriodendron tulipifera	Good	
353	25	Tulip poplar	Liriodendron tulipifera	Excellent	
354	29	Tulip poplar	Liriodendron tulipifera	Excellent	
355	38	Tulip poplar	Liriodendron tulipifera	Poor	topped in storm, center trunk rot
356	26	Tulip poplar	Liriodendron tulipifera	Excellent	
357	26	Tulip poplar	Liriodendron tulipifera	Good	
358	30	Tulip poplar	Liriodendron tulipifera	Good	
359	30	Tulip poplar	Liriodendron tulipifera	Excellent	
360	27	Tulip poplar	Liriodendron tulipifera	Good	
361	28	Tulip poplar	Liriodendron tulipifera	Fair	sparse canopy
362	26	Tulip poplar	Liriodendron tulipifera	Good	
363	24	Tulip poplar	Liriodendron tulipifera	Fair	twin @ 5', sparse canopy

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
364	27/ 25	Tulip poplar	Liriodendron tulipifera	Good	
365	47	Tulip poplar	Liriodendron tulipifera	Good	
366	25	Red oak	Quercus rubra	Good	
367	42	Red maple	Acer rubrum	Poor	dead branches, sparse canopy
368	24	Red maple	Acer rubrum	Poor	mostly dead
369	25	Mockernut hickory	Carya alba	mostly dead	
370	47	White oak	Quercus alba	Good	
371	27	White oak	Quercus alba	Good	
372	30	White oak	Quercus alba	Good	
373	33	Red oak	Quercus rubra	Fair	topped in storm
374	28	Scarlet oak	Quercus coccinea	Fair	10% lean, vines
375	34	White oak	Quercus alba	Good	
376	31	Scarlet oak	Quercus coccinea	Fair	twin-half dead
377	24	Korean pine	Pinus koraiensis	Excellent	
378	33	Sycamore	Platanus occidentalis	Excellent	
379	30	Sycamore	Platanus occidentalis	Excellent	
380	32	Sycamore	Platanus occidentalis	Good	
381	28	Sycamore	Platanus occidentalis	Dead	
382	35	Sycamore	Platanus occidentalis	Excellent	
383	33	Sycamore	Platanus occidentalis	Good	
384	29	Sycamore	Platanus occidentalis	Good	
385	33	Green ash	Fraxinus pennsylvanica	Good	
386	28	Sycamore	Platanus occidentalis	Good	
387	26	Sycamore	Platanus occidentalis	Good	
388	29	Sycamore	Platanus occidentalis	Good	
389	28	Korean pine	Pinus koraiensis	Good	
390	24+	Black cherry	Prunus serotina	Poor	covered in poison ivy, dead branches
391		Sycamore	Platanus occidentalis	Excellent	
392	45	Sycamore	Platanus occidentalis	Fair	broken branches, sparse canopy, vines
393	24	Tulip poplar	Liriodendron tulipifera	Good	
394	32	Sycamore	Platanus occidentalis	Excellent	
395	35	Sycamore	Platanus occidentalis	Good	
396	56	Sycamore	Platanus occidentalis	Good	
397	27	Tulip poplar	Liriodendron tulipifera	Excellent	
398	24	Tulip poplar	Liriodendron tulipifera	Excellent	
399	28	Red oak	Quercus rubra	Good	

Tree #	Size DBH	Common name	Scientific name	Condition	Comments
400	28	Korean pine	Pinus koraiensis	Excellent	
401	39	Silver Maple	Acer saccharinum	Good	
434	33	Box Elder	Acer negundo	Good	
433	33	Shingle Oak	Quercus imbricaria	Good	
432	39	Sycamore	Platanus occidentalis	Poor	
431	29	Red Maple	Acer rubrum	Poor	
430	40	Shingle Oak	Quercus imbricaria	Good	
429	33	White oak	Quercus alba	Good	
428	29	White oak	Quercus alba	Fair	
427	39	White oak	Quercus imbricaria	Good	
426	31	Shingle Oak	Quercus imbricaria	Poor	
425	37	Sycamore	Platanus occidentalis	Poor	
424	26	Sycamore	Platanus occidentalis	Fair	
423	28	Sycamore	Platanus occidentalis	Fair	
422	29	Sycamore	Platanus occidentalis	Good	
421	27/33	White oak	Quercus alba	Fair	
420	40	White oak	Quercus alba	Good	
419	62	Sycamore	Platanus occidentalis	Poor	
418	24	Honey Locust	Gleditsia tricanthos	Poor	
419	25	Tulip Poplar	Liriodendron tulipifera	Good	
420	37	White oak	Quercus alba	Fair	

V. APPENDIX B - FOREST STAND DELINEATION DATA SHEETS

					F	orest	San	nplin	g Dat	ta Wo	orksh	eet						
Property:	North	Brancl	h Trail							Prepa	red By:			J. Cu	ummin	gs & C	. Perfit	
Stand #:	1		Plot #	:	А	Plot Siz	ze: 🕅	(10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/3/20	12
Succession	al Stag	ge:	early					Basal	Area (sf/ac):		70		Sheet		1	of	1
Tree S	-	5				Siz		s of tr			-	hin san			-			
	>24") Position			<u> </u>		Dom	<3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 _{CoD}	" Other	Dom	20" + CoD	Other	Total
Acer rubrum						Dom	COD	8	Dom	000	15	Dom	4	7	Dom	COD	Other	34
Acer saccha	arinum							2			2	2	1					7
Fraxinus pe	nnsylva	anica						1		1	3		1	2				8
Total # Tree	s / Cla	SS:					11			21			17			0		49
# / Size Star	nding D	Dead:					4			1			0			0		5
	U	nders	tory S	pecies	s (3' - 2	20'):					ŀ	lerbace	ous S	pecies	s (0' - 3	;'):		
Acer rubrum	ı								Micros	stegiun	n vimin	eum		Allium	n canad	dense		
									Rubus	s phoe	nicolas	ius						
									llex of	oaca								
									Vitis s	р.								
									Rosa	multifle	ora							
									Lonice	əra jap	onica							
	-								Heder	a helix	1							
Prism		9	% Cano	ору Со	ver			%	Under	story C	Cover			% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	100	95	95	80	100	94%	20	0	10	60	0	18%	100	5	100	80	10	59%
1/20		%	6 Invas	ive Co	ver			# L	Inderst	ory Sp	ecies		%	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	E S W Mean C N						Е	S	W	Mean	С	N	Е	S	W	Mean
Invasive	100	0	100	80	0	56%	2	0	1	4	0	1	2	80	20	40	80	44%

					F	orest	: San	nplin	g Da	ta Wo	orksh	eet						
Property:	North	Branc	h Trail							Prepa	red By:			J. Cı	umming	gs & C	. Perfit	
Stand #:	1		Plot #	:	В	Plot Siz	ze: 🤇	(/10ac	=r 37	.24ft	1/20	ac = r 25	5.28ft		Date:	1	2/3/20	12
Succession	al Stag	ge:	early					Basal	Area (sf/ac):		90		Sheet		1	of	1
Tree S	-	5				Siz		s of tr			-	hin san			•			
	>24") Position					Dam	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other		- 19.9 CoD	" Other	Dom	20" + CoD	Other	Total
Acer rubrum						Dom	COD	5	Dom	2	8	Dom	2	7	Dom	COD	Other	24
Acer saccha								1		2	1	1	5	2	1			11
Fraxinus pe		anica						-			1		5	2				1
	iiisyiv	anica									-							
Total # Tree	s / Cla	SS:					6			12			17			1		36
# / Size Star	nding E	Dead:					7			0			2			0		9
	U	nders	tory S	pecies	s (3' - 2	20'):					ŀ	lerbace	ous S	pecies	s (0' - 3	5'):		
									Micro	stegiun	n vimin	eum						
									Alliaria	a petio	lata							
									Allium	canac	lense							
									Rosa	multifle	ora							
Prism		9	6 Cano	ору Со	ver			%	Under	story C	over			% G	round (Cover	(0' - 3')	
Scale	С	N	E	s	W	Mean	С	N	Е	S	W	Mean	С	N	Е	s	W	Mean
1/10	80	100	95	85	80	88%	0	20	0	5	2	5%	100	80	35	60	50	65%
1/20		%	6 Invas	sive Co	ver	<u> </u>		# L	Inderst	ory Sp	ecies	1	9	% Cove	er Dowi	n Woo	dy Deb	oris
* =	С	N	E S W Mean C N						Е	S	W	Mean	С	N	Е	S	W	Mean
Invasive	100	80	35						0	0	1	0	75	90	90	75	100	86%
	<u> </u>		l	1	l	I	<u> </u>	1				1		1	1	1		

					F	orest	San	nplin	g Dat	ta Wo	orksh	eet						
Property:	North	Brancl	h Trail							Prepa	red By:			J. Cı	ummin	gs & C	. Perfit	
Stand #:	2		Plot #	:	А	Plot Siz	ze: 🕅	(10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/3/20	12
Succession	al Stag	ge:	early					Basal	Area (sf/ac):	140			Sheet		1	of	1
Tree S	-	5				Siz		s of tr	ees > 2		-	hin san			-			
	>24") Position			<u> </u>		Dom	< 3" CoD	Other	Dom	3- 6.9 CoD	" Other	7 Dom	- 19.9 CoD	" Other	Dom	20" + CoD	Other	Total
Acer rubrun						Dom	COD	4	Dom	COD	4	Dom	1	5	Dom	COD	Other	14
Carpinus ca	rolinial	na						3			4							7
Carya alba								1			2		1	4				8
Cornus flori	da							2										2
Diospyros v	irginiar	าล												1				1
Fagus gran	difolia							1			2							3
Liriodendroi	n tulipif	era									1			1	1			3
Nyssa sylva	tica										1							1
Platanus oc	cidenta	alis										1			1			2
Quercus rub	ora												2					2
Total # Tree	s / Cla	SS:					11			14			16			2		43
# / Size Star	nding E	Dead:					1			0			0			0		1
	U	nders	tory S	pecies	(3' - 2	0'):					F	lerbace	ous S	pecies	s (0' - 3	3'):		
Acer rubrun	า								Berbe	ris thu	nbergii			Allium	n canad	dense		
Carpinus ca	rolinia	na							Euony	/mus a	latus							
Cornus flori	da								llex of	oaca								
Rubus sp.									Carpii	nus ca	rolinian	а						
									Rosa	multifle	ora							
									Lonice	əra jap	onica							
	-						-		Mitche	ella rep	oens							
Prism		%	6 Cano	ору Со	ver			%	Under	story C	Cover	-		% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	100	100	85	100	100	97%	20	5	30	50	75	36%	50	80	10	60	90	58%
1/20		%	6 Invas	ive Co	ver			# L	Inderst	ory Sp	ecies		9	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	E S W Mean C N							S	W	Mean	С	N	Е	S	W	Mean
Invasive	30	75	8	40	50	41% along w	3	3	2	4	3	3	10	5	10	15	10	10%

Paved path runs through eastern edge; lake along western edge.

					F	orest	San	nplin	g Dat	ta Wo	orksh	eet						
Property:	North	Brancl	h Trail							Prepa	red By:			J. Cı	umming	gs & C	. Perfit	
Stand #:	2		Plot #	:	В	Plot Siz	ze: 6	(/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/3/20	12
Succession	al Stag	ge:	Mid					Basal	Area (sf/ac):		150		Sheet		1	of	1
Tree S	-	5				Siz		s of tr			-	hin san						
	>24") Position					Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 CoD	" Other	Dom	20" + CoD	Other	Total
Acer rubrum						Dom	COD	2	Dom		Other 2	Dom	COD	Other 2	Dom	COD	Other	6
Carpinus ca	rolinia	na				<u> </u>		2			1							3
Carya alba											1							1
Carya ovata	1										1			1				2
Fagus grand	difolia							4			4			3				11
llex opaca								1										1
Liriodendror	n tulipif	era				[3	1	5	3	1		13
Nyssa sylva	ntica							3			3		1					7
Quercus rub	bra										1					1		2
Total # Tree							12			13			16			5		46
# / Size Star	nding E	Dead:				<u> </u>	3			0			2			0		5
	U	nders	tory S	pecies	s (3' - 2	.0'):					F	lerbace	ous S	pecies	6 (0' - 3	'):		
Carpinus ca	rolinia	na							Berbe	ris thu	nbergii							
Fagus grand	difolia								Polys	tichum	acrosti	choides						
llex opaca									Rubus	s phoe	nicolasi	ius						
									Lonice	əra jap	onica							
									Mitche	ella rep	oens							
									llex of	oaca								
Prism		%	6 Cano	ору Со	ver			%	Under	story C	over	T		% G	round (Cover ((0' - 3')	
Scale	С	Ν	E	S	W	Mean	С	N	E	S	W	Mean	С	N	E	S	W	Mean
(1/10	100	85	90	95	70	88%	0	20	5	10	10	9%	80	40	5	10	30	33%
1/20		%	5 Invas	sive Co	ver	-		# L	Inderst	ory Sp	ecies	I	%	% Cove	er Dowi	n Woo	dy Deb	ris
* =	С	Ν	E	S	W	Mean	С	N	E	S	W	Mean	С	Ν	E	S	W	Mean
Invasive	5	5	0	0 5 25 8% 0				1	1	1	1	1	5	20	15	10	80	26%

Tree #334 in southern edge of plot

					F	orest	San	nplin	g Dat	ta Wo	orksh	eet						
Property:	North	Brancl	h Trail							Prepa	red By:			J. Cı	ummin	gs & C	. Perfit	
Stand #:	2		Plot #	:	С	Plot Siz	ze: 6	(/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/4/20	12
Succession	al Stag	ge:	Mid					Basal	Area (sf/ac):		140		Sheet		1	of	1
Tree S	-	5				Siz		s of tr			-	hin san						
	>24") Position						< 3"			3 - 6.9			- 19.9	1		20" +	01	Total
Acer rubrum						Dom	CoD	Other	Dom	CoD	Other 1	Dom	CoD	Other	Dom	CoD	Other	1
Carya alba	1							1			2							3
Fagus grand	difolia							3			3			3				9
Liriodendror		era						<u> </u>			0		1	3	6	2		12
Quercus rub											1			1	-	_		2
																		0
																		0
																		0
																		0
							-											
Total # Tree	s / Cla	SS:					4			7			8			8		27
# / Size Star	nding E	Dead:					2			1			0			0		3
	U	nders	tory S	pecies	(3' - 2	0'):					F	lerbace	ous S	pecies	s (0' - 3	5'):		
Carpinus ca	roliniai	na							Berbe	ris thu	nbergii			Walds	steinia	fragari	oides	
Fagus grand	difolia								Polys	tichum	acrosti	choides		Micro	stegiur	n vimir	neum	
llex opaca									Rubus	s phoe	nicolasi	ius		Alliari	a petio	lata		
Carya alba									Smila	x sp.								
									Mitche	ella rep	oens							
									llex of	oaca								
									Lonice	əra jap	onica							
Prism		%	6 Cano	ору Со	ver			%	Under	story C	Cover	-		% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	100	100	100	80	95	95%	0	0	5	0	10	3%	20	5	10	50	50	27%
1/20		%	6 Invas	sive Co	ver			# L	Inderst	ory Sp	ecies		%	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е						Е	S	W	Mean	С	Ν	Е	S	W	Mean
Invasive	15	4	10	50	30	22%	0	0	1	0	4	1	25	20	40	65	10	32%

Saplings and mature trees; Japanese stilt grass and mitchella repens ground cover; not much of a shrub layer at all; similar to plot B; plot A is down the slope to the lake, so slightly different: more shrubs and red maples

Property: North Branch Trail Propared By: J. Cummings & C. Perlit Stand #: 3 Plot #: A Plot Size: It Jule = 72.24t 1/20ac = r 25.28t Date: 1 2/1/2012 Successional Stage: Mid Basal Area (sl'ac): 90 Net 1 12/4/2012 Tree Species Total 1 20'+ Total Corown Poeiton 0 Other Dom Col Other Dom Colspan="4">Other Dom Colspan="4">Colspan="4">Other Dom Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4">Colspan="4"Colspan="4"						F	orest	San	nplin	g Dat	ta Wo	orksh	eet						
Successional Stage: Mid Basal Area (strac): 90 Sheet 1 of 1 of 1 Total (1 = >24") Carpinus caroliniana Com Position Total Total Acer rubrum Dom CoD Other Com CoD Other Dom CoD Other Dom CoD Other Com CoD Other Dom CoD Other Dom CoD Other Total Acer rubrum Com CoD Other Dom CoD Other Dom CoD Other Dom CoD Other Com CoD Other Dom CoD Other Dom CoD Other Acer rubrum Com CoD Other Dom CoD Other Dom CoD Other Com CoD Other Dom CoD Other Com CoD Other Dom CoD Other Com CoD Other Dom CoD Other Dom CoD Other Com CoD Other Dom CoD Other Com CoD Other Dom CoD Other Com CoD Other Dom CoD Other Dom CoD Other Com CoD Other Dom CoD Other Com CoD Other Dom CoD Other Com CoD Other Dom CoD Other Com CoD Other Dom CoD Other Com CoD Other Dom CoD Other Dom CoD Other Com CoD Other Dom CoD Other Dom CoD	Property:	North	Branc	h Trail							Prepa	red By:			J. Cı	ummin	gs & C	. Perfit	
Tree Species Size class of trees > 20' height within sample plot (1 = >24') 3 - 6.9'' 7 - 19.3'' 20'' + Total Acer rubrum 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Stand #:	3		Plot #	:	А	Plot Siz	ze: 🤅	(/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/4/20	12
(1 = >24') <3' 3 - 6.9' 7 - 19.9' 20' + Total Cown Posico Dom CoD Other Dom CoD Don CoD	Succession	al Sta	ge:	Mid					Basal	Area (sf/ac):		90		Sheet	t	1	of	1
Cown Position Cab Dom Cab Other Dom Cab Cab Discipance Size Size Size Cab Discipance Size Size <t< td=""><td></td><td>-</td><td>5</td><td></td><td></td><td></td><td>Siz</td><td></td><td>s of tr</td><td></td><td></td><td>-</td><td></td><td></td><td></td><td>•</td><td></td><td></td><td></td></t<>		-	5				Siz		s of tr			-				•			
Acer rubrum Image: Constraint of the second se		,		-	r		Dom		Othor			-				Dom		Othor	Total
Carpinus caroliniana Image: Second marked second mark							Dom	COD		Dom	COD		Dom	COD		Dom	COD	Other	5
Carya alba Image: Standing law			na																
Fagus grandifolia Image: constraint of the second seco	Carya alba								2			2			2				6
Liriodendron tulipifera Image: Sylvatica	Cornus florie	da							1										1
Nyssa sylvatica Image: Sylvatica	Fagus grand	difolia							1			1							2
Quercus alba Image: Converting alba Image: Conv	Liriodendror	n tulipit	fera													1			1
Quercus rubra Image: Construction of the second	Nyssa sylva	ntica										1			3				4
Image: Second	Quercus alb	a													1	3			4
# / Size Standing Dead: 6 0 0 0 6 Understory Species (3' - 20'): Herbaceous Species (0' - 3'): Carpinus caroliniana Berberis thunbergii Cornus florida Polystichum acrostichoides	Quercus rub	bra															1		1
# / Size Standing Dead: 6 0 0 0 6 Understory Species (3' - 20'): Herbaceous Species (0' - 3'): Carpinus caroliniana Berberis thunbergii Cornus florida Polystichum acrostichoides																			
# / Size Standing Dead: 6 0 0 0 6 Understory Species (3' - 20'): Herbaceous Species (0' - 3'): Carpinus caroliniana Berberis thunbergii Cornus florida Polystichum acrostichoides																			
# / Size Standing Dead: 6 0 0 0 6 Understory Species (3' - 20'): Herbaceous Species (0' - 3'): Carpinus caroliniana Berberis thunbergii Cornus florida Polystichum acrostichoides																			
# / Size Standing Dead: 6 0 0 0 6 Understory Species (3' - 20'): Herbaceous Species (0' - 3'): Carpinus caroliniana Berberis thunbergii Cornus florida Polystichum acrostichoides																			
Understory Species (3' - 20'): Herbaceous Species (0' - 3'): Carpinus caroliniana Berberis thunbergii Polystichum acrostichoides Polyst	Total # Tree	s / Cla	SS:					11			11			7			5		34
Carpinus caroliniana Berberis thunbergii Cornus florida Polystichum acrostichoides Rubus phoenicolasius Rubus phoenicolasius Rosa multiflora Allium canadense Lonicera japonica Lonicera japonica Prism % Canopy Cover % Understory Cover % Ground Cover (0' - 3') Scale C N E S W Mean C N E S W Mean (1/1) 100 100 100 100 100 100 100 100 100 100 100 15 0 80 30 31% 15 10 0 5 60 18%	# / Size Star	nding [Dead:					6			0			0			0		6
Cornus florida Polystichum acrostichoides Rubus phoenicolasius Rubus phoenicolasius Rosa multiflora Allium canadense Lonicera japonica Lonicera japonica Prism % Canopy Cover % Understory Cover % Ground Cover (0' - 3') Scale C N E S W Mean (1/1) 100 100 100 100 100 100 100 100 100 18% 1/20 % Invasive Cover # Understory Species % Cover Down Woody Debris # Understory Species % Cover Down Woody Debris		U	Inders	tory S	pecies	s (3' - 2	20'):					ŀ	lerbace	ous S	pecies	s (0' - 3	;'):		
Rubus phoenicolasius Rubus phoenicolasius Rosa multiflora Rosa multiflora Allium canadense Allium canadense Lonicera japonica Lonicera japonica V Scale C N E S W Mean C N E S W Mean 1/10 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 <td>Carpinus ca</td> <td>rolinia</td> <td>na</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Berbe</td> <td>ris thu</td> <td>nbergii</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Carpinus ca	rolinia	na							Berbe	ris thu	nbergii							
Rosa multiflora Allium canadense Lonicera japonica Prism % Canopy Cover % Understory Cover % Ground Cover (0' - 3') Scale C N E S W Mean C N E S W Mean 1/10 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 <td>Cornus florie</td> <td>da</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Polys</td> <td>tichum</td> <td>acrosti</td> <td>ichoides</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Cornus florie	da								Polys	tichum	acrosti	ichoides						
Allium canadense Allium canadense Lonicera japonica Prism % Canopy Cover % Understory Cover % Ground Cover (0' - 3') Scale C N E S W Mean C N E S W Mean 1/10 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Rubus</td> <td>s phoe</td> <td>nicolas</td> <td>ius</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>										Rubus	s phoe	nicolas	ius						
Prism % Canopy Cover % Understory Cover % Ground Cover (0' - 3') Scale C N E S W Mean C N E S W Mean 1/10 100 100 100 100 100 100 30 15 0 80 30 31% 15 10 0 5 60 18% 1/20 % Invasive Cover # Understory Species % Cover Down Woody Debris										Rosa	multifle	ora							
Prism % Canopy Cover % Understory Cover % Ground Cover (0' - 3') Scale C N E S W Mean C N E S W Mean 1/10 100 100 100 100 100% 30 15 0 80 30 31% 15 10 0 5 60 18% 1/20 % Invasive Cover # Understory Species % Cover Down Woody Debris										Allium	canac	dense							
Scale C N E S W Mean 1/10 100 100 100 100 100 30 15 0 80 30 31% 15 10 0 5 60 18% 1/20 % Invasive Cover # Understory Species % Cover Down Woody Debris										Lonice	era jap	onica							
Scale C N E S W Mean 1/10 100 100 100 100 100 30 15 0 80 30 31% 15 10 0 5 60 18% 1/20 % Invasive Cover # Understory Species % Cover Down Woody Debris																			
1/10 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100	Prism		%	% Cano	ру Со	ver			%	Under	story C	Cover			% G	round	Cover	(0' - 3')	1
1/20 % Invasive Cover # Understory Species % Cover Down Woody Debris	Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	s	W	Mean
	1/10	100	100	100	100	100	100%	30	15	0	80	30	31%	15	10	0	5	60	18%
*- C N E S W Mean C N E S W Mean C N E S W Mean	1/20		9	6 Invas	ive Co	ver			# L	Inderst	ory Sp	ecies		9	% Cove	er Dow	n Woo	dy Deb	oris
	* =	С	Ν	E S W Mean C N						Е	S	W	Mean	С	Ν	Е	S	W	Mean
Invasive 10 8 0 5 30 11% 1 2 0 1 2 1 2 10 2 10 5 6% Saplings and mature trees really no shrub layer at all									2	0	1	2	1	2	10	2	10	5	6%

and mature trees, really no shrub layer at all.

					F	orest	San	nplin	g Da	ta Wo	orksh	eet						
Property:	North	Branc	h Trail							Prepa	red By:			J. Cu	ummin	gs & C	. Perfit	
Stand #:	3		Plot #	:	В	Plot Siz	ze: 6	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/4/20	12
Succession	al Stag	ge:	Mid					Basal	Area (sf/ac):		100		Sheet		1	of	1
Tree S	-	5				Siz		s of tr			-	hin san						
	>24") Position			r –		Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 CoD	" Other	Dom	20" + CoD	Other	Total
Acer rubrum		-				Dom	COD	2	Dom	COD	3	Dom	COD	3	Dom	COD	Other	8
Carpinus ca		na						11			11							22
Carya alba											1			2				3
Cornus florie	da							1										1
Juniperus vi	irginiar	na									1							1
Liriodendror	n tulipit	fera												1				1
Quercus alb	a														1	1		2
																		0
																		0
Total # Tree	s / Cla	SS:		-			14			16			6	-		2		38
# / Size Star	nding [Dead:					2			0			0			1		3
	U	nders	tory S	pecies	s (3' - 2	0'):					H	lerbace	ous S	pecies	s (0' - 3	s'):		
Carpinus ca	rolinia	na							Junip	erus vi	rginiana	a						
Cornus flori	da								Rosa	multifle	ora							
Acer rubrum	ו								Lonice	era jap	onica							
									Smila.	x sp.								
Prism		%	6 Cano	opy Co	ver	1		%	Under	story C	Cover	1		% G	round	Cover	(0' - 3')	
Scale	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean
1/10	90	100	100	95	100	97%	20	50	80	30	20	40%	20	10	25	5	10	14%
1/20		%	6 Invasive Cover						Inderst		ecies			% Cove	r	r	r -	oris
* =	С	N	E S W Mean C					N	E	S	W	Mean	С	N	E	S	W	Mean
Invasive	15	10	5	4	10	9%	3	2	1	1	1	2	5	25	5	30	100	33%

This area was inundated lately - ; along lake; also debris in western plot could be washed up debris; saplings, mature trees, not much shrub layer or ground cover at all (both A & B)

					F	orest	San	nplin	g Dat	ta Wo	orksh	eet						
Property:	North	Branc	h Trail							Prepa	red By:			J. Cı	ummin	gs & C	. Perfit	
Stand #:	4		Plot #	2:	А	Plot Siz	ze: 6	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/4/20	12
Succession	al Stag	ge:	early-	mid					Area (-		90		Sheet	:	1	of	1
Tree S	-	5				Siz		s of tr			-	hin san						
	>24") Position					Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 CoD	" Other	Dom	20" + CoD	Other	Total
Acer rubrum		-				Dom	COD	1	Dom	000	2	Dom	000	7	Dom	COD	Other	10
Carya alba								2			2			3				7
Fagus grand	difolia							1			2			1				4
Liriodendror	n tulipif	era													3			3
Pinus virgini	iana													3				3
					-													0
																		0
																		0
																		0
Total # Tree	s / Cla	ss:		<u> </u>			4			6			14			3		27
# / Size Star	nding E)ead:					3			0			2			0		5
	U	nders	tory S	pecies	(3' - 2	0'):					F	lerbace	ous S	pecies	s (0' - 3	s'):		
Carpinus ca	roliniaı	าล							Berbe	ris thu	nbergii			llex o	paca			
Fagus grand	difolia								Polys	tichum	acrosti	choides		Walds	steinia	fragari	oides	
llex opaca									Rubus	s phoe	nicolasi	ius		Micro	stegiur	n vimir	neum	
Viburnum sp	D.								Viburr	num sp).			Rubu	s spp.			
									Smila	x sp.				Allium	n canad	dense		
									Lonice	əra jap	onica							
									Mitche	ella rep	oens							
Prism		%	% Cano	ору Со	ver			%	Under	story C	Cover			% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	95	90	80	100	95	92%	25	50	40	10	20	29%	80	60	60	80	80	72%
1/20		%	6 Invas	sive Co	ver			# L	Inderst	ory Sp	ecies		9	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	E S W Mean C						E	S	W	Mean	С	N	E	S	W	Mean
Invasive	35	40	20	50	60	41%	3	2	2	2	2	2	5	50	10	75	15	31%

					F	orest	San	nplin	g Da	ta Wo	orksh	eet						
Property:	North	Branc	h Trail							Prepa	red By:			J. Cı	ummin	gs & C	. Perfit	
Stand #:	4		Plot #	:	В	Plot Siz	ze: 6	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/4/20	12
Succession	al Sta	ge:	early-	mid				Basal	Area (sf/ac):		90		Sheet	t i	1	of	1
Tree S	-	5				Siz		s of tr	ees > 2		-	hin san			•			
	>24") Position			r –	r –	Dom	< 3" CoD	Other	Dom	3- 6.9' CoD	" Other	7 Dom	- 19.9 CoD	" Other	Dom	20" + CoD	Other	Total
Acer rubrum						Dom	COD	1	Dom	COD	2	Dom	000	4	Dom	COD	Other	7
Carpinus ca		na						-			_			1				1
Carya alba								1			1			1				3
Cornus flori	da							1			1							2
Fagus grand	difolia										1							1
llex opaca								3										3
Liriodendror	n tulipit	fera													2			2
Pinus virgin	iana													1				1
																		0
Total # Tree	s / Cla	SS:		0			6	1		5			7			2		20
# / Size Star	nding [Dead:		0			1			4			1			0		6
	U	Inders	tory S	pecies	s (3' - 2	0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	5'):		
Fagus grand	difolia								Berbe	eris thu	nbergii			Vitis s	sp.			
llex opaca									Rubus	s spp.				Hede	ra helix	(
Lindera ben	zoin								Rubu	s phoe	nicolas	ius						
Viburnum s	Э.								Viburi	num sp).							
									Smila	x sp.								
									Lonic	era jap	onica							
									Mitche	ella rep	oens							
Prism		%	6 Cano	ору Со	ver			%	Under	story C	Cover			% G	round	Cover	(0' - 3')	
Scale	С	Ν	E S W Mean C						Е	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	60	100							30	60	30	42%	25	75	70	85	90	69%
1/20		%	6 Invas	sive Co	over			# L	Inderst	tory Sp	ecies		Q	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	E S W Mean C N						Е	S	W	Mean	С	Ν	Е	S	W	Mean
Invasive	15	50	65	60	60	50%	4	3	3	2	1	3	25	40	100	100	100	73%

Plot A&B: lot of scrubby shrub layer, dead wood, tall dead pines, invasives, openish canopy

					F	orest	Sam	npling	g Dat	ta Wo	orksh	eet						
Property:	North	Brancl	h Trail							Prepa	red By:			J. Cı	ummin	gs & C	. Perfit	
Stand #:	5		Plot #	:	А	Plot Siz	ze: 🕻	/10ac	= r 37	.24ft	1/20a	ac = r 25	.28ft		Date:	1	2/5/20	12
Succession	al Stag	ge:	Mid-la	ate				Basal	Area (sf/ac):		130		Sheet		1	of	1
Tree S	-	5				Siz		s of tr			-	hin sam			-			
	>24") Position			1	<u> </u>	Dom	< 3" CoD	Other	Dom	3 - 6.9 CoD	" Other	7 Dom	- 19.9 _{CoD}	" Other	Dom	20" + CoD	Other	Total
Liriodendror		era				Dom	COD	Other	Dom	COD	Other	2	1	7	4	2	Other	16
	r tempin											-		-	<u> </u>	-		0
																		0
																		0
																		0
																		0
																		0
																		0
																		0
Total # Tree # / Size Star							0			0			10 0			6 0		16
			1		(2) 2	01).	1			-		larkaaa			(0) 2			2
		nders	tory S	pecies	s (3' - 2	0):			A.U			lerbace	ous 5	1	-	-		
Crataegus s Cornus florio	-									a petio		abaidaa		Rosa	multifle	ora		
Lindera ben												choides						
	2011										nicolasi fragaric							
										canac		nues						
										era jap								
									Vitis s									
Prism		%	6 Cano	ору Со	ver			%		story C	Cover			% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	N	E	S	W	Mean
1/10	100	100	90	90	95	95%	80	0	20	100	20	44%	60	100	80	10	80	66%
1/20		%	6 Invas	ive Co	ver			# L	Inderst	ory Sp	ecies		9	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	E	S	W	Mean
Invasive	40	50	60	5	45	40%	1	0	1	1	1	1	40	10	15	1	60	25%
mostly matu	ro tulio	troop	and ar	Joobur	h ohru	h lovor	opprov	0 10'	hiah				1				1	

mostly mature tulip trees and spicebush shrub layer approx 0-10' high

					F	orest	San	nplin	g Da	ta Wo	orksh	eet						
Property:	North	Brancl	h Trail							Prepa	red By:			J. Cı	ummin	gs & C	. Perfit	
Stand #:	5		Plot #	!:	В	Plot Siz	ze: 🕅	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/5/20	12
Succession	al Stag	ge:	mid					Basal	Area (sf/ac):		160		Sheet		1	of	1
Tree S	-	5				Siz		s of tr			-	hin san						
	>24") Position			1		Dam	< 3" CoD	Other	Dom	3 - 6.9 CoD		7 Dom	- 19.9 CoD	" Other	Dam	20" + CoD	Other	Total
Liriodendror		fera				Dom	COD	4	Dom	COD	Other 4	6	3	14	Dom 1	1	Other	33
Maclura por											3		-					3
																		0
																		0
																		0
																		0
																		0
																		0
																		0
Total # Tree							4			7			23			2		36
# / Size Star	nding E	Dead:					12			0			1			0		13
	U	nders	tory S	pecies	s (3' - 2	20'):					ŀ	lerbace	ous S	pecies	s (0' - 3	s'):		
Cornus florid	da								Berbe	eris thu	nbergii			Rosa	multifle	ora		
Lindera ben	zoin								Polys	tichum	acrosti	ichoides		Walds	steinia	fragari	oides	
Maclura por	nifera								Rubu	s phoe	nicolas	ius		Rubu	s spp.			
Mahonia sp.									Hede	ra helix	ć							
									Allium	n canad	dense							
									Lonic	era jap	onica							
									Vitis s	pp.								
Prism		%	6 Cano	ору Со	ver			%	Under	story C	Cover			% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	E	S	W	Mean
1/10	90	90	100	90	95	93%	30	20	20	0	0	14%	80	90	60	40	90	72%
1/20		%	6 Invas	sive Co	ver			# L	Inderst	tory Sp	ecies		9	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	E	S	W	Mean
Invasive	75	75	30	35	70	57%	1	1	1	0	0	1	30	25	5	10	25	19%

					F	orest	San	nplin	g Dat	ta Wo	orksh	eet						
Property:	North I	Brancl	h Trail							Prepa	red By:			J. Cı	ummin	gs & C	. Perfit	
Stand #:	5		Plot #	:	С	Plot Siz	ze: (1/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/5/20	12
Succession	al Stag	je:	early-	mid		<u>.</u>		Basal	Area (sf/ac):		90		Sheet	t	1	of	1
Tree S	-					Siz		s of tr			-	hin san			-			
	>24") Position					Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 CoD	" Other	Dom	20" + CoD	Other	Total
Lindera ben						Dom	COD	1	Dom	COD	Other	Dom	COD	Other	Dom	COD	Other	1
Liriodendror		era											1	1	1	2		5
Maclura pon	nifera							2			5			5				12
																		0
						<u> </u>												0
						 												0
																		0
																		0
																		0
					-													
Total # Tree	s / Clas	ss:					3			5			7			3		18
# / Size Star	nding D	ead:					0			6			1			0		7
	U	nders	tory S	pecies	(3' - 2	.0'):					F	lerbace	ous S	pecies	s (0' - 3	5'):		
Cornus florid	da								Alliaria	a petio	lata			unkno	wn gra	ass		
Lindera ben.	zoin								Walds	steinia	fragario	oides						
Maclura pon	nifera								Rosa	multifle	ora							
									Heder	ra helix	1							
									Allium	canac	lense							
									Lonice	əra jap	onica							
									Vitis s	pp.								
Prism		%	6 Canc	ору Со	ver			%	Under	story C	over	r		% G	round	Cover	(0' - 3')	1
Scale	С	Ν	E	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	E	S	W	Mean
1/10	100	90	95	80	90	91%	10	30	15	0	30	17%	80	65	90	50	50	67%
1/20		%	lnvas	sive Co	ver			# L	Inderst	ory Sp	ecies		%	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	E	S	W	Mean	С	Ν	Е	S	W	Mean	С	N	E	S	W	Mean
Invasive	50	50	40	40	45	45% /ines, Os	1	1	1	0	2	1	10	20	10	10	2	1 0 %

					F	orest	Sam	nplin	g Daf	ta Wo	orksh	eet								
Property:	North E	Branch	h Trail							Prepa	red By:			J. Cummings & C. Perfit						
Stand #:	6		Plot #	:	А	Plot Siz	ze: 6	(10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/5/20	12		
Succession	al Stage	e:	early-	mid				Basal	Area (sf/ac):		70		Sheet		1	of	1		
	pecies					Siz		s of tr			-	hin san								
	>24") Position						< 3"			3 - 6.9			- 19.9	1		20" +	0.1	Total		
Acer neguno						Dom	CoD	Other	Dom	CoD	Other	Dom	CoD	Other 1	Dom	CoD	Other	1		
Acer rubrum				┝──			<u> </u>	2			2			9				13		
		nico		┣───			<u> </u>	2			2			9 3				6		
Fraxinus per Maclura por	-	nica		<u> </u>			<u> </u>	-			2							-		
Platanus oc		lio		<u> </u>			<u> </u>	1						2	2			3		
		15		<u> </u>	 		<u> </u>								2			2		
Prunus sero	otina			──		·	 	ļ!		 				1				1		
				 	 		 			 								0		
				<u> </u>			<u> </u>											0		
				<u> </u>	 		 											0		
				<u> </u>	 		 	ļ!	!	 										
				<u> </u>			<u> </u>	ļ!												
				<u> </u>	<u> </u>		<u> </u>													
																		26		
Total # Tree							4		4				16			Image: second				
# / Size Star							2			1			0							
	Un	derst	tory S	pecies	(3' - 2	0'):			Herbaceous Species (0' - 3'):											
Cornus florid	da								Alliaria	a petio	lata			Berberis thunbergii						
Lindera ben	zoin			<u> </u>					Walds	steinia	fragario	oides		Toxicodendron radicans						
Maclura por	nifera								Rosa	multifle	ora			Rubus	s spp.					
									Polyst	tichum	acrosti	choides		unkno	wn gra	ass				
									Allium	n canac	dense									
									Lonice	era jap	onica									
						Vitis s	pp.													
Prism		%	6 Cano	ору Со	ver			%	Under	story C	Cover			% G	round	Cover	(0' - 3')			
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean		
1/10	95	95 100 100 100 98% 20				60	10	0	30	24%	30	20	30	10	40	26%				
1/20		%	% Invasive Cover # L							tory Sp	ecies		9	% Cover Down Woody Debris						
* =	С	Ν	Е	S	W	Mean	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean		
Invasive	25	8	25	10	40	22%	1	1	1	0	2	1	20	10	15	2	15	12%		

					F	orest	San	nplin	g Da	ta Wo	orksh	eet										
Property:	North	Brancl	n Trail							Prepa	red By:			J. Cummings & C. Perfit								
Stand #:	6		Plot #	:	В	Plot Siz	ze: 6	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/5/20	12				
Succession	al Stag	je:	early-	mid				Basal	Area (sf/ac):		90		Sheet		1	of	1				
Tree S	-					Siz		s of tr			-	hin san										
	>24") Position			1		Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 CoD	" Other	Dom	20" + CoD	Other	Total				
Acer negun						Dom	COD	Other	Dom	COD	Other	Dom	COD	2	Dom	COD	Other	2				
Acer saccha								4			5			6		1		16				
Fraxinus pe		anica												1				1				
Liriodendror	-													2				2				
Maclura por																	1	1				
Platanus oc		alis											1		1	1		3				
																		0				
																		0				
																		0				
Total # Tree	s / Cla	SS:					4			5			12			4		25				
# / Size Star	nding D)ead:					1			1			0			0						
	U	nders	tory S	pecies	s (3' - 2	:0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	;'):						
Rosa multifl	ora								Alliari	a petio	lata											
Lindera ben	zoin								Smila.	x sp.												
									Rosa	multifle	ora											
									Lonic	əra jap	onica											
									unkno	wn gra	ass											
Prism		%	6 Cano	Canopy Cover				%	Under	story C	Cover	1		% G	round(Cover	T					
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean				
1/10	100	100 85 60 80 90 83% 30				60	40	10	0	28%	50	70	100	40	70	66%						
1/20		%	% Invasive Cover # L							ory Sp	ecies		% Cove	er Dow	n Woo	dy Deb	oris					
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	N	Е	S	W	Mean				
Invasive	50	50	60	40	50	50%	1	1	1	0	0	1	20	1	0	10	50	16%				

area is along stream and had been flooded lately; lots of unindentifiable grasses/ground cover; tree #273 in plot

					F	orest	San	nplin	g Da	ta W	orksh	eet									
Property:	North	Branc	h Trail							Prepa	red By:			J. Cu	J. Cummings & D. Merkey						
Stand #:	7		Plot #	:	А	Plot Siz	ze: 6	(10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/12/2)12			
Succession	nal Sta	ge:	mid					Basal	Area (sf/ac):		110		Sheet		1	of	1			
		e Spe				Size class of trees > 20' height within sa															
	,	1 = >24	,			Dom	< 3" CoD	Other	Dom	3 - 6.9 CoD	" Other	7 Dom	- 19.9 _{CoD}	" Other	Dom	20" + CoD	Other	Total			
Acer rubrur		5wii 1 03				Dom	COD	2	Dom	COD	1	Dom	COD	Other	Dom	COD	Other	3			
Acer sacch	arinum										2			1				3			
Carpinus ca	arolinia	na						1										1			
Carya alba								3			4							7			
Cornus flor	ida							2										2			
Fagus gran						2							2								
Liriodendron tulipifera												1	1	2				4			
Nyssa sylvatica								1										1			
Platanus occidentalis												1			2			3			
Quercus alba											2							2			
Quercus falcata													1					1			
Quercus ru	bra												1					1			
Total # Tree							9	-		11	-		8	-		2	-	30			
# / Size Sta	nding [Dead:					3	3 3 2								0 8					
	U	nders	tory S	pecies	(3' - 2	:0'):					ŀ	lerbace	ous S	pecies	5 (0' - 3	8'):					
Lindera ber	nzoin								Smilax spp.												
Viburnum s	spp.								Lonic	era jap	onica										
Carpinus ca	arolinia	na							Toxic	odendı	ron radi	cans									
Cornus flor	ida							Rosa multiflora													
Quercus all	ba								llex ci	renata											
llex opaca									Allium	n canad	dense										
Prism		%	% Canc		ver			%	Under		Cover			% G	-	Cover	(0' - 3')				
Scale	С	Ν	E	S	W	Mean	С	Ν	Е	S	W	Mean	С	N	Е	S	W	Mean			
(1/10	70	50	100	50	100	74%	40	10	20 50 0 2			24%	10	15	5	9%					
1/20		%	1							tory Sp		% Cover Down Woody Debris									
* =	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean	С	N	Е	S	W	Mean			
Invasive	10	10	5	10	5	8%	1	2	2	1	2	2	5	20	20	25	20	18%			
Just west o	f tree #	31																			

					F	orest	: San	nplin	g Da	ta W	orksh	eet							
Property:	North	Branch	n Trail							Prepa	red By:			J. Cu	mming	s & D.	Merke	у	
Stand #:		7	Plot #	:	В	Plot Siz	ze: 6	(10ac	=r 37	.24ft	1/20	ac = r 28	5.28ft		Date:	1	2/12/2	012	
Succession	al Sta	ge:	mid					Basal	Area (sf/ac):		130		Sheet		1	of	1	
		e Spec						Size c				neight v		-	e plot				
		1 = >24					< 3"	01		3 - 6.9 CoD	1		- 19.9 _{CoD}			20" +		Tota	
Acer negun			luon			Dom	CoD	Other	Dom	COD	Other	Dom	COD	Other 1	Dom	CoD	Other	1	
Carya alba	40							2			2			1				5	
Carya glabr	a							2			~			1				1	
Cornus flori								2										2	
Fagus gran								_			1							1	
Liriodendron tulipifera														1	3	1		5	
Nyssa sylvatica											1							1	
Prunus sero										1				1					
Quercus all	ba										1							1	
Total # Tree	es / Cla	SS:					4	<u>.</u>		5			5	<u>.</u>		4	4		
# / Size Sta	nding [Dead:					2	0 0 0										2	
	U	Inders	tory S	pecies	(3' - 2	:0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	8'):			
Cornus flori	da								Lonicera japonica Polystichum acrostichoides										
Lindera ber	izoin								Carex	spp.									
Carpinus ca	arolinia	na							Walde	esteinia	a fragai	oides							
Viburnum s	pp/								Smila	x spp.									
Carya alba									Rubu	s phoe	nicolas	ius							
Fagus gran	difolia								Viburi	num sp	р.								
Quercus all	ba								Vitis s	pp.									
Prism		%	6 Cano	ру Со	ver			%	Under	story C	Cover			% G	round	Cover	(0' - 3')		
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	E	S	W	Mear	
1/10	70	100	60	80	60	74%	40	70	20	40	10	36%	20	60	10	10	40	28%	
1/20		%	5 Invas	ive Co	ver			# L	Inderst	ory Sp	ecies		Q	% Cover Down Woody Debr					
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	
Invasive	15	10	10	5	10	10%	2	1	2	3	3	2	10	20	15	10	30	17%	
Tree #32 is	next to	plot ce	enter.	All 3 la	yers T	ree, Uno	derstor	y, and	Herba	ceous	are pre	sent; ve	ry larg	e Whit	e Oaks	s scatte	ered ar	ound	

Tree #32 is next to plot center. All 3 layers Tree, Understory, and Herbaceous are present; very large White Oaks scattered around periphery of plot; recent wind damage to Tulip Poplars caused down woody debris.

Property:	NI - utla				-	01030	Jan	ipiiii	y Da		orksh	leel							
<u> </u>	North	Brancl	h Trail							Prepa	red By:			J. Cummings & D. Merkey					
Stand #:		8	Plot #	:	А	Plot Siz	ze: 6	(10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	12/12/2012		
Succession	al Stag	ge:	mid					Basal	Area (sf/ac):		130		Sheet		1	of	1	
		e Spec						Size c				neight w			e plot				
		= >24					< 3"	01		3 - 6.9	1		- 19.9	1			Tota		
Acer rubrum		own Posi	Ition			Dom	CoD	Other 2	Dom	CoD	Other 2	Dom	CoD	Other	Dom	CoD	Other	4	
Carya alba	1							2			10							10	
Carya ovata	,										1			<u> </u>				10	
llex opaca	•							1			2							3	
Juniperous	virainia	na									2							2	
Liriodendror	-										2	1	2					5	
Nyssa sylva	-							3			2			2				7	
Prunus sero							1							1					
Quercus alb											1			1					
Quercus rubra													1					1	
													-						
Total # Tree	s / Cla	ss:					6	<u> </u>		22	ļ		6	Į		1	<u> </u>	35	
# / Size Star	nding D	Dead:				1 3 1							0 5						
	U	nders	tory S	pecies	(3' - 2	0'):					H	lerbace	ous S	pecies	6 (0' - 3	s'):			
llex opaca									Carex	spp.									
Nyssa sylva	ntica									əra jap	onica								
Juniperus vi		a								era tata									
Prunus sero																			
Acer rubrum																			
Prism		%	6 Cano	ру Со	ver			%	Under	story C	Cover			% Gi	round	Cover	(0' - 3')		
Scale	С	Ν	Е	S	W	Mean	С	N	Е	S	W	Mean	С	N	Е	S	W	Mear	
1/10	90	90	100	50	30	72%	40	30	10	10	100	38%	0	0	5	20	0	5%	
1/20		%	6 Invas	asive Cover # L						ory Sp	ecies		ç	% Cover Down Woody Debris					
* =	С	Ν	Е	S	W	Mean	С	N	Е	S	W	Mean	С	N	Е	S	W	Mear	
Invasive		0	5	1	0	2%	2	0	1	3	1	1	10	30	5	5	20	14%	

Mostly saplings and mature trees, not much groundcover or shrub layer at all.

					F	orest	San	nplin	g Da	ta W	orksh	eet								
Property:	North	Branch	h Trail					-			red By:			J. Cu	mming	s & D.	Merke	у		
Stand #:		8	Plot #		В	Plot Siz	e: 6	/10ac	=r 37	.24ft	1/20	ac = r 25	5.28ft		012					
Succession	al Stag	ge:	mid					Basal	Area (sf/ac):		110		Sheet		1	of	1		
	Tre	e Spec	cies					Size c	lass o	f trees	s > 20' l	neight w			e plot					
		= >24					< 3"			3 - 6.9	1		- 19.9			20" +	1	Total		
Acer rubrun		own Posi	ition			Dom	CoD	Other	Dom	CoD	Other	Dom	CoD	Other	Dom	CoD	Other			
								2			2			4				8		
Carpinus ca	arolinial	na						5			6							11		
Carya alba											2							2		
Cornus flori								1										1		
Liriodendron tulipifera														1	1			2		
Nyssa sylva									1				1							
Quercus all								1				1	2							
Quercus rubra														1				1		
																		0		
													0							
																		0		
																		0		
Total # Tree	es / Cla	ss:					8			10			8	<u>.</u>		2	<u>.</u>	28		
# / Size Sta	nding E	Dead:					0			2			0 3							
	U	nders	tory S	pecies	s (3' - 2	20'):					ŀ	lerbace	ous S	pecies	(0' - 3	5'):				
Carpinus ca	aroliniai	na							Lonice	era jap	onica									
Kalmia latifo	olia								unknown grass											
Fagus gran	difolia								llex of											
									, í		nicolas	ius								
										trum sp										
									-	ra helix	-									
Prism		%	6 Canc		ver			%	Carex Under		Cover			% G	round	Cover	(0' - 3')	I		
Scale	С	N	E	s	W					S	W	Mean	С	N	E	S	(0 0) W	Mean		
1/10	20	60	100	50	20	50%	80	70	E 100	30	100	76%	0					1%		
1/20	20									tory Sp		10%								
			1	1	1	Maga			r	г	-	Maga		T	6 Cover Down Woody Debris					
* =	C	N	E	S	W	Mean	С	N	E	S	W	Mean	C	N	E	S	W	Mean		
Invasive	0	0	0	5	0 ayer at	1%	1	0	0	2	0	1	15	15	60	25	15	26%		

Property:	North	Brancl	n Trail		-	orest	Jail	ipini,	y Da		red By:				mming	<u>م ۶</u> ۹	Merke	
	North		Plot #		0	Plot Siz		1402-	= r 37		,		- 004	J. Cu	Date:		2/12/20	-
Stand #:	ol Stor		mid		С	Plot 512	2e: 4					ac = r 25	5.2811	Sheet		1		
Succession		ge: e Spec							Area (130 neight v	vithin			1	of	1
		= >24					< 3"	Size c		3 - 6.9			- 19.9	-		20" +		Tota
		own Posi				Dom	CoD	Other	Dom	CoD	Other	Dom	CoD	Other	Dom	CoD	Other	Tota
Acer rubrun	1													2				2
Carpinus ca	rolinia	na						4			5							9
Carya alba											1				1			2
Fagus gran	difolia										2							2
Liriodendro	n tulipif	era									2		1	5				8
Nyssa sylva	tica										2							2
Quercus all	a													1			1	1
Quercus fal	cata														1		1	1
Quercus rul	ora												1		2			3
																		0
																		0
																		0
Total # Tree	s / Cla	ss:					4	1		12			10	1		4	ļ	30
# / Size Sta	nding E	Dead:					1									0		1
	U	nders	tory S	pecies	(3' - 2	:0'):					F	lerbace	ous S	pecies	s (0' - 3	8'):		
Carpinus ca	rolinia	na							Walds	steinia	fragaro	ides						
									Alliaria	a petio	lata							
									Polys	tichum	acrosti	ichoides						
									Lonic	əra jap	onica							
									Euony	/mus a	latus							
									-		nbergii							
Prism		%	6 Cano	ру Со	ver			%	Under	story C	over			% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	N	Е	S	W	Mean	С	N	E	S	W	Mear
1/10	50	50	100	50	40	58%	100	100	30	100	25	71%	5	35	5	0	1	9%
1/20		%	5 Invas	ive Co	ver			# L	Inderst	ory Sp	ecies		%	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	N	E	S	W	Mear
Invasive	5	5	1	0	1	2%	2	1	1	1	0	1	10	30	10	5	10	13%
All 3 plots v	ery sim	ilar: no	o real g	round	cover	or shrub	layer	presen	t, hicko	ory, oa	k, tulips	; wind d	lamage	e from	recent	storm	added	to

					F	orest	San	nplin	g Dat	ta W	orksh	eet						
Property:	North	Branch	h Trail					•			red By:			J. Cu	mming	s & D.	Merke	у
Stand #:		9	Plot #	:	А	Plot Siz	ze: 6	(10ac	=r 37	.24ft	1/20a	ac = r 28	5.28ft		Date:	1	2/12/2	012
Successior	nal Stag	ge:	early-	mid				Basal	Area (sf/ac):		130		Sheet		1	of	1
		e Spec						Size c				neight v			e plot			
		1 = >24					< 3"	0.1		3 - 6.9	1		- 19.9	1		20" +	0.1	Total
Acer rubrun	-	own Posi	Ition			Dom	CoD	Other	Dom	CoD	Other 1	Dom	CoD	Other	Dom	CoD	Other	1
Carpinus ca	-	na						2										2
Cornus flori								1										1
Fraxinus pe		anica									1		1					2
Liriodendro	-							2			3		2	1	3			11
Platanus oc												1			-			1
Prunus sero	otina										2			1				3
																		0
Total # Tree	es / Cla	SS:					5			7			6			3		21
# / Size Sta	nding [Dead:					4			4			4			0		12
	U	nders	tory S	pecies	(3' - 2	0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	s'):		
Carpinus ca	arolinia	na							Polys	tichum	acrosti	ichoides		Carex	spp.			
Acer rubrun	n								Micros	stegiur	n vimin	eum		Walde	esteinia	a fraga	roides	
Quercus rui	bra								Rubus	s phoe	nicolas	ius		Vitis s	spp.			
Cornus flori	da								Smila	x spp.				Toxic	odendr	ron rad	licans	
Berberis thu	unbergi	ï							Berbe	eris thu	nbergii							
Fagus gran	difolia								Rosa	multifle	ora							
Lindera ber	nzoin								Alliaria	a petio	lata							
Prism		%	6 Canc	ру Со	ver			%	Under	story C	Cover			% G	round(Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	50	30	60	95	60	59%	0	30	100	0	10	28%	80	100	100	75	80	87%
1/20		%	5 Invas	ive Co	ver			# L	Inderst	tory Sp	ecies		0	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
Invasive	60	100	100	75	80	83%	0	0	2	0	1	1	15	5	20	10	25	15%
Area is very	scrubl	oy, has	lots o	f grape	and p	oison iv	y vine	s and i	nvasive	es sucl	h as Ja	panese	stilt gr	ass.				

Area is very scrubby, has lots of grape and poison ivy vines and invasives such as Japanese stilt grass.

					F	orest	San	nplin	g Da									
Property:	North	Branch	h Trail							Prepa	red By:			J. Cu	mming	s & D.	Merke	у
Stand #:		10	Plot #	:	А	Plot Siz	e: 6	/10ac	=r 37	.24ft	1/20a	ac = r 28	5.28ft		Date:	1	2/12/20	012
Succession	nal Stag	ge:	early-	mid				Basal	Area (sf/ac):		120		Sheet		1	of	1
		e Spec						Size c				neight w			e plot			
		1 = >24				Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 _{CoD}	r	Dom	20" + CoD	Other	Tota
Carpinus ca						Dom	COD	1	Dom	COD	1	Dom	COD	Other	Dom	COD	Other	2
Cornus flori								3			-							3
Liriodendro		fera						2			3	6	1		1			13
Nyssa sylva											1	-						1
Quercus pa											•			3				3
Quercus rul											1							1
																		0
																		0
																		0
Total # Tree	es / Cla	SS:					6	<u></u>		6	<u>[</u>		10	<u> </u>		1	<u></u>	23
# / Size Sta	nding [Dead:					3			4			0			0		7
	U	Inders	tory S	pecies	(3' - 2	0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	s'):		
Cornus flori	da								Lonice	əra jap	onica							
Eleaegnus	umbella	ata							Berbe	ris thu	nbergii							
llex opaca									Allium	canad	dense							
Carpinus ca	arolinia	na							Rosa	multifle	ora							
Quercus rul	bra								Smila	x spp.								
									Vitis s	pp.								
									unkno	wn gra	ass							
Prism		%	6 Cano	py Cov	/er			%	Under	-				% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	N	Е	S	W	Mean	С	N	E	S	W	Mean
1/10	60	80	20	50	75	57%	0	0	100	50	0	30%	50	75	50	30	100	61%
1/20		%	5 Invas	ive Co	ver			# L	Inderst	ory Sp	ecies		9,	% Cove	er Dow	n Woo	dy Deb	oris
* =	Е	S	W	Mean	С	N	E	S	W	Mean								
Invasive	50	75	50	30	75	56%	1	0	2	1	1	1	15	15	0	5	5	8%
Similar to so	crubby	comm	unity o	f FSD	olot 9A	, but the	ere is a	an ope	n cano	py/scru	ub layei	r in betw	een th	e 2 are	eas.			

					F	orest	: San	nplin	g Da	ta W	orksh	eet						
Property:	North	Branch	n Trail	-						Prepa	red By:			J. Cu	mming	s & D.	Merke	у
Stand #:		11	Plot #	:	А	Plot Siz	ze: 🤅	(/10ac	=r 37	'.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/12/20	012
Succession	al Stag	ge:	Mid					Basal	Area ((sf/ac):		90		Sheet		1	of	1
		e Spec						Size c	lass o			neight v		-	e plot			
		1 = >24				Dom	< 3" CoD	Other	Dom	3 - 6.9 CoD	" Other	7 Dom	- 19.9 _{CoD}	" Other	Dom	20" + CoD	Other	Total
Acer rubrun		50011 03				Dom	COD	4	Dom	COD	4	Dom	COD	1	Dom	COD	Other	9
Carya alba											1							1
Fagus gran	difolia													1				1
Liriodendroi	n tulipif	era						1			1				1			3
Nyssa sylva	tica							4			10							14
Prunus serc	otina										1							1
Quercus alb	a													2				2
Quercus rub	ora							1						2	1			4
Total # Tree							10			17			6			2		35
# / Size Star	-						2			2			0			0		4
	U	nders	tory S	pecies	s (3' - 2	20'):					ŀ	lerbace	ous S	pecies	s (0' - 3	5'):		
Carpinus ca	rolinia	na							Lonic	era jap	onica							
Nyssa sylva	tica								Vitis s	spp.								
Fagus gran	difolia								Polys	tichum	acrosti	ichoides						
Prunus serc	otina								Carex	c spp.								
Acer rubrun	า								unkno	own gra	ass							
Kalmia latifo	olia																	
Prism		-		ру Со	1	1		1	1	story C	1	1					(0' - 3')	1
Scale	С	N	E	S	W	Mean	С	N	E	S	W	Mean	С	N	E	S	W	Mean
(1/10	50	60	100	30	0	48%	50	100	5	100	100	71%	10	0	5	40	60	23%
1/20		-	1	ive Co	ver			1	1	tory Sp	ecies			% Cove	1	1	dy Deb	1
* =	С	Ν	E	S	W	Mean	С	N	E	S	W	Mean	С	Ν	E	S	W	Mean
Invasive Area is mad	0	0	0	40	0	8%	1	1	2	2	2	2	50	5	10	5	20	18%

Area is made up of saplings and mature Oaks and Tulips, not much of a shrub or groundcover layer apparent, lots of large trees have fallen down, Large multi-trunk Red oak at eastern border of plot

					F	orest	San	nplin	g Da	ta W	orksh	eet						
Property:	North	Branch	n Trail					•	•		red By:			J. Cu	mming	s & D.	Merke	у
Stand #:		11	Plot #	:	В	Plot Siz	ze: 🕅	(10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/12/2	012
Successior	nal Stag	ge:	Mid					Basal	Area (sf/ac):		100		Sheet		1	of	1
	Tre	e Spec	cies					Size c				neight w			e plot			
		1 = >24					< 3"	1		3 - 6.9	1		- 19.9	1		20" +	1	Total
		own Posi	ition			Dom	CoD	Other	Dom	CoD	Other	Dom	CoD	Other	Dom	CoD	Other	
Acer rubrun Carpinus ca		20						1			2			2	1			6
	aroimai	na						3			2							5
Carya alba	difalia										1							1
Fagus gran								1										1
Liriodendro		era						0			2			1				1
Nyssa sylva								2			3			2				7
Prunus sero											1				4			1
Quercus all															1			1
Quercus ru	ora										1			1				2
																		0
																		0
							<u> </u>							ļ				
Total # Tree # / Size Sta							7			10 2			6 0			2		25
				•	(0) 0		0			2			-	• • •	(0) 0	-		2
		nders	tory S	pecies	3 (3 - 2	0'):						lerbace	ous S	pecies	s (0 [.] - 3	5'):		
Acer rubrun	n								Lonic	era jap	onica							
Carpinus ca	arolinia	na							Berbe	eris thu	nbergii							
Hamamelis	virginia	ana							Carex	spp.								
Prunus sero	otina								Polys	tichum	acrosti	ichoides						
Liriodendro	n tulipit	fera							unkno	wn gra	ass							
Fagus gran	difolia																	
Prism		%		ру Со	ver			%	Under	- -	Cover			1			(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	E	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	30	100	0	90	75	59%	100	10	50	25	100	57%	0	0	5	0	40	9%
1/20		%	5 Invas	ive Co	ver			# L	Inderst	tory Sp	ecies		0	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
Invasive	1	5	5	0	30	8%	2	1	3	1	3	2	5	10	5	5	10	7%
Same as co	mmuni	ity in A	; expo	sed be	d rock	in the p	lot											

					F	orest	: San	nplin	g Da	ta W	orksh	eet						
Property:	North	Brancl	h Trail							Prepa	red By:				D. N	/lerkey		
Stand #:		12	Plot #	:	А	Plot Siz	ze: 🕅	(10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/12/2	012
Succession	al Stag	ge:	early					Basal	Area (sf/ac):		110		Sheet		1	of	1
		e Spec						Size c	lass o			neight w		-	e plot			
		1 = >24					< 3"	01		3 - 6.9			- 19.9	1		20" +	01	Total
Acer rubrum		own Pos	Ition			Dom	CoD	Other 5	Dom	CoD	Other 6	Dom	CoD	Other	Dom	CoD	Other	11
Acer saccha								1			1							2
Juniperus vi								1			1			1				3
Liriodendror	-											1	3					4
Nyssa sylva	tica										3			1				4
Pinus strobu	JS														1			1
Prunus serc	otina										1	1				1		3
																		0
Total # Tree							7	-		12			7	-		2	-	28
# / Size Star	nding [Dead:					0			1			0			0		1
	U	nders	tory S	pecies	s (3' - 2	0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	8'):		
Acer rubrum	ו								Lonic	era jap	onica							
Juniperus vi	irginiar	na							llex ve	erticilla	ta							
Lonicera sp	p.								Allium	i spp.								
Eleaegnus ı	umbella	ata																
	_	_	_		_	_		_		_	_	_					_	_
Prism		1	1	ру Со	r	-		1	Under	-	-			1	r	1	(0' - 3')	l.
Scale	С	N	E	S	W	Mean	С	N	E	S	W	Mean	С	N	E	S	W	Mean
(1/10	50	100	30	40	40	52%	50	30	30	80	40	46%	40	20	30	10	50	30%
1/20	С	Γ	E Invas	ive Co S	Γ	Meer	С	1	Jnderst		-	Mear		% Cove	r	1	, 	1
								N 1	E	S 3	W	Mean 2	C 5	N 5	E 1	S 5	W 15	Mean
Invasive	40	20	30	10	40	28%	0	1	3	3	2	2	5	5	1	5	CI	6%

Early successional area between park road and Lake Frank. Canopy is thin and dominated by very few large trees sparsely scattered. Understory/co-dominants of red maple and other early successional tree species are common. Groundcover mainly consists of Japanese honeysuckle.

					F	orest	: San	nplin	g Da	ta W	orksh	eet						
Property:	North	Brancl	h Trail							Prepa	red By:				J. Cur	mming	S	
Stand #:		13	Plot #		А	Plot Siz	ze: 🕅	(10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/18/20	012
Succession	al Stag	ge:	Mid					Basal	Area (sf/ac):		150		Sheet		1	of	1
		e Spec						Size c	lass o			neight v		-	e plot			
		1 = >24				Dom	< 3" CoD	Other	Dom	3 - 6.9 CoD	" Other	7 Dom	- 19.9 _{CoD}	" Other	Dom	20" + CoD	Other	Total
Acer rubrum		JWITF US				Dom	COD	2	Dom	COD	Other	Dom	COD	Other	Dom	COD	Other	2
Carya alba														3				3
Fagus grand	lifolia										1							1
Nyssa sylva	tica							1			6			5				12
Quercus alb	а												1	2	2			5
Quercus rub	ora														1	1		2
																		0
																		0
																		0
Total # Tree	s / Cla	SS:					3			7	_		11	-		4	-	25
# / Size Star	nding E	Dead:					0			0			3			0		3
	U	nders	tory S	pecies	(3' - 2	0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	8'):		
Kalmia latifo	lia								Carex	c spp.								
Acer rubrum	1								Berbe	eris thu	nbergii							
									Fagus	s grand	lifolia							
									Lonic	era jap	onica							
									unkno	wn gra	ass - se	e pic						
Prism		%	6 Cano	ру Со	ver	-		%	Under	story C	Cover			% G	1	Cover	(0' - 3')	
Scale	C N E S W Mean C								E	S	W	Mean	С	N	E	S	W	Mean
1/10	75	90	90	100	65	84%	0	0	0	0	75	15%	25	20	45	10	10	22%
1/20		Γ	r	ive Co	-			1	1	tory Sp	-			% Cove	r	1	-	-
* =	C							N	E	S	W	Mean	C	N	E	S	W	Mean
Invasive	0	0	0	0	0	0%	0	0	0	0	2	0	0	45	25	35	10	23%

Stand contains large mature oaks in the canopy, hickory and black gums in the subcanopy, and numerous beech, ironwood, and some mountain laurel. Tulips run along the path in this plot and increase as the stand goes north. Not much of a shrub or ground cover layer at all.

					F	orest	San	nplin	g Da	ta W	orksh	eet						
Property:	North	Brancl	h Trail								red By:				J. Cu	mming	s	
Stand #:		13	Plot #	:	В	Plot Siz	ze: 6	/10ac	=r 37	.24ft	1/20	ac = r 25	5.28ft		Date:	1	2/19/2	012
Succession	nal Stag	ge:	Mid					Basal	Area (sf/ac):		110		Sheet		1	of	1
		e Spec						Size c				neight w			e plot			
		1 = >24	· ·			Dem	< 3" CoD	Other	Dom	3 - 6.9 CoD	1		- 19.9 CoD	1	Dam	20" + CoD	Other	Total
Acer rubrur	-	own Pos	luon			Dom	COD	Other 1	Dom	COD	Other 3	Dom	COD	Other 1	Dom	COD	Other	5
Carpinus ca		na						4			1							5
Carya alba											1							1
- Fagus gran	difolia							2										2
Liriodendro	n tulipil	fera						4			6		4	3				17
Nyssa sylva	atica							2			4							6
Quercus all	ba											1						1
Total # Tree							13	-		15			9	-		0	-	37
# / Size Sta							1			0			0			0		1
	U	Inders	tory S	pecies	(3' - 2	:0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	8'):		
Carpinus ca	arolinia	na							Berbe	eris thu	nbergii							
Fagus gran	difolia								Polys	tichum	acrost	ichoides						
Liriodendro	n tulipit	fera							Lonice	era jap	onica							
									Carex	spp.								
									llex of	baca								
									unkno	wn gra	ass			<u> </u>				
																-	/	
Prism		r	1	py Co	-			1	Under	r -			-	T .	round	1	, , T	-
Scale	C	N	E	S	W	Mean	C	N	E	S	W	Mean	C	N	E	S	W	Mean
(1/10	75	80	55	80	50	68%	0	0	0	95	75	34%	0	50	50	0	30 du Dak	26%
1/20		1	1	ive Co	· · · · ·			1	Inderst	- ·				% Cove	1	1	, 	· · · · ·
* =	C	N	E	S	W	Mean	C	N	E	S	W	Mean	C	N	E	S	W	Mean
Invasive See Plot A	15	35	30	0	20	20%	0	0	0	1	1	0	0	15	10	50	55	26%
Jee Flot A																		

					F	orest	San	nplin	g Da	ta Wo	orksh	ieet						
Property:	North	Brancl	n Trail							Prepa	red By:				J. Cur	mming	s	
Stand #:		13	Plot #	:	С	Plot Siz	ze: 6	1/10ac	= r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1:	2/19/20	012
Succession	al Stag	je:	Mid					Basal	Area (sf/ac):		110		Sheet		1	of	1
		e Spec						Size c				neight w		-	e plot			
		1 = >24				Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 CoD	" Other	Dom	20" + CoD	Other	Total
Acer rubrum		JWN F US	lion			Dom	000	2	Dom	COD	9	Dom	COD	Uner	Dom	COD	Other	11
Liriodendror		era						1				1	2	4	2			10
Quercus rut	bra											1						1
																		0
																		0
																		0
																		0
Total # Tree							3			9			8			2		22
# / Size Star	-						0			1			1			0		2
	U	nders	tory S	pecies	(3' - 2	0'):					H	lerbace	ous S	pecies	(0' - 3	'):		
Carpinus ca	roliniar	na		ļ					Berbe	eris thu	nbergii							
Acer rubrum	1								Polys	tichum	acrosti	ichoides						
Berberis thu	Inbergi	i		ļ					Lonice	era jap	onica			<u> </u>				
ļ				<u> </u>					Carex	: spp.								
									Walds	steinia	fragario	oides						
				 					Allium	n canac	lense							
										own gra								
Prism		1	% Cano	1	1	I		r	1	story C				T	round (1	· /	1
Scale	С	Ν	E	S	W	Mean	С	N	E	S	W	Mean	С	N	E	S	W	Mean
1/10	100	75	65	95	65	80%	0	65	0	0	85	30%	40	15	75	20	15	33%
1/20		%	6 Invas	T	ver			# L	r	tory Sp	ecies			% Cove	1	1	dy Deb	oris
* =	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean	С	N	E	S	W	Mean
Invasive	25	5	0	0	15	9%	0	1	0	0	2	1	25	15	20	10	15	17%
See Plot A.	Tree 20	08 and	209 ir	1 plot.	This Pl	ot has a	ı more	open	canopy	′, down	i trees,	dead un	iknowr	ו grass	, and e	>xpose	d bedr	ock.

					F	orest	: San	nplin	g Da	ta Wo	orksh	eet						
Property:	North	Branch	n Trail							Prepa	red By:				J. Cu	mming	S	
Stand #:		14	Plot #	:	А	Plot Siz	ze: 🤇	(/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/18/20	012
Succession	nal Sta	ge:	early-	mid				Basal	Area (sf/ac):			120	Sheet		1	of	1
		e Spec						Size c				neight w		-	e plot			
		1 = >24	-			Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 _{CoD}	" Other	Dom	20" + CoD	Other	Total
Acer negun		JWITFUSI		_		Dom	COD	Other	Dom	COD	1	Dom	COD	Other	Dom		Other	1
Acer rubrun								4			2							6
Carpinus ca	rolinia	na						10			8			2				20
Carya alba											1							1
Fraxinus pe	nnsylv	anica											1					1
Liriodendroi	n tulipit	era						1			4	6	4	3				18
	-																	
Total # Tree	s / Cla	SS:					15	I		16			16			0		47
# / Size Sta	nding [Dead:					0			5			0			0		5
	U	nders	tory S	pecies	(3' - 2	20'):					H	lerbace	ous S	pecies	s (0' - 3	8'):		
Carpinus ca	arolinia	na							Rosa	multifle	ora			Walds	steinia	fragar	ioides	
Berberis thu	ınbergi	ï							Berbe	ris thu	nbergii			llex o	paca			
Cornus flori	da								Carex	spp.				Vitis s	spp.			
									Allium	canad	dense			unkno	wn gra	ass		
									Lonic	əra jap	onica							
									Micro	stegiur	n vimin	eum						
									Alliari	a petio	lata							
Prism		%	6 Cano	ору Со	ver			%	Under	story C	Cover			% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	60	100	85	100	85	86%	0	60	0	40	50	30%	40	40	45	35	50	42%
4/00		%	lnvas	sive Co	ver			# L	Inderst	ory Sp	ecies		0	% Cove	er Dow	n Woo	dy Deb	oris
1/20					1	T									T			
* =	С	Ν	Е	S	W	Mean	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean

This plot has a rather open canopy made up of mostly Tulip poplars and a scrubby layer made up of grasses, Carex spp., and Japanese barberry. There is a lot of downed woody debris, dead Eastern red cedars, and grape vines as well. Mature large Oaks begin to mix in just to the north of plot.

					F	orest	San	nplin	g Da	ta W	orksh	eet						
Property:	North	Brancl	n Trail							Prepa	red By:				J. Cu	mming	S	
Stand #:		14	Plot #	:	В	Plot Siz	ze: 🕅	(10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/19/2	012
Succession	al Stag	ge:	mid						Area (Sheet		1	of	1
		e Spec						Size c				neight v			e plot			
		l = >24				Dem	< 3" CoD	Other		3 - 6.9 _{CoD}			- 19.9 _{CoD}	" Other	Dem	20" + CoD	Other	Total
Carpinus ca			Ition			Dom	CoD	Other 8	Dom	CoD	Other 7	Dom	CoD	Other	Dom	CoD	Other	15
Liriodendror								0			2			4				6
Platanus oc	-													· ·		1		1
Prunus sero	otina										1							1
Quercus alb	a														1			1
Quercus co	ccinea														1			1
Total # Tree							8	-		10			4	-		3	-	25
# / Size Star							1			1			0			0		2
	U	nders	tory S	pecies	(3' - 2	20'):					ŀ	lerbace	ous S	pecies	s (0' - 3	8'):		
Carpinus ca	roliniai	na							Rosa	multifle	ora							
Cornus flori	da								Lonic	era jap	onica							
Berberis thu	Inbergi	i							unkno	wn gra	ass							
									Berbe	eris thu	nbergii							
									Allium	i canad	dense							
									Vitis s	pp.								
Prism		%	6 Canc	ру Со	ver	1		%	Under	-	1	-		% G	1	1	(0' - 3')	r
Scale	С	Ν	E	S	W	Mean	С	N	E	S	W	Mean	С	N	E	S	W	Mean
1/10	95	90	85	75	85	86%	40	90	0	40	90	52%	25	5	100	40	60	46%
1/20			1	ive Co		1		r	Inderst E					1	1	1	dy Deb	1
* =	С	Ν	Е	S W Mean C N						S	W	Mean	С	N	E	S	W	Mean
Invasive	5	0	25	35	40	21%	0	1	0	1	1	1	35	25	15	20	35	26%

Predominantly Tulip poplars with some large mature Oaks and Sycamores scattered within. Understory is mostly Ironwood with some Eastern red cedars; groundcover is mainly Japanese barberry and unknown grass.

					F	orest	San	nplin	g Da	ta W	orksh	eet						
Property:	North	Branch	h Trail								ared By:				J. Cu	mming	s	
Stand #:		14	Plot #	:	С	Plot Siz	ze: 🤅	1/10ac	= r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/19/20	012
Succession	al Sta	ge:	mid					Basal	Area (sf/ac):			100	Sheet	t	1	of	1
		e Spec						Size c				neight w			e plot			
		1 = >24					< 3"		-	3 - 6.9	1		- 19.9	1		20" +	01	Total
Carpinus ca			luon			Dom	CoD	Other 2	Dom	CoD	Other 5	Dom	CoD	Other	Dom	CoD	Other	7
Cornus florie										<u> </u>	1							1
Juniperus vi		าล									1							1
Liriodendror	-						<u> </u>	1	<u> </u>	<u> </u>	2	2	1	1	1			8
Platanus oc									<u> </u>			1	1		1			3
																		0
						<u> </u>	<u> </u>		<u> </u>	<u> </u>								<u> </u>
									1									
Total # Tree	s / Cla	SS:					3	+		9			6	•		2		20
# / Size Star	nding E	Dead:					0			3			1			0		4
	U	Inders	tory S	pecies	(3' - 2	0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	8'):		
Lindera ben	zoin								Micro	stegiur	n vimin	eum		Alliari	a petic	olata		
Cornus florie	da								Lonic	era jap	onica			Toxic	odend	ron rad	icans	
Berberis thu	ınbergi	ii							unknc	own gra	388							
									Berbe	ris thu	nbergii							
									Allium	n canad	dense							
									Vitis s	spp.								
									Carex	cspp.								
Prism		%	% Cano	ру Со	ver			%	Under	story C	Cover	T		% G	round	Cover	(0' - 3')	
Scale	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	50	85	85	65	75	72%	25	0	0	25	0	10%	30	65	45	0	55	39%
1/20		%	6 Invas	ive Co	ver			# L	Inderst	tory Sp	ecies	T	0,	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
Invasive								1	0	0	0	0	30	35	25	35	15	28%
Plot in simila	ar to B,	, but al	so has	a lot c	of down	ied woo	dy det	oris. Tre	ee #25	8 in plo	ot. *Tre	e #257	at top	of hill a	and sta	art of bl	ue trai	I

makes end of FSD 14 and beginning of FSD 15

					F	orest	: San	nplin	g Da	ta Wo	orksh	neet						
Property:	North	Brancl	h Trail							Prepa	red By:				J. Cu	mming	S	
Stand #:		15	Plot #	:	А	Plot Siz	ze: 6	(/10ac	=r 37	.24ft	1/20	ac = r 25	5.28ft		Date:	1	2/20/20	012
Succession	al Stag	ge:	early					Basal	Area (sf/ac):		90		Sheet		1	of	1
		e Spec						Size c				neight v		-	e plot			
	-	= >24	-				< 3"			3 - 6.9	-		- 19.9			20" +	01	Total
Juniperus vi		own Pos	tion			Dom	CoD	Other 1	Dom	CoD	Other 14	Dom	CoD	Other 5	Dom	CoD	Other	20
Liriodendror	-						<u> </u>				14	2		1	1			4
Nyssa sylva	-										1				-			1
Platanus oc		alis													1			1
Prunus sero	tina					<u> </u>					1							1
						1	1											0
																		0
																		0
																		0
	_																	
Total # Tree	s / Cla	SS:					1			16			8	-		2	-	27
# / Size Star	nding D)ead:					0			8			1			0		9
	U	nders	tory S	pecies	(3' - 2	:0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	8'):		
Berberis thu	nbergi	i		<u> </u>					Alliaria	a petio	lata			Toxico	odendi	ron rad	licans	
Lindera ben	zoin			<u> </u>					Micros	stegiun	n vimin	eum						
									Lonice	era jap	onica							
									Berbe	ris thu	nbergii							
									Allium	n canac	dense							
									Rosa	multifle	ora							
									Vitis s	spp.								
Prism		%	6 Cano	ору Со	ver	-		%	Under	story C	Cover	T		% Gi	round	Cover	(0' - 3')	
Scale	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean
1/10	100	45	70	45	40	60%	0	0	0	0	10	2%	25	90	10	60	40	45%
1/20		%	lnvas	sive Co	ver	-		# U	Inderst	tory Sp	ecies	T	9	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	E	S	W	Mean	С	Ν	Е	S	W	Mean
Invasive	10	80	5	50	30	35%	0	0	0	0	1	0	45	10	50	70	20	39%

Rather open canopy mostly Eastern red cedars, Tulips, some dominant Sycamores; few to no shrubs and grass/Japanese stiltgrass; a lot of downed woody debris and vines. Tree #256 in plot.

					F	orest	San	nplin	g Da	ta W	orksh	eet						
Property:	North	Branch	h Trail					•			red By:				J. Cu	mming	s	
Stand #:		15	Plot #	:	А	Plot Siz	ze: ((10ac	=r 37	.24ft	1/20a	ac = r 28	5.28ft		Date:	1	2/20/2)12
Succession	nal Sta	ge:	early					Basal	Area (sf/ac):		140		Sheet		1	of	1
		e Spec						Size c				neight v			e plot			
		1 = >24					< 3"			3 - 6.9	1		- 19.9	1		20" +	1	Total
Cornus flori	-	own Posi	ition			Dom	CoD	Other 2	Dom	CoD	Other	Dom	CoD	Other	Dom	CoD	Other	2
Fraxinus pe		anica						2			1							2
Juniperus v	-							4			18			4				26
Liriodendroi								2			3	3	2	2				12
Platanus oc	-							2			3	3	2	2				12
Prunus sero		115									1							1
	лпа										1							-
			1											<u> </u>				
Total # Tree							8			23			12			0		43
# / Size Sta							6			6			2			0		14
	U	nders	tory S	pecies	(3' - 2	:0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	8'):		
Juniperus v	irginiar	na							Micro	stegiur	n vimin	eum		Rubu	s phoe	nicolas	sius	
									Lonic	era jap	onica							
									Allium	n canad	dense							
									Smila	x spp.								
									Carex	spp.								
									unkno	wn gra	ass							
									Vitis s	spp.								
Prism		%	6 Cano	ору Со	ver			%	Under	•••	Cover			% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	N	E	S	W	Mean	С	N	E	S	W	Mean
1/10	50	45	50	90	60	59%	0	0	100	0	0	20%	35	60	10	50	90	49%
1/20		%	6 Invas	ive Co	ver			# L	Inderst	tory Sp	ecies		C.	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	N	Е	s	W	Mean	С	N	E	S	W	Mean	С	N	E	S	W	Mean
Invasive	25	50	10	40	75	40%	0	0	1	0	0	0	40	25	15	30	20	26%
Same as Pl	ot A		1							1			1	1				<u> </u>

					F	orest	San	nplin	g Da	ta We	orksh	neet						
Property:	North	Branch	n Trail							Prepa	red By:				J. Cu	mming	s	
Stand #:		16	Plot #	:	А	Plot Siz	ze: (1/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/20/2	012
Succession	nal Stag	je:	early					Basal	Area ((sf/ac):		80		Sheet		1	of	1
		e Spec						Size c				neight w			e plot			
	-	1 = >24own Posi				Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD})" Other	7 Dom	- 19.9 _{CoD}	" Other	Dom	20" + CoD	Other	Total
Acer rubrun		JWN FUSi	tion			Dom	COD	Other 5	Dom	COD	Uther 18	Dom	00	Other 11	Dom	1 1	Other	35
Liriodendroi		fera						Ť			10			1		1		2
Platanus oc															1	-		1
																		0
								+										0
																		0
																		0
																		0
								1										
Total # Tree							5			18			12			3		38
# / Size Star	nding [)ead:					1			0			0			0		1
	U	Inderst	tory S	pecies	(3' - 2	:0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	5'):		
Berberis thu	ınbergi	ï							Lonice	era jap	onica							
									unkno	own gra	iss			ļ				
									Carex	: spp.								
									Rosa	multifle	ora							
									Vitis s	pp.				ļ				
Prism		%	-	ору Со				%	1	story C	1	T		1	1	Cover		1
Scale	С	N	Е	S	W	Mean	С	N	E	S	W	Mean	С	N	E	S	W	Mean
(1/10	75	95	95	75	100	88%	0	0	0	0	40	8%	90	85	80	45	80	76%
1/20		%	lnvas	sive Co	ver			# L	Inderst	tory Sp	ecies	1	Q A	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean	С	Ν	E	S	W	Mean
Invasive	45	5	50	25	40	33%	0	0	0	0	1	0	10	20	30	15	20	19%
Floodplain a very few Jap				camore	es and	stand o	f Red	maples	s; no ui	ndersto	əry; gro	undcove	er is m	ade up	of unk	nown	grass a	and

					F	orest	San	npling	g Dai									
Property:	North	Branch	h Trail			1		~			red By:				J. Cu	mming	S	
Stand #:		16	Plot #	:	В	Plot Siz	ie: 6	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	1	2/20/20	012
Succession	nal Stag	ge:	early			-		Basal	Area (sf/ac):			80	Sheet		1	of	1
		e Spec						Size c				neight v		-	e plot			
		1 = >24				Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 _{CoD}	" Other	Dom	20" + CoD	Other	Tota
Acer rubrun						Dom	COD	1	Dom	COD	2	Dom	COD	5	Dom	COD	Other	8
Carpinus ca		na						•			1			Ŭ				1
Fraxinus pe								1			•		1	3				5
Juniperus v	-										1			-				1
Platanus oc	-										•				1			1
Prunus sero											1			1				2
																		0
																		0
Total # Tree	es / Cla	SS:					2	<u> </u>		5	<u> </u>		10			1		18
# / Size Sta	nding [Dead:					1			2			2			0		5
	U	Inders	tory S	pecies	(3' - 2	0'):					ŀ	lerbace	ous S	pecies	6 (0' - 3	8'):		
Lindera ber	nzoin								Rosa	multifle	ora			Carex	spp.			
Fraxinus pe	ennsylv	anica							unkno	wn gra	ass							
									Vitis s									
									Lonice	era jap	onica							
											fragaro	idies						
									Berbe	ris thu	nbergii							
									Toxico	odendr	ron radi	cans						
Prism		%	6 Canc	ру Со	ver			%	Under					% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	N	Е	S	W	Mear
1/10	20	80	50	80	60	58%	90	0	10	0	10	22%	90	100	90	40	70	78%
1/20		%	6 Invas	ive Co	ver			# L	Inderst	ory Sp	ecies		0	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	N	Е	S	W	Mear
Invasive	0	0	40	20	5	13%	2	0	1	0	1	1	5	20	5	20	15	13%
Floodplain a	area; gi	roundc	over o	f grass	es, no	small sl	nrubs,	but rat	her lar	ge spie	cebush	are con	nmon,	unders	story of	fsmall	trees s	such a

Floodplain area; groundcover of grasses, no small shrubs, but rather large spicebush are common, understory of small trees such as red maples, black cherry, and ash; canopy is rather open

					F	orest	: San	nplin	g Da	ta W	orksh	neet						
Property:	North	Brancl	h Trail							Prepa	red By:			J. Cu	mming	s & D.	Merke	у
Stand #:		17	Plot #	:	1	Plot Siz	ze: 6	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	7	7/10/20	12
Succession	al Stag	ge:	early					Basal	Area (sf/ac):		120		Sheet		1	of	1
		e Spec						Size c				neight w			e plot			
	-	l = >24				Dem	< 3" CoD	Other		3 - 6.9 CoD			- 19.9 CoD	" Other	Dem	20" + CoD	Other	Total
Acer rubrun		JWN POSI	luon			Dom	COD	Other	Dom	1	Other 6	Dom 3	11	Other	Dom	COD	Other	21
Quercus bio											1	0						1
Nysssa sylv	atica										1							1
Cornus flori								1			1							2
Prunus serc	otina											1				1		2
																		0
																		0
																		0
Total # Tree							1			10			15			1		27
# / Size Star	-		_				0			0			2			0		2
	U	nders	tory S	pecies I	s (3' - 2	20'):					ŀ	lerbace	ous S	pecies	s (0' - 3	8'):		
Berberis thu	ınbergi	i							Acer I	rubrum								
									Alliari	a petio	lata							
									Parth	enocis	sus qui	nquefolia	а					
									Arisae	ema tri	ohyllum	ו						
									Wiste	ria spp								
									Micro	stegiur	n vimin	eum						
																	(0) 0)	
Prism			-	opy Co	1			r		story C	-		-	1	1	1	(0' - 3')	-
Scale	C	N	E	S	W	Mean	C	N	E	S	W	Mean	C	N 07	E	S	W	Mean
(1/10)	50	30	35	90	85	58%	0	0	0 Indorei	30	15	9%	3	27 27	3	20	2 dy Dob	11%
1/20		-	1	sive Co	r					tory Sp	-			% Cove	r	1	- -	1
* =	C	N	E	S	W	Mean	С	N	E	S	W	Mean	C	N	E	S	W	Mean
Invasive	1	80 5 and	1 Vitio o	15	5	20%	NA	NA	NA	NA	NA	#####	7 a diffa	55	7	40	3	22%

A lot of Wistera spp. and Vitis spp. present smothering trees. Original data was collected using different data forms. Data has been transferred over for consistency, however not all of this form can be completed with the original data. We originally combined Ground Cover & Cover Down Woody Debris; as a general rule we split the coverage 2/3 as Ground Cover and 1/3 Woody Debris.

					F	orest	San	npling	g Dat									
Property:	North	Branch	n Trail							Prepa	red By:			J. Cu	mming	s & D.	Merke	у
Stand #:		17	Plot #	:	2	Plot Siz	ze: 🕅	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	7	7/10/20	12
Succession	nal Stag	ge:	early					Basal	Area (sf/ac):		120		Sheet		1	of	1
		e Spec						Size c				neight v			e plot			
	,	l = >24	,			Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 CoD	" Other	Dom	20" + CoD	Other	Tota
Acer negun						Dom	COD	Other	Dom	COD	1	Dom	1	Other	Dom	COD	Other	2
Acer rubrun									1		4	1	-					6
Carya alba											2	•						2
Carya glabr	a										1							1
Fraxinus pe		anica									1							1
Liriodendroi	n tulipif	era													1			1
Prunus serc	otina											10		1				11
Quercus im	bricaria	1									1							1
																		0
																		0
																		0
Total # Tree	es / Cla	ss:					0	-		11			13			1		25
# / Size Sta	nding E	Dead:					0			0			5			0		5
	U	nders	tory S	pecies	s (3' - 2	20'):					ŀ	lerbace	ous S	pecies	s (0' - 3	s'):		
Lindera ben	izoin								Micros	stegiun	n vimin	eum						
Fraxinus pe	nnsylva	anica							Polyg	onum s	spp.							
Vitis spp.									Persic	aria pe	erfoliata	a						
									Arisae	ema trij	ohyllum	ו						
									Alliaria	a petio	lata							
Prism		%	6 Canc	ру Со	ver	1		%	Under	story C	Cover	1		% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	N	Е	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	85	90	90	50	0	63%	0	0	0	10	40	10%	28	10	20	31	26	23%
1/20		%	5 Invas	ive Co	ver	1		# L	Inderst	ory Sp	ecies	1	C	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
Invasive	75	5	25	5	20	26%	NA	NA	NA	NA	NA	#####	57	20	40	64	54	47%

Original data was collected using different data forms. Data has been transferred over for consistency, however not all of this form can be completed with the original data. We originally combined Ground Cover & Cover Down Woody Debris; as a general rule we split the coverage 2/3 as Ground Cover and 1/3 Woody Debris.

					F	orest	San	nplin	g Da	ta W	orksh	eet						
Property:	North	Branch	n Trail							Prepa	red By:			J. Cu	mming	s & D.	Merke	у
Stand #:		18	Plot #	:	1	Plot Siz	ze: 6	/10ac	=r 37	.24ft	1/20a	ac = r 28	5.28ft		Date:	7	7/12/20	12
Succession	al Stag	ge:	mid					Basal	Area (sf/ac):		160		Sheet	l	1	of	1
		e Spec						Size c				neight v		-	e plot			
		1 = >24 own Posi				Dom	< 3" CoD	Other	Dom	3 - 6.9 CoD	" Other	7 Dom	- 19.9 CoD	" Other	Dom	20" + CoD	Other	Total
Acer negun						Dom	COD	Other	Dom	COD	Other 1	Dom	1	1	Dom	COD	Other	3
Fraxinus pe		anica										5		·	1			6
		annou										0			<u> </u>			0
																		0
																		0
																		0
																		0
																		0
																		0
																		0
																		0
Total # Tree	s / Cla	SS:					0			1			7			1	-	9
# / Size Star	nding [Dead:					0			0			0			0		0
	U	nders	tory S	pecies	(3' - 2	0'):					F	lerbace	ous S	pecies	s (0' - 3	5'):		
Quercus iml	bricaria	a							Micro	stegiur	n vimin	eum						
									Polyg	onum l	hydropi	peroide	s					
									Cinna	arund	inacea							
									Symp	locarp	us foeti	dus						
Prism		-		py Co				%	r	story C		1		1	r		(0' - 3')	-
Scale	С	N	E	S	W	Mean	С	Ν	E	S	W	Mean	С	N	E	S	W	Mean
1/10	0	95	50	35	30	42%	0	0	5	0	0	1%	0	40	18	67	67	38%
1/20		r 1	1	ive Co	·			-	1	tory Sp				% Cove	r		1	
* =	С	N	E	S	W	Mean	С	N	E	S	W	Mean	С	N	E	S	W	Mean
Invasive	0	1	0	60	1	12%	NA	NA	NA	NA	NA	#####	0	20	37	33	33	25%

Common invasive species found : Microstegium vimineum. Eastern half of the plot is standing water and mud. No understory is present. Original data was collected using different data forms. Data has been transferred over for consistency, however not all of this form can be completed with the original data. We originally combined Ground Cover & Cover Down Woody Debris; as a general rule we split the coverage 2/3 as Ground Cover and 1/3 Woody Debris.

					F	orest	Sam	nplin	g Da	ta Wo	orksh	neet						
Property:	North	Branch	n Trail							Prepa	red By:			J. Cu	mming	s & D.	Merke	у
Stand #:		18	Plot #	:	2	Plot Siz	ze: 6	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	7	7/12/20	12
Succession	al Stag	ge:	mid					Basal	Area (sf/ac):		100		Sheet		1	of	1
		e Spec						Size c				neight v			e plot			
		1 = >24 own Posi					< 3"	01		3 - 6.9			- 19.9			20" +	01	Total
Acer neguno		own Posi	tion	_		Dom	CoD	Other	Dom	CoD	Other 3	Dom 2	CoD	Other 1	Dom	CoD	Other	7
Acer rubrum								3			7		1	2				, 13
Fraxinus pe		anica						-				6			2			8
																		0
																		0
																		0
																		0
																		0
																		0
																		0
																		0
Total # Tree							3			10			13	-		2	-	28
# / Size Star	-						0			0			0			0		0
	U	nders	tory S	pecies	(3' - 2	0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	5'):		
Acer rubrum	1			 					Micro	stegiur	n vimin	eum						
									Polyg	onum l	hydropi	peroide	S					
				<u> </u>					Cinna	arund	inacea							
				 					Symp	locarpi	us foeti	dus						
				 					Boehi	meria s	spp.							
				 					Alliari	a petio	lata							
Prism		1		opy Cov		-		r 1		story C	-	1		T	1		(0' - 3')	1
Scale	С	N	E	S	W	Mean	С	N	E	S	W	Mean	С	N	E	S	W	Mean
1/10	0	60	60	40	25	37%	0	0	100	0	0	20%	0	13	60	67	67	41%
1/20	-		1	ive Co	-	.		r		tory Sp	-			% Cove	1	r	-	l.
* =	C	N	E	S	W	Mean	C	N	E	S	W	Mean	C	N 07	E	S	W	Mean
Invasive	0	5	5	0	10	4%	NA	NA	NA	NA	NA	#####	0	27	30	33	33	25%

Common invasive species found : Microstegium vimineum, Alliaria petiolata. Original data was collected using different data forms. Data has been transferred over for consistency, however not all of this form can be completed with the original data. We originally combined Ground Cover & Cover Down Woody Debris; as a general rule we split the coverage 2/3 as Ground Cover and 1/3 Woody Debris.

					F	orest	Sam	nplin	g Da	ta Wo	orksh	neet						
Property:	North	Branch	n Trail							Prepa	red By:			J. Cu	mming	s & D.	Merke	у
Stand #:		19	Plot #	-	1	Plot Siz	ze: 🕅	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	7	7/12/20	12
Succession	al Stag	ge:	mid					Basal	Area (sf/ac):		100		Sheet		1	of	1
		e Spec						Size c				neight w			e plot			
	-	l = >24 own Posi	· ·			Dam	< 3"	Other		3 - 6.9			- 19.9		Dam	20" +	Other	Total
Acer rubrum		own Posi	tion			Dom	CoD	Other 5	Dom	CoD	Other 5	Dom 5	CoD	Other 3	Dom	CoD	Other	24
Cornus florie								5			1		v	Ŭ				1
Lindera ben								2										2
Nysssa sylv	atica												1					1
Prunus serc	otina											5	1					6
Quercus im	bricaria	1									1							1
																		0
																		0
																		0
																		0
																		0
Total # Tree							7			7			21			0		35
# / Size Star	÷						0			0			1			0		1
		nders	tory S	pecies	(3' - 2	0'):						lerbace		pecies	s (0' - 3	'):		
Lindera ben				──							sus qui	nquefolia	а					
Beberis thui				 					Vitis s	spp.								
Cornus flori	da			<u> </u>														
				<u> </u>														
				 														
				<u> </u>														
Prism		%	6 Canc	ору Соч	ver			%	Under	story C	Cover			% Gi	round (Cover	(0' - 3')	
Scale	С	N	E	S	W	Mean	С	N	Е	s	W	Mean	С	N	Е	s	W	Mean
1/10	80	95	50	5	25	51%	10	100	30	0	25	33%	23	3	37	67	67	39%
1/20		%	lnvas	sive Co	ver			# L	Inders	tory Sp	ecies		Q	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	N	Е	S	W	Mean
Invasive	30	100	50	100	100	76%	NA	NA	NA	NA	NA	#####	12	2	18	33	33	20%
In the state of the			NA:	- +					ساب م ما م	م ما م		undont)	A 111	io potic			nicorio	

Invasive species present: Microstegium vimineum (abundant), Berberis thunbergii (abundant), Alliaria petiolata, and Persicaria perfoliata.

Forest stand bordered by more open canopy, lower stem density, wooded areas dominated by Gleditsia triacanthos and Juglans nigra. Forest stand dominated by pioneer Prunus serotina with Acer rubrum co-dominant.Original data was collected using different data forms. Data has been transferred over for consistency, however not all of this form can be completed with the original data. We originally combined Ground Cover & Cover Down Woody Debris; as a general rule we split the coverage 2/3 as Ground Cover and 1/3 Woody Debris.

					F	orest	: San	nplin	g Da	ta Wo	orksh	eet						
Property:	North	Branch	h Trail							Prepa	red By:			J. Cu	mming	s & D.	Merke	у
Stand #:		20	Plot #	:	1	Plot Siz	ze: 6	/10ac	=r 37	.24ft	1/20a	ac = r 25	5.28ft		Date:	7	7/12/20	12
Succession	al Stag	ge:	mid					Basal	Area (sf/ac):		100		Sheet		1	of	1
		e Spec						Size c				neight v		-	e plot			
		= >24				Dom	< 3" CoD	Other	Dom	3 - 6.9 _{CoD}	" Other	7 Dom	- 19.9 _{CoD}	" Other	Dom	20" + CoD	Other	Total
Celtis occide		JWII 1 03				Dom	COD	Oulei	Dom	COD	Other	Dom	COD	2	Dom	COD	Other	2
Gleditsia tria		os										4						4
Gymnocladu											6	5	1		2			. 14
Juglans nigr													1	1				2
Magnolia ac		ta												1				1
Prunus sero	tina											1		1				2
																		0
																		0
																		0
																		0
																		0
Total # Tree	s / Cla	ss:					0	1		6			17	<u>.</u>		2	1	25
# / Size Star	nding E	Dead:					0			0			5			0		5
	U	nders	tory S	pecies	(3' - 2	0'):					ŀ	lerbace	ous S	pecies	s (0' - 3	;'):		
Berberis thu	nbergi	i							Micro	stegiur	n vimin	eum						
Lindera ben	zoin								Alliari	a petio	lata							
Lonicera ma	nckii								Lonic	era ma	ckii							
Acer rubrum	n																	
Gymnocladı	ıs dioid	cus																
Prism		%	6 Canc	ору Со	ver	-		%	Under	story C	Cover	-		% G	round	Cover	(0' - 3')	
Scale	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
1/10	40	50	70	20	30	42%	40	40	25	5	5	23%	33	60	47	54	60	51%
1/20		%	5 Invas	sive Co	ver	-		# L	Inderst	tory Sp	ecies	-	9	% Cove	er Dow	n Woo	dy Deb	oris
* =	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean	С	Ν	Е	S	W	Mean
Invasive	40	70	50	70	80	62%	NA	NA	NA	NA	NA	#####	17	30	23	26	30	25%

Original data was collected using different data forms. Data has been transferred over for consistency, however not all of this form can be completed with the original data. We originally combined Ground Cover & Cover Down Woody Debris; as a general rule we split the coverage 2/3 as Ground Cover and 1/3 Woody Debris.

VI. APPENDIX C – FOREST STAND SUMMARY WORKSHEETS

Data and the Managers			Summary Works	neet			
Property Name:	North E	ranch Trail			Stand ID:		1
Town: Ro	ockville	County	Montgomery		Sheet	# 1	of #1
Prepared By:	J. Cum	mings & C. Perfit	ADC Map# 29	Grid Coo	ordinates:		H 2-3
	Stand Va	iable					
Dominant Tree Sp	ecies:		Silver	Maple (Ac	er saccharini	um)	
Co-Dominant Tree	Species:				Acer rubrum) er saccharini		
Successional Stag	0.				arly	<i></i>)	
Average % Tree C		ure.			%		
Average Size Clas					9.9"		
Number of Tree Sp					3		
Average Number of	•				.3		
	•	DBH > 7" (only Apr-Oct)					
Number of Tree Sp					3		
Number of Trees >					1		
Basal Area (sf/ac):				8	0		
			R	ed Maple (Acer rubrum)		
Common Understo	ory Species	(3' - 20'):					
% of Understory C	over (3' - 20)'):		12	2%		
Number of Unders	tory Specie	s (3' - 20') in 1/10ac Plot:			1		
	ous and Wo	ody Ground Cover	Japanese s	iltgrass (<i>M</i>	licrostegium v	vimine	um)
Species (0' -3'):			Multi	flora rose (Rosa multiflo	ra)	
% Herbaceous and	d Woody Gr	ound Cover (0' - 3'):		62	2%		
Dominant Invasive	Plant Spec	ies.	Japanese s	iltgrass (<i>M</i>	licrostegium v	vimine	um)
			Multi	flora rose (Rosa multiflo	ra)	
Average % Cover	of Invasives	:		61	%		
Number of Standir	ig Dead Tre	es per 1/10 acre:		-	7		
	Debris Gro	und Cover:		65	5%		
Average % Woody			0: Mo	Anri Coor	d Forest Struc	turo	

Property Name:	North Branch Trail		Summary Works		-	Stand ID:		2
Town: Rockvi		County	<i>r</i>					L
		County	Montgomery			Sheet	# 1	of #1
Prepared By:	J. Cummings & C. I	Perfit	ADC Map#	29	Grid Coo	rdinates:		H 2-3
S	stand Variable							
Dominant Tree Species			Tul	lip Pop	lar (<i>Liriod</i>	endron tulip	ifera)	
			Americ	an Syo	camore (P	Platanus occ	idental	is)
Co-Dominant Tree Spe	cios.		Tul	lip Pop	olar (<i>Liriod</i>	endron tulip	ifera)	
Co-Dominant Tree Spe				Red	Oak (Que	ercus rubra)		
Successional Stage:					Mie	d		
Average % Tree Canop	y Closure:				939	%		
Average Size Class of	Dominant Tree Spe	ecies:			20"	+		
Number of Tree Specie	s per Acre:				12	2		
Average Number of Tre	es per Acre:				38	7		
% Canopy Closure for	Trees DBH > 7" (or	ly Apr-Oct)						
Number of Tree Specie	s >7" DBH:				9			
Number of Trees >24"	DBH:				21			
Basal Area (sf/ac):					14:	3		
			Ir	ronwoo	od (<i>Carpin</i>	nus carolinia	na)	
	a a a i a a (2! 20!).		Am	nerican	Beech (F	agus grandi	ifolia)	
Common Understory S	pecies (3 - 20):			Amer	ican Holly	(llex opaca)	
	(0) 00)				1.00	~		
% of Understory Cover	, ,				169			
Number of Understory	Species (3' - 20') in	1/10ac Plot:	_		4			
Common Herbaceous a (0' -3'):	and Woody Ground	Cover Species		-		itchella repe		
· ·			Japai	nese E		Berberis thui	nbergii)
% Herbaceous and Wo	oay Ground Cover	(0' - 3'):			39%			<u>,</u>
Dominant Invasive Plar	nt Species:					Berberis thu		
			Japane	ese Ho	-	e (Lonicera j	aponic	a)
Average % Cover of Inv					249			
Number of Standing De	-	acre:			3			
Average % Woody Deb					239			
Forest Structure Value:			12:	Mar-A	pr: Priority	y Forest Stru	icture	

Property Name:	North Bra	nch Trail				Stand ID:		3	
Town: Rockv	rille	Cour	ounty:						
			Montgomery			Sheet	# 1	of	#1
Prepared By:	J. Cummi	ngs & C. Perfit	ADC Map#	29	Grid Coo	ordinates:		H2-3	
	Stand Va	riable							
Dominant Tree Specie	<i>vc.</i>			W	hite Oak (G	Quercus alba)		
			Т	ulip P	oplar <i>(Lirio</i> o	dendron tulip	ifera)		
Co-Dominant Tree Sp	ecies:			Re	ed Oak (Qu	iercus rubra)			
	00100.			W	hite Oak (G	Quercus alba)		
Successional Stage:					М	id			
Average % Tree Canc	py Closur): 			99	1%			
Average Size Class of	Dominan	Tree Species:			20	" +			
Number of Tree Speci	es per Acı	e:			1	0			
Average Number of Ti	rees per A	cre:			36	60			
% Canopy Closure for	Trees DB	H > 7" (only Apr-Oct)							
Number of Tree Speci	es >7" DB	H:			e	6			
Number of Trees >24"	DBH:			23					
Basal Area (sf/ac):					9	5			
			Flowering Dogwood (Cornus florida)						
Common Understory S	Species (3	- 20'):		Ironwood (Carpinus caroliniana)					
Common Onderstory C		20).		Red Maple (Acer rubrum)					
% of Understory Cove	r (3' - 20'):				36	6%			
Number of Understory	Species (3' - 20') in 1/10ac Plot:		3					
Common Herbaceous	and Woo	ly Ground Cover Species	Japar	nese l	Ioneysuck	le (<i>Lonicera</i>)	iaponio	a)	
(0' -3'):		,		Multiflora Rose (<i>Rosa multiflora</i>)					
% Herbaceous and W	oody Grou	nd Cover (0' - 3'):			16	6%			
Dominant Invasiva Dia	nt Crasi-		Japar	nese l	Honeysuck	le (<i>Lonicera</i>)	iaponio	a)	
Dominant Invasive Pla	an opecie	5.		Multif	lora Rose (Rosa multifle	ora)		
Average % Cover of Ir	nvasives:				10	1%			
Number of Standing D	ead Trees	per 1/10 acre:		5					
Average % Woody De	bris Grour	nd Cover:	20%						
Forest Structure Value	e:		12: Mar-Apr: Priority Forest Structure						

	Forest Stand St	ummary Wor	kshee	et	0, 115			
Property Name: North Branch Trail				Stand ID:		4		
Town: Rockville	County:	/: Montgomery			Sheet	# 1	of	#1
Prepared By: J. Cummings & C. I	Perfit	ADC Map#	29	Grid Coo	ordinates:		H2-3	
Stand Variable								
Dominant Tree Species:	٦ 	Tulip P	oplar (Liriod	dendron tulip	ifera)			
Co-Dominant Tree Species:								
Successional Stage:				Early	- Mid			
Average % Tree Canopy Closure:				85	%			
Average Size Class of Dominant Tree Spe	ecies:			20'	"+			
Number of Tree Species per Acre:				8	3			
Average Number of Trees per Acre:				23	35			
% Canopy Closure for Trees DBH > 7" (or	nly Apr-Oct)							
Number of Tree Species >7" DBH:				6	3			
Number of Trees >24" DBH:		30						
Basal Area (sf/ac):		90						
		American Beech (Fagus grandifolia)						
Common Understory Species (3' - 20'):		American Holly (<i>llex opaca</i>)						
		Viburnum spp.						
		Spicebush (Lindera benzoin)						
% of Understory Cover (3' - 20'):		36%						
Number of Understory Species (3' - 20') in	1/10ac Plot:	4						
Common Herbaceous and Woody Ground	Cover Species (0'	Japanese Barberry (<i>Berberis thunbergii</i>)						
-3'):		Viburnum spp.						
% Herbaceous and Woody Ground Cover	(0' - 3'):			71	%			
Dominant Invasive Plant Species:		Jap	banese	Barberry (Berberis thu	nbergi	i)	
			Wineb	erry (<i>Rubus</i>	s phoenicola	sius)		
Average % Cover of Invasives:				46	%			
Number of Standing Dead Trees per 1/10	acre:			6	3			
Average % Woody Debris Ground Cover:				52	%			
Forest Structure Value:		12: Mar-Apr: Priority Forest Structure						

Property Name: No	rth Branch Trail	ummary Workshe		Stand ID:		_
						5
Town: Rockville	County:	County: Montgomery			# 1	of #1
Prepared By: J. C	Cummings & C. Perfit	ADC Map# 29	Grid Coor	rdinates:		H2-3
Sta	nd Variable					
Dominant Tree Species:	Tulip P	Poplar (<i>Liriod</i>	endron tulip	ifera)		
Co-Dominant Tree Specie	S:	Tulip P	Poplar (<i>Liriod</i> e	endron tulip	ifera)	
Successional Stage:			Mic	d		
Average % Tree Canopy	Closure:		93%	%		
Average Size Class of Do	minant Tree Species:		7-19	.9"		
Number of Tree Species p	per Acre:		3			
Average Number of Trees	per Acre:		233	3		
% Canopy Closure for Tre	es DBH > 7" (only Apr-Oct)					
Number of Tree Species >	•7" DBH:		2			
Number of Trees >24" DB	H:	16				
Basal Area (sf/ac):		127				
		Flowering Dogwood (Cornus florida)				
Common Understory Spec	cies (3' - 20'):	Spicebush (Lindera benzoin)				
		Osage Orange (Maclura pomifera)				
% of Understory Cover (3'	- 20'):	25%				
Number of Understory Spe	ecies (3' - 20') in 1/10ac Plot:	3				
Common Herbaceous and	I Woody Ground Cover Species (0'	Mult	iflora rose (<i>R</i>	Rosa multiflo	ra)	
-3'):		Japanese Honeysuckle (<i>Lonicera japonica</i>)				
% Herbaceous and Wood	y Ground Cover (0' - 3'):		68%	%		
Dominant Invasive Plant S		Mult	iflora rose (<i>R</i>	Rosa multiflo	ra)	
		Japanese	Honeysuckle	e (Lonicera)	aponic	a)
Average % Cover of Invas	ives:		47%	%		
Number of Standing Dead	Trees per 1/10 acre:	7				
Average % Woody Debris	Ground Cover:		18	}		
Forest Structure Value:		9: Ma	r-Apr: Good	Forest Struc	ture	

Property Name: North Branc	h Trail		Stand	ID:		
				6		
Town: Rockville	County	: Montgomery	SI	heet # 1 of # 1		
Prepared By: J. Cumming	s & C. Perfit	ADC Map# 29	Grid Coordinate	es: H2-3		
Stand Varia	ble					
Dominant Tree Species:		American S	ycamore (<i>Platanu</i>	is occidentalis)		
Co-Dominant Tree Species:		ycamore (Platanu	-			
	· · · ································			charinum)		
Successional Stage:			early-mid			
Average % Tree Canopy Closure:			91%			
Average Size Class of Dominant T	ree Species:		20"+			
Number of Tree Species per Acre:			8			
Average Number of Trees per Acre	9:		255			
% Canopy Closure for Trees DBH	> 7" (only Apr-Oct)					
Number of Tree Species >7" DBH:			8			
Number of Trees >24" DBH:		8				
Basal Area (sf/ac):		80				
		Spicebush (Lindera benzoin)				
Common Understory Species (3' -	20'\.	Multiflora rose (Rose multiflora)				
	20).	Osage Orange (Maclura pomifera)				
% of Understory Cover (3' - 20'):		26%				
Number of Understory Species (3'	- 20') in 1/10ac Plot:		3			
Common Herbaceous and Woody	Ground Cover Species	Japanese	Honeysuckle (Lon	icera japonica)		
(0' -3'):			unknown grasse	es		
% Herbaceous and Woody Ground	d Cover (0' - 3'):		46%			
Deminent Investor Direct Orac i		Multi	lora rose (<i>Rose n</i>	nultiflora)		
Dominant Invasive Plant Species:		Japanese I	loneysuckle (Lon	icera japonica)		
Average % Cover of Invasives:			26%			
Number of Standing Dead Trees p	er 1/10 acre:		3			
Average % Woody Debris Ground	Cover:	14%				
Forest Structure Value:	11: Mar-Apr: Priority Forest Structure					

		Forest Stand	Summary Worksl	neet			
Property Name:	North E	Branch Trail			Stand ID:	7	,
Town: Roc	kville	County:	Montgomery	Sheet	# 1 c	of #1	
Prepared By:	J. Cum	mings & D. Merkey	ADC Map# 29	Grid Coc	ordinates:	J-K,	1-2
	Stand Va	riable					
Dominant Tree Spec			Tulip p	oplar <i>(Lirioc</i>	dendron tulipi	fera)	
Dominant Tree Oper	063.		American	Syamore (F	Platanus occio	lentalis)	
Co-Dominant Tree S	Snecies.		Tulip p	oplar <i>(Lirioc</i>	dendron tulipii	fera)	
CO-Dominant Tree C	Co-Dominant Tree Species:		R	ed Oak (Qu	ıercus rubra)		
Successional Stage	:			М	id		
Average % Tree Ca	nopy Clos	ure:		74	%		
Average Size Class	of Domina	ant Tree Species:		20	"+		
Number of Tree Spe	cies per A	Acre:		1	5		
Average Number of	Trees per	Acre:	240				
% Canopy Closure f	or Trees D	DBH > 7" (only Apr-Oct)					
Number of Tree Spe	cies >7" [DBH:		ç	9		
Number of Trees >2	4" DBH:		4				
Basal Area (sf/ac):			120				
			Flowering dogwood (Cornus florida)				
.	. .		Spicebush (Lindera benzoin)				
Common Understory	/ Species	(3' - 20'):	Ironwood (Carpinus caroliniana)				
			White Oak (Quercus alba)				
% of Understory Cov	/er (3' - 20)'):	30%				
Number of Understo	ry Specie	s (3' - 20') in 1/10ac Plot:		7	7		
Common Herbaceou	is and Wo	ody Ground Cover	Japanese	loneysuck	le (<i>Lonicera ja</i>	aponica)	
Species (0' -3'):			Multi	flora rose (<i>l</i>	Rosa multiflor	a)	
% Herbaceous and	Woody Gr	ound Cover (0' - 3'):		19	1%		
			Japanese	Honeysuck	le (<i>Lonicera ja</i>	aponica)	
Dominant Invasive F	Plant Spec	ies:	Multi	flora rose (<i>l</i>	Rosa multiflor	a)	
Average % Cover of	Invasives	::		99	%		
Number of Standing				5	5		
Average % Woody [•	18%				
Forest Structure Val			13: Mar	-Apr: Priori	ty Forest Stru	cture	
Comments:			1	-			

		Summary Worksho	eet			
Property Name: No	rth Branch Trail		Stand ID:	8		
Town: Rockville	County:	Montgomery	Sheet	# 1 of #1		
Prepared By: J.C	Cummings & D. Merkey	ADC Map# 29	Grid Coordinates:	J-K, 1-2		
Star	nd Variable					
Dominant Trac Spacias:		Tulip P	oplar (<i>Liriodendron tulip</i>	ifera)		
Dominant Tree Species:		R	ed Oak (Q <i>uercus rubra</i>)			
Co Dominant Trao Spacio	201	Tulip P	oplar (<i>Liriodendron tulip</i>	ifera)		
Co-Dominant Tree Specie	95.	R	ed Oak (Quercus rubra)			
Successional Stage:						
Average % Tree Canopy	Closure:		60%			
Average Size Class of Do	minant Tree Species:		20" +			
Number of Tree Species p	per Acre:		14			
Average Number of Trees	s per Acre:	310				
% Canopy Closure for Tre	ees DBH > 7" (only Apr-Oct)					
Number of Tree Species >	>7" DBH:		7			
Number of Trees >24" DB	3H:	67				
Basal Area (sf/ac):		123				
		Ironw	vood (Carpinus carolinia	na)		
Common Understory Spe	aiaa (2' - 20');	American Holly (<i>llex opaca</i>)				
Common Onderstory Spec	(3 - 20).	Mountain Laurel (Kalmia latifolia)				
		Eastern R	ed Cedar (<i>Juniperus vir</i>	giniana)		
% of Understory Cover (3	' - 20'):	62%				
Number of Understory Sp	ecies (3' - 20') in 1/10ac Plot:		3			
Common Herbaceous and	d Woody Ground Cover Species	Japanese	e Barberry (<i>Berberis thu</i>	nbergii)		
(0' -3'):			Carex spp.			
% Herbaceous and Wood	ly Ground Cover (0' - 3'):		5%			
Dominant Investive Plant 6	Spacios:	Japanese	e Barberry (<i>Berberis thu</i>	nbergii)		
Dominant Invasive Plant S	opeoles.	Garlio	c Mustard (<i>Alliaria petiola</i>	ata)		
Average % Cover of Invas	sives:		2%			
Number of Standing Dead	Trees per 1/10 acre:		3			
Average % Woody Debris	Ground Cover:	18%				
Forest Structure Value:		12: Mai	r-Apr: Priority Forest Stru	ucture		
Comments:		•				

Description	NI /1 -		Summary works	Summary Worksheet			
Property Name:	North E	Branch Trail			Stand ID:		9
Town: R	ockville	County	/: Montgomery		Sheet	# 1	of #
Prepared By:	J. Cum	mings & D. Merkey	ADC Map# 2	9 Grid Coo	rdinates:	J	-K, 1-2
	Stand Va	riable		1			
Dominant Tree Sp			Tulip	Poplar (<i>Liriod</i>	lendron tulip	ifera)	
Dominant Tree Sp	Jecles.		Syca	amore (<i>Platar</i>	nus occident	alis)	
Co Dominant Tra				Poplar (<i>Lirio</i> a	lendron tulip	ifera)	
Co-Dominant Tree	e opecies.		Greer	h Ash (<i>Fraxinı</i>	ıs pennsylva	anica)	
Successional Stag	ge:			early-	·mid		
Average % Tree C	Canopy Clos	ure:		599	%		
Average Size Clas	ss of Domina	ant Tree Species:		20'	+		
Number of Tree S	pecies per A	Acre:		7			
Average Number	of Trees per	Acre:		21	0		
% Canopy Closur	e for Trees [DBH > 7" (only Apr-Oct)					
Number of Tree S	pecies >7" [DBH:		4			
Number of Trees :	>24" DBH:		3				
Basal Area (sf/ac)	:		130				
			Ironwood (Carpinus caroliniana)				
		(2) 20)	Flowering Dogwood (Cornus florida)				
Common Underst	ory Species	(3 - 20):	Spicebush (Lindera benzoin)				
			Japane	se Barberry (Berberis thu	nbergii)
% of Understory C	Cover (3' - 20)'):	28%				
Number of Unders	story Specie	s (3' - 20') in 1/10ac Plot:		7			
Common Herbace	ous and Wo	oody Ground Cover	Japanese	Stiltgrass (Mi	crostegium	vimineu	um)
Species (0' -3'):				Vitis	spp.		
% Herbaceous an	d Woody Gr	ound Cover (0' - 3'):		879	%		
Dominant laure for	Diant Or	ioo	Japanese	Stiltgrass (Mi	crostegium	vimineu	um)
Dominant Invasive	e mant Spec		Japane	se Barberry (Berberis thu	nbergii)
Average % Cover	of Invasives	:		839	%		
Number of Standi	ng Dead Tre	es per 1/10 acre:	12				
Average % Wood	y Debris Gro	ound Cover:		15	%		
Forest Structure V	/alue:		12: Mar-Apr: Priority Forest Structure				

Property Name:	North Br	anch Trail				Stand ID:		
								10
Town: Rock	ville	County	: Montgomery			Sheet	# 1	of #1
Prepared By:	J. Cumm	ings & D. Merkey	ADC Map#	29	Grid Coo	ordinates:		J-K, 1-2
S	Stand Vari	able						
Dominant Tree Speci	Dominant Tree Species:			lip Po	oplar (<i>Lirio</i>	dendron tulipi	ifera))
Co-Dominant Tree Species:			Tu	lip Po	oplar (<i>Lirio</i>	dendron tulipi	ifera))
Successional Stage:					early	/-mid		
Average % Tree Can	opy Closu	re:			57	%		
Average Size Class c	of Dominar	nt Tree Species:			7-1	9.9"		
Number of Tree Spec	cies per Ac	re:			(6		
Average Number of T	ree per A	cre:			23	30		
% Canopy Closure fo	r Trees DI	3H > 7" (only Apr-Oct)				NA		
Number of Tree Spec	cies >7" DI	3H:			2	2		
Number of Trees >24	" DBH:		5					
Basal Area (sf/ac):			120					
			Flowering dogwood (Cornus florida)					
Common Understory	Snecies (1	8' - 20'):	Autumn-olive (Elaegnus umbellata)					
common onderstory	Opecies (, 20).		Am	erican holl	y (llex opaca,)	
			Ironwood (Carpinus caroliniana)					
% of Understory Cove	er (3' - 20')	:			30)%		
Number of Understor	y Species	(3' - 20') in 1/10ac Plot:			Ę	5		
Common Herbaceous	s and Woo	dy Ground Cover			Vitis	spp.		
Species (0' -3'):			Japa	nese	Barberry (Berberis thur	nberg	gii)
% Herbaceous and V	Voody Gro	und Cover (0' - 3'):			61	%		
Dominant Invasive PI	ant Specie		Japa	nese	Barberry (Berberis thur	nberg	qii)
			Japan	ese H	loneysuck	le (<i>Lonicera j</i>	apon	ica)
Average % Cover of I	Invasives:				56	6%		
Number of Standing I	Dead Tree	s per 1/10 acre:	7					
Average % Woody D	ebris Grou	nd Cover:			8	%		
Forest Structure Value:			8: Mar-Apr: Good Forest Structure					

		d Summary Worksh					
Property Name: N	orth Branch Trail		Stand ID:	11			
Town: Rockville	e Cour	nty: Montgomery	Sheet	# 1 of #1			
Prepared By: J.	Cummings & D. Merke	ey ADC Map# 29	Grid Coordinates:	J-K, 1-2			
Sta	nd Variable						
Dominant Tree Species:		Tulip po	plar (<i>Liriodendron tulip</i>	ifera)			
Dominant free Openes.		Re	ed oak (Q <i>uercus rubra</i>)				
Co-Dominant Tree Spec	ies:						
Successional Stage:			Mid				
Average % Tree Canopy	Closure:		54%				
Average Size Class of D	ominant Tree Species:		20"+				
Number of Tree Species	per Acre:		9				
Average Number of Tree	es per Acre:		300				
% Canopy Closure for T	rees DBH > 7" (only Apr-Oct)						
Number of Tree Species	>7" DBH:		6				
Number of Trees >24" D	BH:		28				
Basal Area (sf/ac):		95					
		Ironw	ood (Carpinus carolinai	na)			
Common Understory Sp	22	Re	Red maple (Acer rubrum)				
Common Onderstory Sp	ecies (3 - 20).	America	American beech (Fagus grandifolia)				
% of Understory Cover (3' - 20'):		64%				
Number of Understory S	pecies (3' - 20') in 1/10ac Plot	:	6				
Common Herbaceous a	nd Woody Ground Cover		Carex spp.				
Species (0' -3'):	·	Christmas fe	ern (Polystichum acrost	ichoides)			
% Herbaceous and Woo	dy Ground Cover (0' - 3')		16%				
Dominant Invasiva Diant	Species:	Japanese h	oneysuckle (<i>Lonicera j</i>	aponica)			
Dominant Invasive Plant	opecies.	Japanese	barberry (Berberis thur	nbergii)			
Average % Cover of Inva	asives:		8%				
Number of Standing Dea	ad Trees per 1/10 acre:		3				
Average % Woody Debr	is Ground Cover:		13%				
Forest Structure Value:		12: Mar-	Apr: Priority Forest Stru	icture			

	Forest Stand	Summary Worksho	eet			
Property Name: North Brar	nch Trail		Stand ID:	12		
Town: Rockville	County	: Montgomery	Sheet	# 1 of #1		
Prepared By: D. Merkey		ADC Map# 29	Grid Coordinates:	J-K, 1-2		
Stand Varia	ble					
Dominant Tree Species:		Black	Cherry (<i>Prunus seroti</i>	na)		
		Tulip Po	plar (<i>Liriodendron tulip</i>	oifera)		
Co-Dominant Tree Species:		Black	Cherry (<i>Prunus seroti</i>	na)		
oo Bommant Hee Openies.		Tulip Po	oplar (<i>Liriodendron tulip</i>	oifera)		
Successional Stage:			Early			
Average % Tree Canopy Closure	:		52%			
Average Size Class of Dominant	Tree Species:		7-19.9"			
Number of Tree Species per Acre):		7			
Average Number of Tree per Acr	e:		280			
% Canopy Closure for Trees DBH	l > 7" (only Apr-Oct)					
Number of Tree Species >7" DBI	ł:		5			
Number of Trees >24" DBH:		3				
Basal Area (sf/ac):			110			
		Eastern re	ed cedar (<i>Juniperus vir</i>	giniana)		
	221	Red Maple (Acer rubrum)				
Common Understory Species (3'	- 20'):	Autumn olive (<i>Elaeagnus umbellata</i>)				
% of Understory Cover (3' - 20'):			46%			
Number of Understory Species (3	3' - 20') in 1/10ac Plot:		4			
Common Herbaceous and Wood	v Ground Cover	Japanese h	oneysuckle (Lonicera	iaponica)		
Species (0' -3'):	,		Allium spp.			
% Herbaceous and Woody Grou	nd Cover (0' - 3'):		30%			
		Japanese h	oneysuckle (Lonicera	iaponica)		
Dominant Invasive Plant Species	:					
Average % Cover of Invasives:			28%			
Number of Standing Dead Trees	per 1/10 acre:		1			
Average % Woody Debris Groun	d Cover:		6%			
Forest Structure Value:		7: Mar-Apr: Good Forest Structure				

		Summary Workshe				
Property Name: North	Branch Trail		Stand ID:	13		
Town: Rockville	County:	Montgomery	Sheet	# 1 of #1		
Prepared By: J. Cu	nmings	ADC Map# 29	Grid Coordinates:	J-K, 1-2		
Stand	Variable					
Dominant Tree Species:		W	hite oak (Q <i>uercus alba</i>)			
Dominant Tree Species.		Tulip p	oplar (<i>Liriodendron tulipif</i> e	era)		
Co-Dominant Tree Species:		Tulip p	oplar (<i>Liriodendron tulipif</i>	era)		
Successional Stage:			Mid			
Average % Tree Canopy Clo	sure:		77%			
Average Size Class of Domi	nant Tree Species:		20" +			
Number of Tree Species per	Acre:		8			
Average Number of Trees pe	er Acre:		280			
% Canopy Closure for Trees	DBH > 7" (only Apr-Oct)					
Number of Tree Species >7"	DBH:		6			
Number of Trees >24" DBH:		23				
Basal Area (sf/ac):		123				
		Ironwood (Carpinus caroliniana)				
		Mountain Laurel (Kalmia latifolia)				
Common Understory Specie	s (3 [°] - 20 [°]):	American beech (Fagus grandifolia)				
% of Understory Cover (3' - 2	20'):		26%			
Number of Understory Speci	,		3			
·	/oody Ground Cover Species	Japanese	e barberry (<i>Berberis thun</i> l	pergii)		
(0' -3'):			Carex spp.	<u> </u>		
% Herbaceous and Woody (Ground Cover (0' - 3'):		27%			
		Japanese	e barberry (<i>Berberis thunl</i>	pergii)		
Dominant Invasive Plant Spe	cies:		honeysuckle (<i>Lonicera ja</i>			
Average % Cover of Invasive	es:		10%			
Number of Standing Dead T	ees per 1/10 acre:		2			
Average % Woody Debris G	round Cover:					
Forest Structure Value:		11: Mar	-Apr: Priority Forest Struc	ture		
Comments:						

		Summary Worksh					
Property Name: North	Branch Trail			Stand ID:		14	
Town: Rockville	County	Montgomery		Sheet	# 1	of	#1
Prepared By: J. Cu	mmings	ADC Map# 20	Grid Coo	rdinates:		K13	
Stand \	/ariable						
Dominant Tree Species:		Tulip po	plar (<i>Liriod</i>	lendron tulipi	fera)		
Dominant Tree Opecies.		Sycam	ore (<i>Platar</i>	nus occidenta	alis)		
Co-Dominant Tree Species:		Tulip po	plar (<i>Liriod</i>	lendron tulipi	fera)		
Co-Dominant Tree Species.		WI	nite oak (Q	uercus alba)			
Successional Stage:			Mi	d			
Average % Tree Canopy Clo	osure:		819	%			
Average Size Class of Domi	nant Tree Species:		7-19	9.9"			
Number of Tree Species per	Acre:		11	1			
Average Number of Trees p	er Acre:		30	7			
% Canopy Closure for Trees	BBH > 7" (only Apr-Oct)						
Number of Tree Species >7'	' DBH:		6	i			
Number of Trees >24" DBH:			25	5			
Basal Area (sf/ac):			10	3			
		Ironwood (Carpinus caroliniana)					
		Flowering dogwood (Cornus florida)					
Common Understory Specie	s (3' - 20'):	Japanese	barberry (I	Berberis thur	nbergii))	
		Spicebush (Lindera benzoin)					
% of Understory Cover (3' - 2	20'):		319	%			
Number of Understory Spec	ies (3' - 20') in 1/10ac Plot:		3	}			
Common Herbaceous and V	Voody Ground Cover	Japanese	barberry (I	Berberis thur	nbergii))	
Species (0' -3'):			unknowr	n grass			
% Herbaceous and Woody (Ground Cover (0' - 3'):		429	%			
		Japanese	barberry (I	Berberis thur	nbergii))	
Dominant Invasive Plant Spe	ecies:	Japanese h	noneysuckle	e (Lonicera ja	aponica	a)	
Average % Cover of Invasiv	es:		339	%			
Number of Standing Dead T	rees per 1/10 acre:		4				
Average % Woody Debris G	-		259	%			
Forest Structure Value:		11: Mar-	Apr: Priorit	y Forest Stru	cture		
Comments:		<u> </u>					

		Summary Worksh	eet				
Property Name: North B	ranch Trail			Stand ID:	15		
Town: Rockville	County	Montgomery		Sheet	# 1 of #1		
Prepared By: J. Cumr	nings	ADC Map# 20	Grid Coo	ordinates:	K13		
Stand Va	riable						
Dominant Tree Species:		Tulip po	oplar (<i>Liriod</i>	dendron tulipif	era)		
Dominant Tree Opecies.		Sycamore (Platanus occidentalis)					
Co-Dominant Tree Species:		Tulip po	oplar (<i>Lirioc</i>	dendron tulipif	era)		
oo bommant free opecies.		Sycan	nore (<i>Platar</i>	nus occidenta	lis)		
Successional Stage:			Ea	rly			
Average % Tree Canopy Closu	ire:		60	%			
Average Size Class of Domina	nt Tree Species:		7-19	9.9"			
Number of Tree Species per A	cre:		7	1			
Average Number of Trees per	Acre:		35	50			
% Canopy Closure for Trees D	BH > 7" (only Apr-Oct)						
Number of Tree Species >7" D	BH:		3	3			
Number of Trees >24" DBH:			5	5			
Basal Area (sf/ac):		115					
		Japanese barberry (Berberis thunbergii)					
Common Understory Species (3' - 20').	Spicebush (Lindera benzoin)					
		Eastern red cedar (Juniperus virginiana)					
% of Understory Cover (3' - 20'):	11%					
Number of Understory Species	(3' - 20') in 1/10ac Plot:		2	2			
Common Herbaceous and Wo	ody Ground Cover	Japanese st	iltgrass (<i>Mi</i>	icrostegium vi	mineum)		
Species (0' -3'):		Garlic	mustard (A	Alliaria petiola	ta)		
% Herbaceous and Woody Gro	ound Cover (0' - 3'):		47	%			
Dominant Invasive Plant Speci		Japanese	e barberry (Berberis thun	bergii)		
Dominant invasive Plant Speci	८ २.	Japanese st	iltgrass (<i>Mi</i>	icrostegium vi	mineum)		
Average % Cover of Invasives:			38	%			
Number of Standing Dead Tree	es per 1/10 acre:		12	2			
Average % Woody Debris Gro	und Cover:		33	3			
Forest Structure Value:		9: Mar	-Apr: Good	Priority Struct	ure		
Comments:		-					

	Forest Stand	Summary Workshe	et				
Property Name: North	Branch Trail		S	Stand ID:	16		
Town: Rockville	County:	Montgomery		Sheet	# 1 of #1		
Prepared By: J. Cur	nmings	ADC Map# 20	Grid Coord	dinates:	K13		
Stand V	ariable						
Dominant Tree Species:		Syacam	ore (<i>Platan</i> i	us occidenta	alis)		
Co-Dominant Tree Species:			sh (<i>Fraxinus</i> d maple <i>(Ac</i>		nica)		
Successional Stage:			Early	y			
Average % Tree Canopy Clo	sure:		73%)			
Average Size Class of Domir	ant Tree Species:		20"+	-			
Number of Tree Species per	Acre:		7				
Average Number of Trees pe	r Acre:		280				
% Canopy Closure for Trees	DBH > 7" (only Apr-Oct)						
Number of Tree Species >7"	DBH:		5				
Number of Trees >24" DBH:			3				
Basal Area (sf/ac):		80					
		Spicebush (Lindera benzoin)					
Common Understory Species	x (2' 20'\)	Green ash (Fraxinus pennsylvanica)					
Common Onderstory Species	s (3 - 20).	Japanese barberry (Berberis thunbergii)					
% of Understory Cover (3' - 2	0'):	15%					
Number of Understory Speci	es (3' - 20') in 1/10ac Plot:		2				
Common Herbaceous and W	oody Ground Cover		unknown	grass			
Species (0' -3'):		Japanese h	oneysuckle	(Lonicera ja	nponica)		
% Herbaceous and Woody G	Fround Cover (0' - 3'):		77%)			
Dominant Investive Plant Sea	cioc:	Japanese he	oneysuckle	(Lonicera ja	nponica)		
Dominant Invasive Plant Spe	UE5.	Japanese	barberry (<i>B</i> e	erberis thun	bergii)		
Average % Cover of Invasive	s:		23%				
Number of Standing Dead Tr	ees per 1/10 acre:		3				
Average % Woody Debris G	ound Cover:		16%				
Forest Structure Value:		11: Mar-/	Apr: Priority	Forest Stru	cture		
Comments:		-					

Stand ID: 17 Dunty: Montgomery Sheet # 1 of #1 ADC Map# 20 Grid Coordinates: K12 Red Maple (Acer rubrum) Black cherry (Prunus serotina) Red Maple (Acer rubrum) Black cherry (Prunus serotina) early 61% 7-19.9" 11 260					
Montgomery Sheet # 1 of #1 ADC Map# 20 Grid Coordinates: K12 Red Maple (Acer rubrum) Black cherry (Prunus serotina) Red Maple (Acer rubrum) Black cherry (Prunus serotina) early 61% 7-19.9" 11					
ADC Map# 20 Grid Coordinates: K12 Red Maple (Acer rubrum) Black cherry (Prunus serotina) Red Maple (Acer rubrum) Black cherry (Prunus serotina) Black cherry (Prunus serotina) early 61% 7-19.9" 11 11					
Black cherry (Prunus serotina) Red Maple (Acer rubrum) Black cherry (Prunus serotina) early 61% 7-19.9" 11					
Black cherry (Prunus serotina) Red Maple (Acer rubrum) Black cherry (Prunus serotina) early 61% 7-19.9" 11					
Red Maple (Acer rubrum) Black cherry (Prunus serotina) early 61% 7-19.9" 11					
Black cherry (<i>Prunus serotina</i>) early 61% 7-19.9" 11					
early 61% 7-19.9" 11					
61% 7-19.9" 11					
7-19.9"					
11					
260					
t) NA					
4					
8					
120					
Spicebush (Lindera benzoin)					
Green ash (Fraxinus pennsylvanica)					
Japanese barberry (Berberis thunbergii)					
10%					
ot: 2					
Japanese stiltgrass (Microstegium vimineum)					
Garlic mustard (Alliaria petiolata)					
3'): 17%					
Japanese stiltgrass (Microstegium vimineum)					
Garlic mustard (Alliaria petiolata)					
23%					
4					
35%					
11: Apr - Oct: Good Forest Structure*					
c					

		Stand Summary Workshe	et						
Property Name: N	North Branch Trail		Stand ID: 18						
Town: Rockvil	le	County: Montgomery	Sheet # 1 of #1						
Prepared By:	I. Cummings & D. Merkey	ADC Map# 20	Grid Coordinates: K12						
S	tand Variable								
		Bo	ox elder (<i>Acer negund</i> o)						
Dominant Tree Species	:	Green A	Ash (<i>Fraxinus pennsylvanica</i>)						
	-1	Bo	ox elder (<i>Acer negund</i> o)						
Co-Dominant Tree Spec	cles:	Re	Red Maple (Acer rubrum)						
Successional Stage:			Mid						
Average % Tree Canop	y Closure:		40%						
Average Size Class of I	Dominant Tree Species:		7-19.9"						
Number of Tree Species	s per Acre:		3						
Average Number of Tre	es per Acre:		185						
% Canopy Closure for T	rees DBH > 7" (only Apr-	Oct)	NA						
Number of Tree Species	s >7" DBH:		3						
Number of Trees >24" [DBH:		2						
Basal Area (sf/ac):			130						
		Shing	Shingle Oak (Quercus imbricaria)						
Common Understory Sp	becies (3' - 20'):	R	Red Maple (Acer rubrum)						
% of Understory Cover	(3' - 20'):		11%						
-	Species (3' - 20') in 1/10ac	Plot:	1						
· · ·	and Woody Ground Cover	0	Woodreed (Cinna arundinacea)						
(0' -3'):		Opecies	tiltgrass (Microstegium vimineum)						
% Herbaceous and Wo	ody Ground Cover (0'	- 3'):	40%						
	· · ·	Japanese st	tiltgrass (Microstegium vimineum)						
Dominant Invasive Plan	t Species:	Garlic	mustard (Alliaria petiolata)						
Average % Cover of Inv	asives:		8%						
Number of Standing De	ad Trees per 1/10 acre:		0						
Average % Woody Deb	ris Ground Cover:		25%						
Forest Structure Value:		8: Apr -	Oct: Good Forest Structure*						
Comments:		I							

Property Name:	Forest Stand Stand Stand Stand Stand Stand Stand Stand		Stand ID:					
			19					
Town: Rockvi	lle County:	Montgomery	Sheet # 1 of #					
Prepared By:	J. Cummings & D. Merkey	ADC Map# 20	Grid Coordinates: K12					
S	tand Variable							
Dominant Tree Species	<u>.</u>	R	ed Maple (Acer rubrum)					
Dominant Tree Opecies	5.	Black cherry (Prunus serotina)						
Co-Dominant Tree Spe	icios.	R	ed Maple (<i>Acer rubrum</i>)					
CO-Dominant Tree Ope		Blac	k cherry (<i>Prunus serotina</i>)					
Successional Stage:			Mid					
Average % Tree Canor	by Closure:		51%					
Average Size Class of	Dominant Tree Species:		7-19.9"					
Number of Tree Specie	es per Acre:		6					
Average Number of Tre	ees per Acre:		350					
% Canopy Closure for	Trees DBH > 7" (only Apr-Oct)		NA					
Number of Tree Specie	es >7" DBH:		3					
Number of Trees >24"	DBH:		0					
Basal Area (sf/ac):		100						
		Spicebush (Lindera benzoin)						
Common Understory S	necies (3' - 20'):	Japanese Barberry (Berberis thunbergii)						
	pecies (5° 20).	Flowering dogwood (Cornus florida)						
% of Understory Cover	(3' - 20'):		33%					
Number of Understory	Species (3' - 20') in 1/10ac Plot:		3					
Common Herbaceous a	and Woody Ground Cover Species	Vitis spp.						
(0' -3'):		Virginia cree	per (Parthenocissus quinquefolia)					
% Herbaceous and Wo	oody Ground Cover (0' - 3'):		39%					
		Japanese S	tiltgrass (<i>Microstegium vimineum</i>)					
Dominant Invasive Plar	nt Species:	Japanese Barberry (<i>Berberis thunbergii</i>)						
Average % Cover of In	vasives:		76%					
Number of Standing De	ead Trees per 1/10 acre:		1					
Average % Woody Deb	oris Ground Cover:		20%					
Forest Structure Value:		9: Apr ·	Oct: Good Forest Structure*					

	ummary Workshee						
Property Name: North Branch Trail		Stand ID: 20					
Town: Rockville County	/: Montgomery	Sheet # 1 of #1					
Prepared By: J. Cummings & D. Merkey	ADC Map# 20	Grid Coordinates: K12					
Stand Variable							
Dominant Tree Species:	Kentucky C	offeetree (Gymnocladus dioicus)					
Dominant free Species.	Honey	Locust (Gleditsia triacanthos)					
Co-Dominant Tree Species:	Kentucky C	offeetree (Gymnocladus dioicus)					
Co-Dominant Tree Species.	Bla	ck walnut (<i>Juglans nigra</i>)					
Successional Stage:		Mid					
Average % Tree Canopy Closure:		42%					
Average Size Class of Dominant Tree Species:		7-19.9"					
Number of Tree Species per Acre:		6					
Average Number of Trees per Acre:	250						
% Canopy Closure for Trees DBH > 7" (only Apr-Oct)		NA					
Number of Tree Species >7" DBH:		6					
Number of Trees >24" DBH:		1					
Basal Area (sf/ac):	100						
	Japanese Barberry (Berberis thunbergii)						
Common Understory Species (3' - 20'):	Spicebush (Lindera benzoin)						
Common Ondersiony Species (3 - 20).	Bush honeysuckle (Lonicera maackii)						
% of Understory Cover (3' - 20'):		23%					
Number of Understory Species (3' - 20') in 1/10ac Plot:		5					
	Japanese S	tiltgrass (Microstegium vimineum)					
Common Herbaceous and Woody Ground Cover Species (0' 3'):		c mustard (<i>Alliaria petiolata</i>)					
% Herbaceous and Woody Ground Cover (0' - 3'):		51%					
	Japanese S	tiltgrass (<i>Microstegium vimineum</i>)					
Dominant Invasive Plant Species:		e Barberry (<i>Berberis thunbergii</i>)					
Average % Cover of Invasives:		62%					
Number of Standing Dead Trees per 1/10 acre:		5					
Average % Woody Debris Ground Cover:		25%					
Forest Structure Value:	12: Apr	- Oct: Good Forest Structure*					

VII. APPENDIX D – FOREST STRUCTURE ANALYSIS WORKSHEETS

Forest Structure Analysis and Candidate Specimen Trees										
		Forest S	Structure Analysis	5			Stan	nd #	1	
Time of Year										
Structure	Structure Rating			March - A (Measure 2, 3	-	5) Siz	ze Class of I	Dominant Ti	rees	
Priority Fores	t Structure		15 - 21	11 - 15	5		DBH	Score		
Good Forest	Stucture		7 - 14	6 - 10		20) or more	3		
Poor Forest S	tructure		0 - 6	0 - 6			7 - 19.9	2	2	
Total Stand	1 Score:		9	9			3 - 6.9	1		
			ů.			< 3 0				
	1) Percent Canopy Closure for Trees with DBH >7"			3) Number of Standing Dead Trees per 1/10ac Plot			cent Woody Ground	and Herbac	ceous	
%	Score		#	Score			% Score			
70 - 100	3		3 or more		3	7	' 5 - 100	3		
40 - 69	2		2	2			25 - 74	2		
10 - 39	1		1	1			5 - 24	1		
0 - 9	0		0	0			0 - 4	0		
2) Number of Under	story Spec	ies in	4) Percent of Dea	d and Downed \	Woody	7) Nu	mber of Tre	e Species w	vith a	
, 1/10ac	• •			aterial		,	DBH > 7"			
#	Score		%	Score			#	Score		
>15	3		15 - 100	3	3	6	or more	3		
10 - 15	2		5 - 14	2			4 - 5	2		
5 - 10	1		1 - 4	1			2 - 4	1	1	
0 - 5	0	0	0	0			0 - 1	0		

Forest Structure Analysis and Candidate Specimen Trees										
		Forest	Structure Analysis	S		Star	nd #	2		
			Time	e of Year						
Structure Rating			April - October	March - April (Measure 2, 3, 4, 5, 7) 5) Size Class		5) Size Class of	of Dominant Trees			
Priority Fore	st Structure		15 - 21	11 - 15	5	DBH	Score			
Good Fores	t Stucture		7 - 14	6 - 10)	20 or more	3	3		
Poor Forest	Structure		0 - 6	0 - 6		7 - 19.9	2			
Total Sta	Total Stand Score:		12	12		3 - 6.9	1			
Total Stal	la Score:		12	12		< 3	0			
	1) Percent Canopy Closure for Trees with DBH >7"		3) Number of Standing Dead Trees per 1/10ac Plot			6) Percent Woody and Herbaceous Ground Cover				
%	Score		#	Score		%	Score	,		
70 - 100	3		3 or more	e 3	3	75 - 100	3			
40 - 69	2		2	2		25 - 74	2			
10 - 39	1		1	1		5 - 24	1			
0 - 9	0		0	0		0 - 4	0			
2) Number of Und 1/10a		cies in	4) Percent of Dea N	d and Downed V laterial	Woody	7) Number of Tre DBH > 7"	-	/ith a		
#	Score		%	Score		#	Score			
>15	3		15 - 100	3	3	6 or more	3	3		
10 - 15	2		5 - 14	2		4 - 5	2			
5 - 10	1		1 - 4	1		2 - 4	1			
0 - 5	0	0	0	0		0 - 1	0			

Forest Structure Analysis and Candidate Specimen Trees										
		Forest S	Structure Analysis	5			Stan	d#	3	
	Time of Year									
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Si	ze Class of I	of Dominant Trees		
Priority Fores	t Structure		15 - 21	11 - 15	5		DBH	Score		
Good Forest	Stucture		7 - 14	6 - 10		2	0 or more	3	3	
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9	2		
Total Stan	d Score:		12	12			3 - 6.9	1		
			.=			< 3 0				
,	1) Percent Canopy Closure for Trees with DBH >7"			3) Number of Standing Dead Trees per 6 1/10ac Plot			6) Percent Woody and Herbaceous Ground Cover			
%	Score		#	Score			% Score			
70 - 100	3		3 or more	3	3		75 - 100	3		
40 - 69	2		2	2			25 - 74	2		
10 - 39	1		1	1			5 - 24	1		
0 - 9	0		0	0			0 - 4	0		
2) Number of Unde	rstory Spec	ies in	4) Percent of Dea	d and Downed \	Noody	7) Nu	Imber of Tree	e Species w	/ith a	
1/10ac	Plot		M	aterial			DBH > 7"	per Plot		
#	Score		%	Score			#	Score		
>15	3		15 - 100	3	3	6	or more	3	3	
10 - 15	2		5 - 14	2			4 - 5	2		
5 - 10	1		1 - 4	1			2 - 4	1		
0 - 5	0	0	0	0			0 - 1	0		

Forest Structure Analysis and Candidate Specimen Trees										
	I	Forest S	Structure Analysis	5			Stan	d #	4	
			Time	e of Year						
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Size Class of Dominant Tree			rees	
Priority Fores	t Structure		15 - 21	11 - 15	5		DBH	Score		
Good Forest			7 - 14	6 - 10		_) or more	3	3	
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9	2		
Total Stan	d Score:		12	12			3 - 6.9	1		
						< 3 0				
	1) Percent Canopy Closure for Trees with DBH >7"			3) Number of Standing Dead Trees per 1/10ac Plot			6) Percent Woody and Herbaceous Ground Cover			
%	Score		#	Score			% Score			
70 - 100	3		3 or more	3	3	-	75 - 100	3		
40 - 69	2		2	2			25 - 74	2		
10 - 39	1		1	1			5 - 24	1		
0 - 9	0		0	0			0 - 4	0		
2) Number of Unde	rstory Spec	ies in	4) Percent of Dea	d and Downed \	Noody	7) Nu	mber of Tree	e Species w	rith a	
1/10ac	Plot		M	aterial			DBH > 7"	per Plot		
#	Score		%	Score			#	Score		
>15	3		15 - 100	3	3	6	or more	3	3	
10 - 15	2		5 - 14	2			4 - 5	2		
5 - 10	1		1 - 4	1			2 - 4	1		
0 - 5	0	0	0	0			0 - 1	0		

Forest Structure Analysis and Candidate Specimen Trees										
		Forest S	Structure Analysis	5			Star	d #	5	
Time of Year										
Structure	Structure Rating			March - A (Measure 2, 3	-	5) Siz	e Class of	Dominant T	rees	
Priority Forest	Structure		15 - 21	11 - 15	5		DBH	Score		
Good Forest S	Stucture		7 - 14	6 - 10		20	or more	3		
Poor Forest S	tructure		0 - 6	0 - 6		-	7 - 19.9	2	2	
Total Stand	Score.		9	9			3 - 6.9	1		
			ů.			< 3 0				
1) Percent Canopy Closure for Trees with DBH >7"			3) Number of Sta	nding Dead Tre 0ac Plot	es per	6) Perc	ent Woody Ground	and Herbad	ceous	
%	Score		#	Score			%	Score		
70 - 100	3		3 or more		3	7	/ 0 75 - 100	3		
40 - 69	2		2 01 11010	, J	5	-	25 - 74	2		
10 - 39	2 1		1	2		-	<u>-</u> 5 - 24	2		
0 - 9	0		0	0			0-4	0		
2) Number of Under 1/10ac	• •	ies in	4) Percent of Dea M		Woody	7) Nur	• •	e Species w	/ith a	
#	Score		%	Score			#	Score		
>15	3		15 - 100	3	3	6	or more	3		
10 - 15	2		5 - 14	2			4 - 5	2		
5 - 10	1		1 - 4	1			2 - 4	1	1	
0 - 5	0	0	0	0			0 - 1	0		

Forest Struc	Forest Structure Analysis and Candidate Specimen Trees											
Forest	Structure Analysis	8		Star	nd #	6						
	Time	e of Year										
Structure Rating	April - October	March - April (Measure 2, 3, 4, 5, 7)	5) S	5) Size Class of Dominant Tr								
Priority Forest Structure	15 - 21	11 - 15		DBH	Score							
Good Forest Stucture	7 - 14	6 - 10	2	0 or more	3	3						
Poor Forest Structure	0 - 6	0 - 6		7 - 19.9	2							
Total Stand Score:	11	11		3 - 6.9	1							
				< 3	0							
1) Percent Canopy Closure for Trees with DBH >7"		nding Dead Trees per 0ac Plot	6) Pe	 Percent Woody and Herbace Ground Cover 								
% Score	#	Score		%	Score							
70 - 100 3	3 or more			75 - 100	3							
40 - 69 2	2 01 11016	2 2 2		25 - 74	2							
10 - 39 1		1		5 - 24	2							
0-9 0		0		0 - 4	0							
		Ţ	7) 11		-	.: 41						
2) Number of Understory Species in 1/10ac Plot		d and Downed Woody laterial	7) NU	umber of Tre "DBH > 7		/itn a						
# Score	%	Score		#	Score							
>15 3	15 - 100		6	# 6 or more	3	3						
10 - 15 2	5 - 14	2 2		4 - 5	2	5						
5 - 10 1	1 - 4	1			1							
0-5 0 0		0		0 - 1	0							

	Forest Structure Analysis and Candidate Specimen Trees											
	Fores	t St	tructure Analysis	5			Stan	d #	7			
			Time	of Year								
Structure	Rating		April - October	March - A (Measure 2, 3	•	5) S	5) Size Class of Dominant Tr					
Priority Fores	t Structure		15 - 21	11 - 15	5		DBH	Score				
Good Forest	Stucture		7 - 14	6 - 10			0 or more	3	3			
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9	2				
Total Stan	d Score:		13	13			3 - 6.9	1				
							< 3	0				
1) Percent Canopy with DB			3) Number of Sta 1/10	nding Dead Tre Dac Plot	es per	6) Pei	rcent Woody Ground		ceous			
%	Score		#	Score			%	Score				
70 - 100	3		3 or more	3	3		75 - 100	3				
40 - 69	2		2	2			25 - 74	2				
10 - 39	1		1	1			5 - 24	1				
0 - 9	0		0	0			0 - 4	0				
2) Number of Unde	rstory Species in		4) Percent of Dea	d and Downed \	Noody	7) Nu	umber of Tree	e Species w	rith a			
1/10ac	Plot		M	aterial	-		DBH > 7"	per Plot				
#	Score		%	Score			#	Score				
>15	3		15 - 100	3	3	6	6 or more	3	3			
10 - 15	2		5 - 14	2			4 - 5	2				
5 - 10	1 1		1 - 4	1			2 - 4	1				
0 - 5	0		0	0			0 - 1	0				

	Forest Structure Analysis and Candidate Specimen Trees											
	I	Forest S	Structure Analysis	3			Stan	d #	8			
			Time	e of Year								
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Size Class of Dominant T			rees			
Priority Fores			15 - 21	11 - 15	5		DBH	Score				
Good Forest			7 - 14	6 - 10		_	0 or more	3	3			
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9	2				
Total Stan	d Score:		12	12			3 - 6.9	1				
							< 3	0				
1) Percent Canopy with DB		Trees	3) Number of Sta	nding Dead Tree Dac Plot	es per	6) Per		ody and Herbaceo nd Cover				
%	Score		#	Score			%	Score				
70 - 100	3		3 or more	3	3		75 - 100	3				
40 - 69	2		2	2			25 - 74	2				
10 - 39	1		1	1			5 - 24	1				
0 - 9	0		0	0			0 - 4	0				
2) Number of Unde	rstory Spec	ies in	4) Percent of Dea	d and Downed \	Noody	7) Nu	Imber of Tree	e Species w	vith a			
1/10ac	Plot		M	aterial			DBH > 7"	per Plot				
#	Score		%	Score			#	Score				
>15	3		15 - 100	3	3	6	or more	3	3			
10 - 15	2		5 - 14	2			4 - 5	2				
5 - 10	1		1 - 4	1			2 - 4	1				
0 - 5	0	0	0	0			0 - 1	0				

	Forest Structure Analysis and Candidate Specimen Trees											
	F	orest S	Structure Analysis	5			Stand #	9				
			Time	e of Year								
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Size Clas	Frees					
Priority Forest	t Structure		15 - 21	11 - 15	5	DBH	Score					
Good Forest S	Stucture		7 - 14	6 - 10		20 or mo	ore 3	3				
Poor Forest S	structure		0 - 6	0 - 6		7 - 19.9						
Total Stand	Score:		12	12		3 - 6.9						
			•-	•-		< 3	0					
1) Percent Canopy 0 with DBH		Frees	3) Number of Sta 1/10	nding Dead Tree Dac Plot	es per		oody and Herba ound Cover	aceous				
%	Score		#	Score		%	Score					
70 - 100	3		3 or more	3	3	75 - 10	0 3					
40 - 69	2		2	2		25 - 74	1 2					
10 - 39	1		1	1		5 - 24	1					
0 - 9	0		0	0		0 - 4	0					
2) Number of Under	story Speci	es in	4) Percent of Dea	d and Downed \	Noody	7) Number o	of Tree Species	with a				
1/10ac	Plot		M	aterial		DBH	I > 7" per Plot					
#	Score		%	Score		#	Score					
>15	3		15 - 100	3	3	6 or mo	re 3					
10 - 15	2		5 - 14	2		4 - 5	2	2				
5 - 10	1	1	1 - 4	1		2 - 4	1					
0 - 5	0		0	0		0 - 1	0					

	Forest Structure Analysis and Candidate Specimen Trees											
	I	Forest S	Structure Analysis	5			Stan	d #	10			
			Time	e of Year								
Structure	Rating		April - October	March - A (Measure 2, 3		5) Size Class of Dominant T			rees			
Priority Fores	t Structure		15 - 21	11 - 15	5		DBH	Score				
Good Forest	Stucture		7 - 14	6 - 10		2	0 or more	3				
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9	2	2			
Total Stan	d Score:		8	8			3 - 6.9	1				
			Ŭ				< 3	0				
1) Percent Canopy with DB		Trees	3) Number of Sta	nding Dead Tre Dac Plot	6) Per	cent Woody Ground		ceous				
%	Score		#	Score			%	Score				
70 - 100	3		3 or more	3	3		75 - 100	3				
40 - 69	2		2	2			25 - 74	2				
10 - 39	1		1	1			5 - 24	1				
0 - 9	0		0	0			0 - 4	0				
2) Number of Unde	rstory Spec	ies in	4) Percent of Dea	d and Downed \	Woody	7) Nu	umber of Tre	e Species w	vith a			
, 1/10ac	• •		· · ·	aterial	-	,	DBH > 7"					
#	Score		%	Score			#	Score				
>15	3		15 - 100	3		6	or more	3				
10 - 15	2		5 - 14	2	2		4 - 5	2				
5 - 10	1		1 - 4	1			2 - 4	1	1			
0 - 5	0	0	0	0			0 - 1	0				

	Forest Structure Analysis and Candidate Specimen Trees											
	F	orest S	structure Analysis	5			Stan	d #	11			
			Time	of Year								
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Size Class of Dominant			rees			
Priority Fores	t Structure		15 - 21	11 - 15	5		DBH	Score				
Good Forest	Stucture		7 - 14	6 - 10		20) or more	3	3			
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9	2				
Total Stan	d Score:		12	12			3 - 6.9	1				
				•=			< 3	0				
1) Percent Canopy with DB		Trees	3) Number of Sta 1/10	nding Dead Tre Dac Plot	6) Per	cent Woody Ground		ceous				
%	Score		#	Score			%	Score				
70 - 100	3		3 or more	3	3	-	75 - 100	3				
40 - 69	2		2	2			25 - 74	2				
10 - 39	1		1	1			5 - 24	1				
0 - 9	0		0	0			0 - 4	0				
2) Number of Unde	rstory Speci	es in	4) Percent of Dea	d and Downed \	Noody	7) Nu	mber of Tre	e Species v	vith a			
1/10ac	Plot		M	aterial			DBH > 7"	per Plot				
#	Score		%	Score			#	Score				
>15	3		15 - 100	3		6	or more	3	3			
10 - 15	2		5 - 14	2	2		4 - 5	2				
5 - 10	1	1	1 - 4	1			2 - 4	1				
0 - 5	0		0	0			0 - 1	0				

	Forest Structure Analysis and Candidate Specimen Trees											
	I	Forest S	Structure Analysis	5			Stan	d #	12			
			Time	of Year								
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Size Class of Dominant Tre			rees			
Priority Fores	t Structure		15 - 21	11 - 1	5		DBH	Score				
Good Forest			7 - 14	6 - 10			0 or more	3				
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9	2	2			
Total Stan	d Score:		7	7			3 - 6.9	1				
			•	•			< 3	0				
1) Percent Canopy with DB		Trees	3) Number of Sta 1/10	nding Dead Tre Dac Plot	es per	6) Per	cent Woody Ground		ceous			
%	Score		#	Score			%	Score				
70 - 100	3		3 or more	3			75 - 100	3				
40 - 69	2		2	2			25 - 74	2				
10 - 39	1		1	1	1		5 - 24	1				
0 - 9	0		0	0			0 - 4	0				
2) Number of Unde	rstory Spec	ies in	4) Percent of Dea	d and Downed	Woody	7) Nu	umber of Tree	e Species v	vith a			
1/10ac	Plot		M	aterial	-		DBH > 7"	per Plot				
#	Score		%	Score			#	Score				
>15	3		15 - 100	3		6	or more	3				
10 - 15	2		5 - 14	2	2		4 - 5	2	2			
5 - 10	1		1 - 4	1			2 - 4	1				
0 - 5	0	0	0	0			0 - 1	0				

	Forest Structure Analysis and Candidate Specimen Trees											
		Forest S	structure Analysis	5			Stan	d #	13			
			Time	of Year								
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Si	5) Size Class of Dominant Tr					
Priority Fores	t Structure		15 - 21	11 - 15	5		DBH	Score				
Good Forest	Stucture		7 - 14	6 - 10			0 or more	3	3			
Poor Forest S	Structure		0 - 6 0 - 6				7 - 19.9	2				
Total Stan	d Score:		11	11			3 - 6.9	1				
			••	••			< 3	0				
1) Percent Canopy	Closure for	Trees	3) Number of Sta	nding Dead Tre	es per	6) Per	cent Woody	ly and Herbaceous				
with DBI	H >7"		1/10ac Plot				Ground	Cover				
%	Score		#	Score			%	Score				
70 - 100	3		3 or more	3			75 - 100	3				
40 - 69	2		2	2	2		25 - 74	2				
10 - 39	1		1	1			5 - 24	1				
0 - 9	0		0	0			0 - 4	0				
2) Number of Under	rstory Spec	ies in	4) Percent of Dea	d and Downed \	Woody	7) Nu	umber of Tre	e Species v	vith a			
, 1/10ac	• •		· · ·	aterial	, , , , , , , , , , , , , , , , , , ,	,	DBH > 7"	•				
#	Score		%	Score			#	Score				
>15	3		15 - 100	3	3	6	or more	3	3			
10 - 15	2		5 - 14	2			4 - 5	2				
5 - 10	1		1 - 4	1			2 - 4	1				
0 - 5	0	0	0	0			0 - 1	0				

	Forest Structure Analysis and Candidate Specimen Trees											
	I	Forest S	Structure Analysis	5			Stan	d #	14			
			Time	of Year								
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Size Class of Dominant			rees			
Priority Fores			15 - 21	11 - 15	5		DBH	Score				
Good Forest			7 - 14	6 - 10		_	0 or more	3				
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9	2	2			
Total Stan	d Score:		11	11			3 - 6.9	1				
			••	••			< 3	0				
1) Percent Canopy with DB		Trees	3) Number of Sta 1/1	nding Dead Tre Dac Plot	es per	6) Per	cent Woody Ground		ceous			
%	Score		#	Score			%	Score				
70 - 100	3		3 or more	3	3		75 - 100	3				
40 - 69	2		2	2			25 - 74	2				
10 - 39	1		1	1			5 - 24	1				
0 - 9	0		0	0			0 - 4	0				
2) Number of Unde	erstory Spec	ies in	4) Percent of Dea	d and Downed \	Noody	7) Nu	mber of Tree	e Species w	/ith a			
1/10ac	Plot		M	aterial			DBH > 7"	per Plot				
#	Score		%	Score			#	Score				
>15	3		15 - 100	3	3	6	or more	3	3			
10 - 15	2		5 - 14	2			4 - 5	2				
5 - 10	1		1 - 4	1			2 - 4	1				
0 - 5	0	0	0	0			0 - 1	0				

	Forest Structure Analysis and Candidate Specimen Trees											
		Forest S	Structure Analysis	5			Stan	nd #	15			
			Time	e of Year								
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Size Class of Dominant Tr			rees			
Priority Fores	t Structure		15 - 21	11 - 15	5		DBH	Score				
Good Forest	Stucture		7 - 14	6 - 10) or more	3				
Poor Forest S	structure		0 - 6	0 - 6			7 - 19.9	2	2			
Total Stand	Score:		9	9			3 - 6.9	1				
			Ŭ				< 3	0				
1) Percent Canopy (Closure for	Trees	3) Number of Sta	nding Dead Tre	es per	6) Per	cent Woody	and Herba	ceous			
with DBI	H >7"		1/10	Dac Plot			Ground	Cover				
%	Score		#	Score			%	Score				
70 - 100	3		3 or more	3	3		75 - 100	3				
40 - 69	2		2	2			25 - 74	2				
10 - 39	1		1	1			5 - 24	1				
0 - 9	0		0	0			0 - 4	0				
2) Number of Under	story Spec	ies in	4) Percent of Dea	d and Downed \	Noody	7) Nu	mber of Tre	e Species v	vith a			
, 1/10ac	• •		· ·	aterial	,	,	DBH > 7"					
#	Score		%	Score			#	Score				
>15	3		15 - 100	3	3	6	or more	3				
10 - 15	2		5 - 14	2			4 - 5	2				
5 - 10	1		1 - 4	1			2 - 4	1	1			
0 - 5	0	0	0	0			0 - 1	0				

	Forest Structure Analysis and Candidate Specimen Trees											
		Forest S	Structure Analysis	5			Stan	nd #	16			
			Time	of Year								
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Size Class of Dominant T			rees			
Priority Fores	t Structure		15 - 21	11 - 15	5		DBH	Score				
Good Forest	Stucture		7 - 14	6 - 10			0 or more	3	3			
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9	2				
Total Stan	d Score:		11	11			3 - 6.9	1				
			••				< 3	0				
1) Percent Canopy (with DBI		Trees	3) Number of Sta	nding Dead Tree Dac Plot	es per	6) Per		dy and Herbaceou nd Cover				
%	Score		#	Score			%	Score				
70 - 100	3		3 or more		3	-	75 - 100	3				
40 - 69	2		2	2	-		25 - 74	2				
10 - 39	1		1	1			5 - 24	1				
0 - 9	0		0	0			0 - 4	0				
2) Number of Under	rstory Spec	ies in	4) Percent of Dea	d and Downed \	Noody	7) Nu	mber of Tre	e Species v	vith a			
, 1/10ac	• •			aterial	,	,	DBH > 7"					
#	Score		%	Score			#	Score				
>15	3		15 - 100	3	3	6	or more	3				
10 - 15	2		5 - 14	2			4 - 5	2	2			
5 - 10	1		1 - 4	1			2 - 4	1				
0 - 5	0	0	0	0			0 - 1	0				

	Forest Structure Analysis and Candidate Specimen Trees											
		Forest S	Structure Analysis	5			Stan	d #	17			
			Time	e of Year								
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Size Class of Dominant Tre			rees			
Priority Fores	st Structure		15 - 21	11 - 15	5		DBH	Score				
Good Forest			7 - 14	6 - 10) or more	3				
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9	2	2			
Total Stan	d Score:		11	10			3 - 6.9	1				
							< 3	0				
1) Percent Canopy with DB		Trees	3) Number of Sta 1/1	nding Dead Tre 0ac Plot	es per	6) Per	cent Woody Ground		ceous			
%	Score		#	Score			%	Score				
70 - 100	3		3 or more	3	3	-	75 - 100	3				
40 - 69	2		2	2			25 - 74	2				
10 - 39	1		1	1			5 - 24	1	1			
0 - 9	0	NA	0	0			0 - 4	0				
2) Number of Unde	erstory Spec	cies in	4) Percent of Dea	d and Downed \	Noody	7) Nu	mber of Tree	e Species v	vith a			
1/10ac	Plot		M	aterial		,	DBH > 7"	per Plot				
#	Score		%	% Score			#	Score				
>15	3		15 - 100	3	3	6	or more	3				
10 - 15	2		5 - 14	2			4 - 5	2	2			
5 - 10	1		1 - 4	1			2 - 4	1				
0 - 5	0	0	0	0			0 - 1	0				

	Forest	Struct	ure Analysis a	nd Candida	ate Spec	cimen Trees			
		Forest \$	Structure Analysis	6		Star	nd #	18	
			Time	e of Year					
Structure	e Rating		April - October	March - A (Measure 2, 3		5) Size Class of	Size Class of Dominant Tree		
Priority Fore	st Structure		15 - 21	11 - 1	5	DBH	Score		
Good Forest	Stucture		7 - 14	6 - 10)	20 or more	3		
Poor Forest	Structure		0 - 6	0 - 6		7 - 19.9	2	2	
Total Star	d Scoro:		8	6	c 3 - 6.9 1				
Total Stal	iu Score.		0	0	< 3		0		
	Percent Canopy Closure for Trees 3) Number of Standing Dead Trees per with DBH >7" 1/10ac Plot			es per	6) Percent Woody and Herbaceous Ground Cover				
%	Score		#	Score		%	Score		
70 - 100	3		3 or more	e 3		75 - 100	3		
40 - 69	2		2	2		25 - 74	2	2	
10 - 39	1		1	1		5 - 24	1		
0 - 9	0	NA	0	0	0	0 - 4	0		
2) Number of Unde	erstory Spe	cies in	4) Percent of Dea	d and Downed	Woody	7) Number of Tre	e Species v	with a	
1/10a	c Plot		N	laterial		DBH > 7"	per Plot		
#	Score		%	Score		#	Score		
>15	3		15 - 100	3	3	6 or more	3		
10 - 15	2		5 - 14	2		4 - 5	2		
5 - 10	1		1 - 4	1		2 - 4	1	1	
0 - 5	0	0	0	0		0 - 1	0		

	Forest	Struct	ure Analysis aı	nd Candida	te Spe	cimen Trees			
		Forest S	Structure Analysis	5		St	and #	19	
			Time	of Year					
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Size Class o	Size Class of Dominant Tre		
Priority Fores	st Structure		15 - 21	11 - 15	5	DBH	Score		
Good Forest			7 - 14	6 - 10		20 or more	3		
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9 2 2		
Total Stan	d Score:		9	7		3 - 6.9 1			
			Ŭ	•		< 3	< 3 0		
1) Percent Canopy with DB		Trees	3) Number of Sta	nding Dead Tre Dac Plot	es per	6) Percent Woody and Herbaceou Ground Cover			
%	Score		#	Score		% Score			
70 - 100	3		3 or more			75 - 100	3		
40 - 69	2		2	2		25 - 74	2	2	
10 - 39	1		1	1	1	5 - 24	1	_	
0 - 9	0	NA	0	0	-	0 - 4	0		
2) Number of Unde	rstory Spec	ies in	4) Percent of Dea	d and Downed \	Noody	7) Number of T	ree Species v	with a	
, 1/10ac	• •			aterial	,		7" per Plot		
#	Score		%	Score		#	Score		
>15	3		15 - 100	3	3	6 or more	3		
10 - 15	2		5 - 14	2		4 - 5	2		
5 - 10	1		1 - 4	1		2 - 4	1	1	
0 - 5	0	0	0	0		0 - 1	0		

	Forest	Structu	ure Analysis a	nd Candida	te Spe	cimen	Trees		
		Forest S	Structure Analysis	5			Stan	d #	20
			Time	e of Year					
Structure	Rating		April - October	March - A (Measure 2, 3	-	5) Si	Size Class of Dominant Tree		
Priority Fores	st Structure		15 - 21	11 - 15	5		DBH	Score	
Good Forest			7 - 14	6 - 10		_	20 or more 3		
Poor Forest S	Structure		0 - 6	0 - 6			7 - 19.9 2 2		
Total Stan	d Score		13	11		3 - 6.9 1		1	
			10				< 3 0		
1) Percent Canopy with DB		Trees	3) Number of Sta 1/1	nding Dead Tree Dac Plot	es per	6) Per	6) Percent Woody and Herbaceou Ground Cover		
%	Score		#	Score			% Score		
70 - 100	3		3 or more	3	3	-	75 - 100	3	
40 - 69	2		2	2			25 - 74	2	2
10 - 39	1		1	1			5 - 24	1	
0 - 9	0	NA	0	0			0 - 4	0	
2) Number of Unde	erstory Spec	cies in	4) Percent of Dea	d and Downed \	7) Nu	mber of Tree	e Species w	/ith a	
1/10ac	Plot		M	aterial			DBH > 7"	per Plot	
#	Score		%	Score			#	Score	
>15	3		15 - 100	3	3	6	or more	3	3
10 - 15	2		5 - 14	2			4 - 5	2	
5 - 10	1		1 - 4	1			2 - 4	1	
0 - 5	0	0	0	0			0 - 1	0	

VIII. APPENDIX E – WETLAND DETERMINATION DATA WORKSHEET

Project/Site:	North Branch Trail		City/County:	Rockville, Mc	ontgomery	Samplin	g Date:	13-Jul-12
Applicant/Owner:	MNCPPC				State:	Maryland Samplin	g Point: V	VL A
nvestigator(s):	D. Merkey & J. Cu	mmings			Section, To	ownship, Range:		
andform (hillslop.	e, terrace, etc.):				Local relief	(concave, convex, none):		
lope (%):			Lat:		Long:		Datum:	
oil Map Unit Nan		boro Silt L				NWI classification:	NA	
	ologic conditions on				Yes	X No	(If no, explain in	,
Are Vegetation	Soil		or Hydrology	Significantly d		Are "Normal Circumstar	•	es <u>X</u>
Are Vegetation	Soil		or Hydrology	naturally prob	plematic?	() f		lo
						•	ed, explain any answ	ers in remarks.)
	INDINGS - Attach	site map s	showing samplin	g point locatio	nis, transet	cts, important features,	ell.	
Hydrophytic Vege	tation Present? Yes	x	No			Is the Sampled Area withi	ina Yes X	No
Hydric Soil Presen		X	No			Wetland?		
Wetland Hydrolog	gy Present? Yes	х	No					
Remarks:	Original data was	collected i	- Ising the 1987 COF	Boutine Wetla	nd Determin	nation Data Form. Data ha	s heen transferred o	ver for
cinarka.	consistency, howe							
	consistency, nowe	ver not un						
	se scientific name	s of plant	te					
			Absolute	Dominant	Indicator			
Free Stratum (P	lot size:)	% Cover	Species?	Status	Dominance Test works	neet:	
1 Acer n		/	// 00/01	<u>opecies:</u>	FAC	Number of Dominant Sp		
	us bicolor				FACW	OBL, FACW, or FAC:		(A
	us pennsylvanica				FACW	-		(
4	ao pennoyrrannea					Total Number of Domina	ant Species	
5						across All Strata:		(B)
			0	= Total Cover		-		
						Percent of Dominant Sp	ecies that are OBL,	
Sapling/Shrub Stra	atum (Plot size:)			FACW, or FAC:		(A,
1								
2						Prevalence Index works	sheet	
3						Total % Cov	er of:	Multiply by:
4						OBL species	x	1
5						FACW species	X	2
			0	= Total Cover	•	FAC species	X	3
						FACU species	X	4
	Plot size:)				UPL species		5
	arundinacea				FACW	Column Totals:	(/	4) <u>(B</u>
	stegium vimineum				FAC			
3 Symple	ocarpus foetidus				OBL		nce Index = B/A =	
						Hydrophytic Vegetation		_
4							/drophytic Vegetatio	n
5						Dominance Test		
56				·		Prevalence Index	daptations* (Provide	supporting
5 6 7							Remarks or on a sepa	
5 6 7 8						uaid III I	•	
5 6 7 8 9				·		Problematic Hyd	ronhytic Vegetation	*(Evalaia)
5 6 7 8				= Total Cover		Problematic Hyd	rophytic Vegetation	*(Explain)
5 6 7 8 9			0	= Total Cover				
5 6 7 8 9 10				= Total Cover		*Indicators of hy	dric soil and wetland	hydrology
5 6 7 8 9 10 Woody Vine Strat	um (Plot size:			= Total Cover		*Indicators of hy must be present,	dric soil and wetland , unless disturbed or	hydrology
5 6 7 8 9 10)	= Total Cover		*Indicators of hy	dric soil and wetland , unless disturbed or	hydrology

SOIL			Sampling Point: WL A
	pth needed to document the indicator or conf	irm the absence o	
Matrix	Redox Features		
Depth Color	Color		
(Inches) (moist) %	(Moist) % Type*	Loc**	Texture Remarks
05			Organic matter
.5-2 7.5YR 4/3			clayey silt
2-15 10YR 5/3	5YR 4/6		silty clay
15+ 7.5YR 4/6	5YR 3/4		coarse sandy silt
	10YR 2.5/1		organic streaks
· · · · · · · · · · · · · · · · · · ·			
	RM=Reduced Matrix, CS=Covered or Coated S	and Grains.	
**Location: PL= Pore Lining, M= Matrix	K		
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils***:
Histostol (A1)	Dark Surfaces (S7)		_ 2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 14	7, 148)	Piedmont Floodplain Soils (F19)
Black Histic (A3)	X Thin Dark Surface (S9) (MLRA 147, 148)		(MLRA 136, 147)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Red Parent Material (TF2)
Stratified Layers (A5)	Depleted Matrix (F3)		Very Shallow Dark Surface (TF12)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)		Other (Explain in Remarks)
Depleted Below Dark Surfaces (A11)	Depleted Dark Surface (F7)		
Thick Dark Surface (A12)	Redox Depressions (F8)	4104 120)	
Sandy Mucky Material (S1) (LRR N, MLRA 147, 148)	Iron-Manganese Masses (F12) (LRR N, N Umbric Surface (F13) (MLRA 136, 122)	/ILKA 130)	***Indicators of hydrophytic vegetation
Sandy Gleyed Matrix (S4)	Piedmont Floodplain Soils (F19), (MLRA	140)	and wetland hydrology must be present,
Sandy Redox (S5)		140)	unless disturbed or problematic.
Stripped Matrix (S6)			uness disturbed of problematic.
Restrictive Layer (if observed):			
Type:		Hydric Soils	
Type:			
Depth (inches):		Present?	Yes X No
Depth (inches):		Present?	Yes <u>X</u> No
Depth (inches): Remarks:		Present?	Yes <u>X</u> No
		Present?	Yes <u>X</u> No
		Present?	Yes <u>X</u> No
		Present?	Yes <u>X</u> No
		Present?	Yes <u>X</u> No
Remarks:		Present?	Yes <u>X</u> No
Remarks:	ired; check all that apply)		Yes X No
Remarks: HYDROLOGY Wetland Hydrology Indicators:	ired; check all that apply) True Aquatic Plants (B14)		
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requ			ators (minimum of two is required)
Remarks: HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1)	True Aquatic Plants (B14)	Secondary Indic	ators (minimum of two is required) Surface Soil Cracks (B6)
Remarks: HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Secondary Indic	<u>ators (minimum of two is required)</u> _Surface Soil Cracks (B6) _Sparsely Vegetated Concave Surface (B8)
Remarks: HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2) X Saturation (A3)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C	Secondary Indic	<u>ators (minimum of two is required)</u> _Surface Soil Cracks (B6) _Sparsely Vegetated Concave Surface (B8) _Drainage Patterns (B10)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requ Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6 Thin Muck Surface (C7)	Secondary Indic	ators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requ Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6	Secondary Indic	ators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requ Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6 Thin Muck Surface (C7) Other (Explain in Remarks)	Secondary Indic	ators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
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Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requestion) Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6 Thin Muck Surface (C7) Other (Explain in Remarks) 37) No X Depth (inches) No X Depth (inches)	<u>Secondary Indic</u>	ators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
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Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requestion one is requestion) Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Date (stream gauge, motestion)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6 Thin Muck Surface (C7) Other (Explain in Remarks) 37) No X Depth (inches) X No Depth (inches) 15 nitoring well, aerial photos, previous inspectio diverse conditions. Soil pit dug approximately	Secondary Indic 3) X Wetland Hydr ns), if available:	ators (minimum of two is required) _Surface Soil Cracks (B6) _Sparsely Vegetated Concave Surface (B8) _Drainage Patterns (B10) _Moss Trim Lines (B16) _Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) _Geomorphic Position (D2) Shallow Aquitard (D3) _Microtopographic Relief (D4) _FAC-Neutral Test (D5) rology Present? Yes XNo

Project/Site:	North Branch Trail	City	/County:	Rockville, Mo	ntgomery		Sampling Da	ate:		13-Jul-1	12
Applicant/Owner:		City			State:	Maryland	Sampling Da		A Up		
Investigator(s):	D. Merkey & J. Cum	nings				wnship, Range:					
Landform (hillslope						(concave, conve	ex, none):				
Slope (%):	· · · · ·	Lat:	:		Long:			Datum:			
Soil Map Unit Nam	e:					NWI classifica	tion:				
Are climatic/hydro	logic conditions on th	e site typica	l for this time	of year?	Yes	X No		(If no, explaiı	n in rem	iarks)	
Are Vegetation	Soil	or H	Hydrology	Significantly c	listurbed?	Are "Normal C	Circumstances	" present?	Yes	х	
Are Vegetation	Soil	or H	Hydrology	naturally prob	plematic?				No		
								explain any a	inswers	in rema	arks.)
SUMMARY OF FI	NDINGS - Attach site	e map shov	wing samplin	g point locatio	ons, transed	cts, important	features, etc.				
Hydrophytic Veget	ation Present? Yes	x	No			Is the Sampled	Area within a	Yes		No	х
Hydric Soil Present			No	x		Wetland?					
, Wetland Hydrology	-		No	x							
	Original data was col	lected using	the 1987 COF	Routine Wetla	nd Determin	ation Data Form	n Data has he	on transform	ad over	for	
	consistency, howeve	-					i. Data nas be		su over	101	
VEGETATION - Us	e scientific names o	of plants.									
		•									
			Absolute	Dominant	Indicator						
Tree Stratum (Plo	ot size:)	% Cover	Species?	Status	Dominance Te	est worksheet	:			
1 Acer rul	brum				FAC	Number of Do	minant Specie	es That are			
2 Prunus	serotina				FACU	OBL, FACW, o	FAC:				(A)
3 Lirioder	ndron tulipifera				FACU						
4						Total Number	of Dominant S	Species			
5						across All Stra	ta:				(B)
			0	= Total Cover							
						Percent of Do	minant Specie	s that are Of	3L,		
	tum (Plot size:)			FACW, or FAC	:				(A/B)
	s thunbergii				FACU						
2 Acer rul					FAC	Prevalence In					
3 Asimina	a triloba				FAC		otal % Cover o	<u>f:</u>		Multiply	y by:
4						OBL species	-		x 1		
5						FACW species	_		x 2		
			0	= Total Cover	•	FAC species	-		x 3		
Liszh Chastana (Di		,				FACU species	-		×4		
	ot size:)			0.01	UPL species	. –		X 5		(D)
	ria hydropiperoides				OBL	Column Totals			(A)		(B)
2 <u>Alliaria</u>	petiolata na triphyllum		·		FACU FACW		Drovalanca	Index = B/A =	_		
4			·		FACW	Hydrophytic \					
4 5			·				Test for Hydro		tation		
6			·				ance Test is >!		.ation		
7			·				ence Index Is <				
8			·				ological Adap		wido su	nnortin	σ
9						worph	e .	arks or on a		••••••	•
10						Proble	matic Hydropi		•)
10			0	= Total Cover			indie Hydropi	Tytic Vegeta		piuiii)	
			0			*Indica	ators of hydric	soil and we	tland hv	drology	,
Woody Vine Stratu	m (Plot size:)				e present, unl				
1 Vitis rip			/		FACW	Hydrophytic \			<u></u>	bieniae	
2			·			Present?	-8	Yes	X**	No	
			·	= Total Cover						<u> </u>	

SOIL					Sampling Point:	A Upland
Profile Description: (Describe to the dep	th needed to docun	nent the indicator or	r confirm the ab	sence of indicators.)	1 0	
Matrix		Redox Features	S			
Depth Color	Color					
(Inches) (moist) %	(Moist)	% Type	e* Loc**	Texture	Remarks	
0-0.5					organic matter	
0.5-1 10R 2.5/1				fine sandy silt		
1+ 5YR 5/4				fine sandy clay		
*Type: C=Concentration, D=Depletion, R	M=Reduced Matrix	CS=Covered or Coa	ted Sand Grains			
**Location: PL= Pore Lining, M= Matrix						
Hydric Soil Indicators:				Indicators for P	Problematic Hydric So	ils***:
Histostol (A1)	Dark Surfaces	(S7)		2 cm Muck (A10	0) (MLRA 147)	
Histic Epipedon (A2)		w Surface (S8) (MLR	A 147, 148)		dplain Soils (F19)	
Black Histic (A3)		ace (S9) (MLRA 147,			.RA 136, 147)	
Hydrogen Sulfide (A4)	Loamy Gleyed		- /	Red Parent Mat		
Stratified Layers (A5)	Depleted Matr				ark Surface (TF12)	
2 cm Muck (A10) (LRR N)	Redox Dark Su			Other (Explain i	. ,	
Depleted Below Dark Surfaces (A11)	Depleted Dark				,	
Thick Dark Surface (A12)	Redox Depress					
Sandy Mucky Material (S1) (LRR N,		se Masses (F12) (LRF	2 N MIRA 136)			
MLRA 147, 148)		e (F13) (MLRA 136, 1		***Indicators o	of hydrophytic vegetat	ion
Sandy Gleyed Matrix (S4)		dplain Soils (F19), (N	-		drology must be pres	
Sandy Redox (S5)					d or problematic.	ent,
Stripped Matrix (S6)				uniess distuibe		
Restrictive Layer (if observed):						
			Hydric	Soils		
Type: Depth (inches):			Presen		No	х
Depth (menes).				100		<u></u>
						<u></u>
Remarks:						<u>~</u>
						<u>~</u>
						<u>.</u>
Remarks:						
Remarks: HYDROLOGY						<u></u>
Remarks: HYDROLOGY Wetland Hydrology Indicators:	ad: check all that an	nly)				<u></u>
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require				ry Indicators (minimum d	of two is required)	<u></u>
Remarks: HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is require</u> Surface Water (A1)	True Aquatic P	lants (B14)		ry Indicators (minimum of a contract of a	<u>of two is required)</u> icks (B6)	
Remarks: HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is require</u> Surface Water (A1) High Water Table (A2)	True Aquatic P Hydrogen Sulf	lants (B14) de Odor (C1)	<u>Seconda</u>	ry Indicators (minimum o Surface Soil Cra Sparsely Vegeta	of two is required) Icks (B6) ated Concave Surface	
Remarks: HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is require</u> Surface Water (A1) High Water Table (A2) Saturation (A3)	True Aquatic P Hydrogen Sulf Oxidized Rhizo	lants (B14) de Odor (C1) pheres on Living Ro	<u>Seconda</u>	ry Indicators (minimum o Surface Soil Cra Sparsely Vegeta Drainage Patter	of two is required) ucks (B6) ated Concave Surface rns (B10)	
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re	lants (B14) de Odor (C1) pheres on Living Ro duced Iron (C4)	<u>Seconda</u> ots (C3)	ry Indicators (minimum of a surface Soil Cra Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line	of <u>two is required)</u> icks (B6) ated Concave Surface rns (B10) s (B16)	
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re Recent Iron Re	lants (B14) de Odor (C1) pheres on Living Ro duced Iron (C4) duction in Tilled Soi	<u>Seconda</u> ots (C3)	ry Indicators (minimum of Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa	of two is required) icks (B6) ated Concave Surface rns (B10) s (B16) ter Table (C2)	
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Sur	lants (B14) de Odor (C1) pheres on Living Ro duced Iron (C4) duction in Tilled Soi face (C7)	<u>Seconda</u> ots (C3)	ry Indicators (minimum of Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrov	of two is required) icks (B6) ated Concave Surface rns (B10) s (B16) ter Table (C2) vs (C8)	(B8)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re Recent Iron Re	lants (B14) de Odor (C1) pheres on Living Ro duced Iron (C4) duction in Tilled Soi face (C7)	<u>Seconda</u> ots (C3)	ry Indicators (minimum of a second content of	of two is required) icks (B6) ated Concave Surface rns (B10) s (B16) ter Table (C2) vs (C8) ole on Aerial Imagery	(B8)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Sur Other (Explain	lants (B14) de Odor (C1) pheres on Living Ro duced Iron (C4) duction in Tilled Soi face (C7)	<u>Seconda</u> ots (C3)	ry Indicators (minimum of Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrow Saturation Visite Stunted or Stre	of two is required) icks (B6) ated Concave Surface rns (B10) s (B16) ter Table (C2) vs (C8) ole on Aerial Imagery ssed Plants (D1)	(B8)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Sur Other (Explain	lants (B14) de Odor (C1) pheres on Living Ro duced Iron (C4) duction in Tilled Soi face (C7)	<u>Seconda</u> ots (C3)	ry Indicators (minimum of Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre Geomorphic Po	of two is required) icks (B6) ated Concave Surface rns (B10) s (B16) ter Table (C2) vs (C8) ole on Aerial Imagery ssed Plants (D1) isition (D2)	(B8)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9)	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Sur Other (Explain	lants (B14) de Odor (C1) pheres on Living Ro duced Iron (C4) duction in Tilled Soi face (C7)	<u>Seconda</u> ots (C3)	ry Indicators (minimum of Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre Geomorphic Po Shallow Aquita	of two is required) icks (B6) ated Concave Surface rns (B10) s (B16) ter Table (C2) vs (C8) ole on Aerial Imagery ssed Plants (D1) isition (D2) rd (D3)	(B8)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Sur Other (Explain	lants (B14) de Odor (C1) pheres on Living Ro duced Iron (C4) duction in Tilled Soi face (C7)	<u>Seconda</u> ots (C3)	ry Indicators (minimum of Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre Geomorphic Po	of two is required) icks (B6) ated Concave Surface rns (B10) s (B16) ter Table (C2) vs (C8) ole on Aerial Imagery ssed Plants (D1) isition (D2) rd (D3)	(B8)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9)	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Sur Other (Explain	lants (B14) de Odor (C1) pheres on Living Ro duced Iron (C4) duction in Tilled Soi face (C7)	<u>Seconda</u> ots (C3)	ry Indicators (minimum of Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrov Saturation Visit Stunted or Stre Geomorphic Po Shallow Aquita	of two is required) icks (B6) ated Concave Surface rns (B10) s (B16) ter Table (C2) vs (C8) ble on Aerial Imagery ssed Plants (D1) isition (D2) rd (D3) hic Relief (D4)	(B8)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9) Aquatic Fauna (B13)	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Sur Other (Explain	lants (B14) de Odor (C1) pheres on Living Ro duced Iron (C4) duction in Tilled Soi face (C7)	<u>Seconda</u> ots (C3)	ry Indicators (minimum of Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrov Saturation Visik Stunted or Stre Geomorphic Po Shallow Aquitar Microtopograp	of two is required) icks (B6) ated Concave Surface rns (B10) s (B16) ter Table (C2) vs (C8) ble on Aerial Imagery ssed Plants (D1) isition (D2) rd (D3) hic Relief (D4)	(B8)
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Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes	True Aquatic P Hydrogen Sulf Oxidized Rhizo Presence of Re Recent Iron Re Thin Muck Sur Other (Explain	lants (B14) de Odor (C1) pheres on Living Ro ducted Iron (C4) duction in Tilled Soi face (C7) in Remarks) 	<u>Seconda</u> ots (C3) ls (C6)	ry Indicators (minimum of Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrov Saturation Visik Stunted or Stre Geomorphic Po Shallow Aquitar Microtopograp FAC-Neutral Te	of two is required) icks (B6) ated Concave Surface rns (B10) s (B16) ter Table (C2) vs (C8) ble on Aerial Imagery ssed Plants (D1) isition (D2) rd (D3) hic Relief (D4)	(B8)
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	١	WETLAND D	DETERMINATIO	ON DATA FORM	VI - Eastern	Mountains and Piedm	ont		
Project/Site:	North Branch Trail	Cit	ty/County:	Rockville, Mo	ontgomery	Sampli	ng Date:	1	.3-Jul-12
Applicant/Owner:	MNCPPC				State:	Maryland Samplin	ng Point:	WL B	
Investigator(s):	D. Merkey & J. Cur	nmings				wnship, Range:			
Landform (hillslop	e, terrace, etc.):					(concave, convex, none)			
Slope (%):		La			Long:		Datum:		
Soil Map Unit Nam			nery silt loams	- f	¥	NWI classification:	NA		
Are Vegetation	ologic conditions on t Soil		Hydrology	Significantly d	Yes	X No Are "Normal Circumsta	(If no, explai	n in rema Yes	X
Are Vegetation	Soil		Hydrology	naturally prob		Are Normal Circumsta	nces present:	No	<u>^</u>
Are vegetation	501	0	nyurology		nematic:	(If need	ded, explain any a		n remarks.)
SUMMARY OF FI	NDINGS - Attach si	ite map sho	owing samplin	g point locatio	ons, transeo	cts, important features			,
Hydrophytic Veget	tation Present? Yes	х	No			Is the Sampled Area with	nin a Yes	х	No
Hydric Soil Present	t? Yes	Х	No			Wetland?			
Wetland Hydrolog	y Present? Yes	Х	No						
Remarks: VEGETATION - U	Original data was co consistency, howev se scientific names	ver not all of				ation Data Form. Data ha al data.	as been transferr	ed over fo	Dr
			Absolute	Dominant	Indicator				
Tree Stratum (Pl	lot size:)	% Cover	Species?	Status	Dominance Test works	sheet.		
	is pennsylvanica	/	70 00101	<u>opecies:</u>	FACW	Number of Dominant S			
2 Acer ne					FAC	OBL, FACW, or FAC:			(A)
3 Juglans	-				FACU	, ,			(,
4						Total Number of Domir	nant Species		
5						across All Strata:			(B)
			0	= Total Cover					
						Percent of Dominant Sp	pecies that are O	BL,	
Sapling/Shrub Stra	tum (Plot size:)			FACW, or FAC:			(A/B
1									
2						Prevalence Index work		_	
3						Total % Co	ver of:		Aultiply by:
4				<u> </u>		OBL species FACW species		x1	
5			0	= Total Cover		FACW species		x 2 x 3	
			0	- Total Cover		FACU species		x 3 x 4	
Herb Stratum (P	lot size:)				UPL species		x 5	
	ocarpus foetidus	/			OBL	Column Totals:		(A)	(B)
2 Pilea fo	, ,				FACW				(3)
,	xon hispidus				FAC	Prevale	ence Index = B/A	=	
4 Persica	ria perfoliata				FAC	Hydrophytic Vegetatio	n Indicators:		
5						Rapid Test for H	lydrophytic Vege	tation	
6						Dominance Test	t is >50%		
7			_			Prevalence Inde	ex ls < or = 3.0*		
8						Morphological A	Adaptations* (Pro	ovide sup	porting
9							Remarks or on a	•	
10						Problematic Hy	drophytic Vegeta	tion*(Exp	lain)
			0	= Total Cover					
			,				ydric soil and we		
	<u>um</u> (Plot size:)		546		t, unless disturbe	d or prob	lematic.
	dendron radicans				FAC	Hydrophytic Vegetatio		V**	No
						Present?	Yes	X**	No
2				= Total Cover					

			Sampling Point: WL B
Profile Description: (Describe to the de	epth needed to document the indicator or confir	m the absence of	
Matrix	Redox Features		
Depth Color	Color		
(Inches) (moist) %	(Moist) % Type*	Loc**	Texture Remarks
0-3 2.5YR 4/2	2.5YR 4/6	100	clayey silt
3-13 2.5YR 6/1	2.5YR 2.5/4	· - <u></u>	coarse sandy silt
<u></u>		·	very fine sandy clay mottle: stark/abundant
<u>13+</u> <u>7.51K 0/1</u>	2.5YR 3/6	·	very line sandy clay mottle. stark/abundant
		·	
		·	
		·	
		· <u></u>	
*Type: C=Concentration, D=Depletion,	RM=Reduced Matrix, CS=Covered or Coated Sa	nd Grains.	
**Location: PL= Pore Lining, M= Matrix	x		
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils***:
Histostol (A1)	Dark Surfaces (S7)		2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147,	148)	Piedmont Floodplain Soils (F19)
Black Histic (A3)	X Thin Dark Surface (S9) (MLRA 147, 148)		(MLRA 136, 147)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Red Parent Material (TF2)
Stratified Layers (A5)	Depleted Matrix (F3)		Very Shallow Dark Surface (TF12)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)		Other (Explain in Remarks)
Depleted Below Dark Surfaces (A11)	Depleted Dark Surface (F7)		
Thick Dark Surface (A12)	Redox Depressions (F8)	DA 12C)	
Sandy Mucky Material (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N, MI	.RA 136)	
MLRA 147, 148)	Umbric Surface (F13) (MLRA 136, 122)		***Indicators of hydrophytic vegetation
Sandy Gleyed Matrix (S4)	Piedmont Floodplain Soils (F19), (MLRA 1	48)	and wetland hydrology must be present,
Sandy Redox (S5)			unless disturbed or problematic.
Stripped Matrix (S6)			
Restrictive Layer (if observed):			
Type:		Hydric Soils	
Depth (inches):		Present?	Yes X No
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:	irod, chock all that apply)	Secondary Indica	tors (minimum of two is required)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u>		Secondary Indica	tors (minimum of two is required)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1)	True Aquatic Plants (B14)	Secondary Indica	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) <u>High Water Table (A2)</u>	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2) Saturation (A3)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2) Saturation (A3)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requinance) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B X	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requ</u> Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requinance) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B X	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requination of the second seco	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requination of the second seco	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requinance) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B X Water-Stained Leaves (B9) Aquatic Fauna (B13)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requination of the second seco	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No X Depth (inches) No X Depth (inches)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requination of the second seco	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37)		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requination of the second seco	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No X Depth (inches) No X Depth (inches) No X Depth (inches))	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is requination of the second seco	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No X Depth (inches) No X Depth (inches))	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is requination of the second seco	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No X Depth (inches) No X Depth (inches) No X Depth (inches))	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is requinant) Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (E X Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes (includes capillary fringe) Describe Recorded Date (stream gauge, mother)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No X Depth (inches) No X Depth (inches) No X Depth (inches))	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)

Project/Site:	North Branch Trail	City/County:	Rockville, Mo	ontgomery	Samplin	g Date: 13-	-Jul-12
Applicant/Owner:	MNCPPC			State:	Maryland Samplin	g Point: B Uplan	d
nvestigator(s):	D. Merkey & J. Cummin	lgs		-	wnship, Range:		
	be, terrace, etc.):				(concave, convex, none):		
Slope (%):		Lat:		Long:	NWI classification:	Datum:	
Soil Map Unit Nar Are climatic/bydr	ologic conditions on the si	ite typical for this time	of year?	Yes	X No	(If no, explain in remark	(5)
Are Vegetation	Soil	or Hydrology	Significantly c		Are "Normal Circumstar		X
Are Vegetation	Soil	or Hydrology	naturally prot			No	<u> </u>
			,		(If need	ed, explain any answers in r	remarks.)
SUMMARY OF F	INDINGS - Attach site m	nap showing samplin	g point locatio	ons, transec	cts, important features,	etc.	
	tation Present? Yes X	No			Is the Sampled Area withi	in a YesN	No X
Hydric Soil Presen		No	<u>x</u>		Wetland?		
Netland Hydrolog		No	Х				
Remarks:						s been transferred over for	
	consistency, however no	ot all of this form can b	e completed wi	th the origin	ial data.		
VEGETATION - U	Jse scientific names of p	plants.					
		6 k l + -	Densinent	lu d'anten			
Free Stratum (P	Plot size:	Absolute) % Cover	Dominant Species?	Indicator Status	Dominance Test works	a a a t	
1 Acer n		//8 COVEI	species!	FAC	Number of Dominant Sp		
2 Acer n	0			FAC	OBL, FACW, or FAC:		(A)
3						-	(
4					Total Number of Domina	ant Species	
5					across All Strata:		(B)
		0	= Total Cover	•		-	
					Percent of Dominant Sp	ecies that are OBL,	
	atum (Plot size:)			FACW, or FAC:	-	(A/B
1							
2					Prevalence Index works		utioly by:
3 4					<u>Total % Cov</u> OBL species	<u>eroi: iviu</u> x 1	ultiply by:
4 5					FACW species	x1 x2	
J		0	= Total Cover		FAC species	x2	
		-			FACU species	x 4	
Herb Stratum (F	Plot size:)			UPL species	x 5	
1 Persico	aria sagittata			OBL	Column Totals:	(A)	(B)
2 Polygo	onum persicaria			FACW			
3 <u>Arthra</u>	axon hispidus			FAC		nce Index = B/A =	
4					Hydrophytic Vegetation		
5						drophytic Vegetation	
6					Dominance Test		
7					Prevalence Index	< ls < or = 3.0* daptations* (Provide suppo	ortina
8 9						daptations* (Provide suppo Remarks or on a separate sl	•
10						rophytic Vegetation*(Expla	
10		0	= Total Cover				,
		0			*Indicators of hv	dric soil and wetland hydro	ology
<u>Woody Vine Str</u> at	um (Plot size:)				, unless disturbed or proble	
1					Hydrophytic Vegetation		
2					Present?		No
2					1		

SOIL				Sampling Point:	B Upland
	th needed to document the indicator or confi	rm the absence of	findicators.)	1 0	
Matrix	Redox Features				
Depth Color	Color				
(Inches) (moist) %	(Moist) % Type*	Loc**	Texture	Remarks	
0-0.5				organic matter	
0.5-1 10R 2.5/1			fine sandy silt		
1+ 5YR 5/4			fine sandy clay		
		_			
*Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, CS=Covered or Coated Sa	nd Grains.			
**Location: PL= Pore Lining, M= Matrix					
Hydric Soil Indicators:			Indicators for P	Problematic Hydric Soil	s***:
Histostol (A1)	Dark Surfaces (S7)		2 cm Muck (A10	0) (MLRA 147)	
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147)	, 148)		dplain Soils (F19)	
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)		_	.RA 136, 147)	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		 Red Parent Mat		
Stratified Layers (A5)	Depleted Matrix (F3)		-	ark Surface (TF12)	
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)		Other (Explain i	. ,	
Depleted Below Dark Surfaces (A11)	Depleted Dark Surface (F7)			in Kenidi K3j	
Thick Dark Surface (A12)	Redox Depressions (F8)				
· · ·		104 100)			
Sandy Mucky Material (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N, M	LKA 136)	***!	Charles and the second second	
MLRA 147, 148)	Umbric Surface (F13) (MLRA 136, 122)	140)		of hydrophytic vegetation	
Sandy Gleyed Matrix (S4)	Piedmont Floodplain Soils (F19), (MLRA 1	148)	-	drology must be prese	nt,
Sandy Redox (S5)			unless disturbe	d or problematic.	
Stripped Matrix (S6)					
Restrictive Layer (if observed):					
Туре:		Hydric Soils			
Depth (inches):		Present?	Yes	No	X
Devee whee					
Remarks:					
Remarks:					
Remarks:					
HYDROLOGY					
HYDROLOGY Wetland Hydrology Indicators:		Consider to the			
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indica		of two is required)	
HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is require</u> Surface Water (A1)	True Aquatic Plants (B14)	Secondary Indica	Surface Soil Cra	icks (B6)	
HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is require</u> Surface Water (A1) High Water Table (A2)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)		Surface Soil Cra Sparsely Vegeta	icks (B6) ated Concave Surface (I	B8)
HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is require</u> Surface Water (A1) High Water Table (A2) Saturation (A3)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C3		_Surface Soil Cra _Sparsely Vegeta _Drainage Patter	icks (B6) ated Concave Surface (I rns (B10)	B8)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4)	3)	Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line	ncks (B6) ated Concave Surface (I rns (B10) s (B16)	88)
HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is require</u> Surface Water (A1) High Water Table (A2) Saturation (A3)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C3	3)	_Surface Soil Cra _Sparsely Vegeta _Drainage Patter	ncks (B6) ated Concave Surface (I rns (B10) s (B16)	B8)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4)	3)	Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line	icks (B6) ated Concave Surface (1 rns (B10) s (B16) ter Table (C2)	88)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6)	3)	Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrow	icks (B6) ated Concave Surface (1 rns (B10) s (B16) ter Table (C2)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C3 Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7)	3)	Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrow Saturation Visib	icks (B6) ated Concave Surface (1 rns (B10) s (B16) ter Table (C2) vs (C8)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)	3)	Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrow Saturation Visib	icks (B6) ated Concave Surface (F rns (B10) s (B16) ter Table (C2) vs (C8) ble on Aerial Imagery (C ssed Plants (D1)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)	3)	Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stre	icks (B6) ated Concave Surface (F rns (B10) s (B16) ter Table (C2) vs (C8) ole on Aerial Imagery (C ssed Plants (D1) isition (D2)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)	3)	Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line: Dry-Season Wa Crayfish Burrow Saturation Visik Stunted or Stre: Geomorphic Po Shallow Aquitan	icks (B6) ated Concave Surface (F rns (B10) s (B16) ter Table (C2) vs (C8) ole on Aerial Imagery (C ssed Plants (D1) isition (D2) rd (D3)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)	3)	Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line: Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stre Geomorphic Po	icks (B6) ated Concave Surface (rns (B10) s (B16) ter Table (C2) vs (C8) ole on Aerial Imagery (C ssed Plants (D1) isition (D2) rd (D3) hic Relief (D4)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Water-Stained Leaves (B9)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Roots (C Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)	3)	Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line: Dry-Season Wa Crayfish Burrow Saturation Visit Stunted or Stre: Geomorphic Po Shallow Aquitan Microtopograph	icks (B6) ated Concave Surface (rns (B10) s (B16) ter Table (C2) vs (C8) ole on Aerial Imagery (C ssed Plants (D1) isition (D2) rd (D3) hic Relief (D4)	
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	,	WETLAND DE	TERMINATIC	ON DATA FORM	VI - Eastern	Mountains and Piedmor	nt		
Project/Site:	North Branch Trail	City	County:	Rockville, Mc	ontgomery	Sampling	Date:		13-Jul-12
Applicant/Owner:				,	State:	Maryland Sampling		WL C	
Investigator(s):	D. Merkey & J. Cu	nmings			Section, To	wnship, Range:			
Landform (hillslope	e, terrace, etc.):	Floodplain			Local relief	(concave, convex, none):			
Slope (%):		Lat:			Long:		Datum:		
Soil Map Unit Nam		ooro Silt Loam				NWI classification:	NA		
	logic conditions on	••		•	Yes	<u>X</u> No	(If no, explain		•
Are Vegetation	Soil		ydrology	Significantly d		Are "Normal Circumstanc	es" present?	Yes	x
Are Vegetation	Soil	or H	ydrology	naturally prob	plematic?	/1 f	-ll-:	No	
SUMMARY OF FI	NDINGS - Attach s	ite map show	ving sampling	g point locatio	ons, transed	cts, important features, e	d, explain any a . tc.	IISWEIST	n remarks.)
Hydrophytic Veget	ation Present? Yes	Х	No			Is the Sampled Area within	a Yes	Х	No
Hydric Soil Present	? Yes	х	No			Wetland?			
Wetland Hydrology	y Present? Yes	x	No						
Remarks: VEGETATION - Us	Original data was c consistency, hower	ver not all of th				nation Data Form. Data has nal data.	been transferre	d over f	or
Tree Stratum (Pl	ot size:		Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test workshe	act:		
1 NA	01 3120.	/	70 00001	Species:	Jtatus	Number of Dominant Spe			
2						OBL, FACW, or FAC:			(A)
3						obl, mew, of me.			(^/
4				·		Total Number of Domina	nt Species		
5				·		across All Strata:	it op coico		(B)
			0	= Total Cover					(2)
						Percent of Dominant Spe	cies that are OB	L.	
Sapling/Shrub Stra	tum (Plot size:)			FACW, or FAC:			(A/B)
1 Acer ru					FAC				
2						Prevalence Index worksh	eet		
3						Total % Cove	<u>r of:</u>	N	Aultiply by:
4						OBL species	_	x 1	
5						FACW species		x 2	
			0	= Total Cover		FAC species		x 3	
						FACU species		x 4	
Herb Stratum (Pl	ot size:)				UPL species		x 5	
	ria sagittata				OBL	Column Totals:		(A)	(B)
	irundinacea				FACW	.			
	carpaea bracteata			·	FAC		ce Index = B/A =	:	
<u> </u>	carpus foetidus			·	OBL	Hydrophytic Vegetation			
5 Typha I				·	OBL	Rapid Test for Hyd		ation	
6 <u>Alisma</u>	triviale		·		OBL	Dominance Test is			
7						Prevalence Index			
8				·		Morphological Ad			
9 10			·	·		Problematic Hydro	emarks or on a s	•	,
10			0	= Total Cover			opinytic vegetät		Jallij
			0			*Indicators of hyd	ric soil and wat	land byo	Irology
Woody Vine Stratu	m (Plot size:)			must be present,			
1 NA	<u></u> (1101 3126		_/			Hydrophytic Vegetation			Actually.
2						Present?	Yes	X**	No
				= Total Cover				<u></u>	
**Abso	-	•	,			FAC, FACW or OBL, this indi	cates Hydrophy	tic	
Vegeta	tion is present.								

SOIL			Sampling Point:	WL C
Profile Description: (Describe to the depth neede	d to document the indicator or confirm	m the absence of	indicators.)	
Matrix	Redox Features			
Depth Color Colo	or			
(Inches) (moist) % (Mo	oist) <u>%</u> Type*	Loc**	Texture Remarks	
0-1.5		. <u></u>	organic matter	
<u>1.5-3</u> <u>5YR 3/1</u>			fine sandy silt	
	3/4		sandy loam	
<u>13-14</u>		. <u> </u>	cobble	
			impenetrable cobble	
		·		
*Type: C=Concentration, D=Depletion, RM=Redu	cod Matrix CS=Covered or Coated San	Grains		
**Location: PL= Pore Lining, M= Matrix				
Hydric Soil Indicators:			Indicators for Problematic Hydric S	oils***:
-	k Surfaces (S7)		2 cm Muck (A10) (MLRA 147)	
· · · ·	value Below Surface (S8) (MLRA 147,	148)	Piedmont Floodplain Soils (F19)	
	Dark Surface (S9) (MLRA 147, 148)		(MLRA 136, 147)	
<u> </u>	my Gleyed Matrix (F2)		Red Parent Material (TF2)	
	leted Matrix (F3)		Very Shallow Dark Surface (TF12)	
	ox Dark Surface (F6)		Other (Explain in Remarks)	
Depleted Below Dark Surfaces (A11)	leted Dark Surface (F7)			
Thick Dark Surface (A12) Red	ox Depressions (F8)			
Sandy Mucky Material (S1) (LRR N, Iror	-Manganese Masses (F12) (LRR N, ML	RA 136)		
	bric Surface (F13) (MLRA 136, 122)		***Indicators of hydrophytic veget	
	dmont Floodplain Soils (F19), (MLRA 14	48)	and wetland hydrology must be pre	esent,
X Sandy Redox (S5)			unless disturbed or problematic.	
Stripped Matrix (S6)				
Restrictive Layer (if observed):		Undria Calla		
Type: Cobble Depth (inches): 14		Hydric Soils Present?	Yes X No	
Depth (inches). 14		Present	Yes <u>X</u> No	
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:				
Primary Indicators (minimum of one is required; check		Secondary Indica	<u>tors (minimum of two is required)</u>	
	e Aquatic Plants (B14)		Surface Soil Cracks (B6)	()
	rogen Sulfide Odor (C1)		Sparsely Vegetated Concave Surfac	e (B8)
	dized Rhizopheres on Living Roots (C3))	Drainage Patterns (B10)	
	sence of Reduced Iron (C4)		Moss Trim Lines (B16)	
	ent Iron Reduction in Tilled Soils (C6)		Dry-Season Water Table (C2)	
<u> </u>	n Muck Surface (C7) er (Explain in Remarks)		Crayfish Burrows (C8)	((CO)
Algal Mat or Crust (B4)Oth Iron Deposits (B5)	er (Explain in Remarks)	·	Saturation Visible on Aerial Imagery	/ (C9)
Inundation Visible on Aerial Imagery (B7)		·	Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
Water-Stained Leaves (B9)			Shallow Aquitard (D3)	
Aquatic Fauna (B13)			Microtopographic Relief (D4)	
			FAC-Neutral Test (D5)	
Field Observations:				
Surface Water Present? Yes No	X Depth (inches)			
Water Table Present? Yes X No	Depth (inches) 14	Wetland Hydro	logy Present?	
Saturation Present? Yes X No	Depth (inches) 0		Yes X No	
(includes capillary fringe)				
Describe Recorded Date (stream gauge, monitoring w	ell, aerial photos, previous inspections	s), if available:		
Pomarke: Used Amphicanoon bractoria and	elineator.Conditions appear normal no	ow but the course	line runs through the fleedalais	
Remarks: Used Amphicarpaea bracteata as d	enneator.conditions appear normal ne	ow but the sewer	mie runs unough the hoouplain.	

Drojact /Site	North Branch Trail	City/Cov.		Pochuille M-	ntacmeri		Complian D	ato.		12 1.1 4	12
Project/Site: Applicant/Owner:	North Branch Trail MNCPPC	City/Count	y: _	Rockville, Mo	ontgomery State:	Maryland	Sampling Da Sampling Po			13-Jul-1 pland	.∠
Investigator(s):	D. Merkey & J. Cummi	ngs		<u> </u>		wnship, Range:				Juna	
Landform (hillslop	/					(concave, conve	ex, none):				
Slope (%):	· · · ·	Lat:			Long:		· · · <u>-</u>	Datum:			
Soil Map Unit Nar	me:				-	NWI classifica	tion:				
Are climatic/hydro	ologic conditions on the	site typical for thi	is time	of year?	Yes	X No		(If no, explaiı	n in rem	iarks)	
Are Vegetation	Soil	or Hydrolo	gy	Significantly d	listurbed?	Are "Normal C	Circumstances	" present?	Yes	х	
Are Vegetation	Soil	or Hydrolo	gy	naturally prob	olematic?				No		
							•	explain any a	inswers	in rema	ırks.)
SUMMARY OF F	INDINGS - Attach site	map showing sa	mplin	g point locatio	ons, transed	cts, important	features, etc				
Hydrophytic Vege	etation Present? Yes X	No				Is the Sampled	Area within a	Yes		No	х
Hydric Soil Presen	nt? Yes	No		Х		Wetland?					
Wetland Hydrolog	gy Present? Yes	No		x							
Remarks:	Original data was colle	cted using the 19	87 COE	Routine Wetla	nd Determin	nation Data Form	n. Data has be	en transferre	ed over	for	
	consistency, however r										
				·	0						
VEGETATION - U	Jse scientific names of	plants.									
			olute	Dominant	Indicator						
	Plot size:) %C	over	Species?	Status	Dominance Te		-			
1 Juglan 2 Querci				<u> </u>	FACU FACU	Number of Do		es That are			(4)
	us alba nus occidentalis				FACU	OBL, FACW, or	FAC:				(A)
4		<u> </u>			FACW	Total Number	of Dominant	Enocios			
4 5						across All Stra		species			(B)
5		·	0	= Total Cover			ια.				_(0)
			Ũ			Percent of Do	minant Specie	s that are Of	31.		
Sapling/Shrub Stra	atum (Plot size:)				FACW, or FAC	-		,		(A/B)
1 Cornu		/			FACU						_(',',',',',',',',',',',',',',',',',',',
	a benzoin				FAC	Prevalence In	dex workshee	t			
3						Т	otal % Cover o	of:		Multiply	y by:
4						OBL species		_	x 1		<u> </u>
5						FACW species	-		x 2		_
			0	= Total Cover		FAC species	-		x 3		
						FACU species	_		x 4		_
Herb Stratum (F	Plot size:)				UPL species	_		x 5		
1 Persice	aria hydropiperoides				OBL	Column Totals			(A)		(B)
	multiflora				FACU						
	stegium vimineum				FAC			Index = B/A =	=		
	enocissus quinquefolia				FACU	Hydrophytic \	0				
5						· ·	Test for Hydro		ation		
6							ance Test is >!				
7							ence Index Is <				
8						Morph	ological Adap	-			-
9								arks or on a	•)
10		<u> </u>		Tatal Cause		Proble	matic Hydropl	iytic vegeta	tion*(Ex	iplain)	
			0	= Total Cover		ابر الغ	+	collord	ا امحط	drol -	
Maadu Mina Ctuat	um (Distaine)	\ \					ators of hydric				
	<u>um</u> (Plot size: dendron radicans)			EAC		e present, uni	ess disturbe	u or pro	biemati	ι.
2	denaron radicans				FAC	Hydrophytic \ Present?	regetation	Yes	v **	No	
۷				= Total Cover		riesenti		162	<u>^</u>		

SOIL			Sampling Point: C Upland
Profile Description: (Describe to the de	oth needed to document the indicator	or confirm the absence	
Matrix	Redox Featu		
Depth Color	Color		
(Inches) (moist) %		ype* Loc**	Texture Remarks
0-1 10R 3/1			sandy loam
<u>1-12</u> 7.5YR 4/4			loamy sand
			impenetrable cobble/gravel layer
*Type: C=Concentration, D=Depletion,	RM=Reduced Matrix, CS=Covered or C	oated Sand Grains.	
**Location: PL= Pore Lining, M= Matrix			
Hydric Soil Indicators:			Indicators for Problematic Hydric Soils***:
Histostol (A1)	Dark Surfaces (S7)		2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (N		Piedmont Floodplain Soils (F19)
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 14	i7, 148)	(MLRA 136, 147)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	· · · <u>-</u>	Red Parent Material (TF2)
Stratified Layers (A5)	Depleted Matrix (F3)	-	Very Shallow Dark Surface (TF12)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	-	Other (Explain in Remarks)
Depleted Below Dark Surfaces (A11)	Depleted Dark Surface (F7)	-	
Thick Dark Surface (A12)	Redox Depressions (F8)		
Sandy Mucky Material (S1) (LRR N,	Iron-Manganese Masses (F12) (
MLRA 147, 148)	Umbric Surface (F13) (MLRA 136		***Indicators of hydrophytic vogetation
			***Indicators of hydrophytic vegetation
Sandy Gleyed Matrix (S4)	Piedmont Floodplain Soils (F19)	, (IVILKA 148)	and wetland hydrology must be present,
Sandy Redox (S5)			unless disturbed or problematic.
Stripped Matrix (S6)			
Restrictive Layer (if observed):	,		
	<u>e</u> cobble/gravel layer	Hydric Soils	
Depth (inches): 12		Present?	Yes <u>No X</u>
		Present	
Remarks:		Present	
		Present?	
		Present	
Remarks:		Present	
Remarks: HYDROLOGY		Present	
Remarks:		Present	
Remarks: HYDROLOGY	red; check all that apply)		icators (minimum of two is required)
Remarks: HYDROLOGY Wetland Hydrology Indicators:	red; check all that apply) True Aquatic Plants (B14)		
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi			icators (minimum of two is required)
Remarks: HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is requi</u> Surface Water (A1)	True Aquatic Plants (B14)	Secondary Ind	icators (minimum of two is required) Surface Soil Cracks (B6)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living	Secondary Ind	icators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Presence of Reduced Iron (C4)	<u>Secondary Ind</u> – Roots (C3) –	icators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S	<u>Secondary Ind</u> – Roots (C3) –	icators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7)	<u>Secondary Ind</u> – Roots (C3) –	icators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S	<u>Secondary Ind</u> – Roots (C3) –	icators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks)	<u>Secondary Ind</u> – Roots (C3) –	icators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is requi Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizopheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks)	<u>Secondary Ind</u> – Roots (C3) –	icators (minimum of two is required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
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		w	ETLAND DE	TERMINATIO	ON DATA FOR	RM - Eastern	n Mountains and	Piedmont			
Project/Site:	North Branch Tra	ail	City	/County:	Rockville, M	lontgomery		Sampling Da	te:		7-Jan-13
Applicant/Owner:	MNCPPC		,	· · -	-	State:		Sampling Poi		WL	AA
Investigator(s):	D. Merkey					Section, To	wnship, Range:				
Landform (hillslope	e, terrace, etc.):	F	Floodplain			Local relief	f (concave, convex	, none):			
Slope (%):			Lat:			Long:		C	atum:		
Soil Map Unit Nam	e: Ha	atbor	ro silt loam/	Blocktown Ch	annery silt loa	m	NWI classification	on:		NA	A
Are climatic/hydro	logic conditions o	n the	e site typica	l for this time	of year?	Yes	X No	(1	f no, explai	n in rer	narks)
Are Vegetation	So	oil _	or H	lydrology	Significantly	disturbed?	Are "Normal Cir	cumstances"	present?	Yes	х
Are Vegetation	So	oil	or H	lydrology	naturally pro	oblematic?				No	
SUMMARY OF FI	NDINGS - Attach	site	e map shov	ving samplin	g point locati	ions, transe				inswer	s in remarks.)
Hydrophytic Veget	ation Present? Ye	es)	x	No			Is the Sampled Ar	rea within a	Yes	Х	No
Hydric Soil Present		_		No			Wetland?				
Wetland Hydrology	y Present? Ye	s)	x	No							
Remarks: VEGETATION - U	se scientific nam	ies o	of plants.								
				Absolute	Dominant	Indicator					
Tree Stratum (Pl	ot size:)	% Cover	Species?	Status	Dominance Tes	t worksheet:			
1 Acer ru			/	95	Yes	FAC	Number of Dom				
	is occidentalis			5	No	FACW	OBL, FACW, or F	•	5 mat are		5 (A)
3	is occidentalis				110	TACW	-	AC.			<u> </u>
3 4							- Total Number o	f Dominant S	nacios		
4 5							across All Strata		pecies		6 (B)
5				100	= Total Cove						<u> </u>
				100		51	Borcont of Dom	inant Enocior	that are O	51	
Sapling/Shrub Stra	tum (Plot size:)			Percent of Dom FACW, or FAC:	mant species	s that are Of	э∟,	83% (A/E
	rotundifolia				Voc	EAC	FACW, OF FAC.				<u> </u>
	s thunbergii			5	Yes Yes	FAC FACU	Prevalence Inde	www.workchoot			
3	s thunberyn				165	FACU	-	al % Cover of			Multiply by:
							-		<u>.</u>	v 1	Multiply by:
4 5							OBL species FACW species			x1 x2	
5				10	= Total Cove		FAC species			x 2	<u> </u>
				10		=1	FACU species				<u> </u>
Herb Stratum (Pl	ot size:)				UPL species			X4	
	thelium clandestin		/	20	Voc	FAC	Column Totals:	-		x 5 (A)	(B)
	a japonica	uIII		10	Yes Yes	FAC		-		_(A)	(Þ)
3 Juncus	, ,			10	Yes	FAC	-	Prevalence I	ndev – ¤/A	_	
4 Carex s				5	No		Hydrophytic Ve			_	
4 <u>curex s</u> 5	rr.				110			est for Hydrop		ation	
5 6					<u> </u>			nce Test is >5		auon	
7					<u> </u>			ice Index is >5			
8								logical Adapt		wido c	upporting
8 9											
							-	data in Rema		•	
10				45	- Total Carr		- Problem	atic Hydroph	yuc vegeta	uon"(E	хріант)
				45	= Total Cove	=1	ski I	and of the state	ممثل و سر ما	ا ا م م	uduole
				`				ors of hydric			
Woody Vine Stratu	m (Plot size:			_)				present, unle	ess disturbe	d or pr	oplematic.
1 <u>NA</u>							Hydrophytic Ve	getation			
2					- Total Ca		Present?		Yes	X	No
.					= Total Cove	er					
Remarks: (include	photo numbers he	ere O	on a sepa	rate sneet.)							

SO	IL									Sampling Point:	WL AA
		cription: (Des	cribe to th	e depth i	needed to docu	ment the indica	tor or confi	rm the absence	of indicators.)		
		• •	/latrix	•		Redox Fe			,		
	Depth	Color			Color						
	(Inches)	(moist)	%		(Moist)	%	Type*	Loc**	Texture	Remarks	
	0-18+	7.5YR 5/3	70	60	2.5YR 3/6	30	D	M	clay loam	hemanks	
	0-101	7.511 5/5		00	2.5YR 8/1	10	MS	M	ciay loann		
			· <u> </u>		2.511.0/1	10	1013				
	· <u> </u>										
	*Type: C=C	oncentration,	D=Deplet	ion, RM=	Reduced Matri	x, CS=Covered o	or Coated Sa	nd Grains.			
	**Location	: PL= Pore Lin	ing, M= M	atrix							
Hyd	dric Soil Indic	ators:							Indicators for	r Problematic Hydric So	ils***:
	Histostol (A	1)			Dark Surface	s (S7)			2 cm Muck (A	10) (MLRA 147)	
	Histic Epipe	edon (A2)			Polyvalue Be	low Surface (S8)	(MLRA 147	, 148)	Piedmont Flo	odplain Soils (F19)	
	Black Histic	(A3)			Thin Dark Su	face (S9) (MLRA	147, 148)		(N	/LRA 136, 147)	
	Hydrogen S	. ,			 Loamy Gleye	. , .			Red Parent N		
	Stratified La				Depleted Ma					Dark Surface (TF12)	
	_	(A10) (LRR N)						_	_ '	n in Remarks)	
	_	elow Dark Su		1)		k Surface (F7)		_		in in richarito)	
		Surface (A12)	Inces (AI.	·/ <u>·</u>	Redox Depre						
	_	ky Material (S	1) /I DD N	<u>^</u>				104 126)			
						ese Masses (F12		LNA 150)	***!		
		MLRA 147, 14	-		_	ce (F13) (MLRA		140)		s of hydrophytic vegetat	
	_ · ·	ed Matrix (S4))			odplain Soils (F	19), (IVILKA .	148)		hydrology must be pres	ent,
-	Sandy Redo								unless distur	ped or problematic.	
	Stripped M										
Res	trictive Laye	r (if observed):								
	Type:							Hydric Soils			
	Depth (inch	les):								NI -	
	Depth (inci							Present?	Yes	No	
	Deptil (ilici	,.						Present?	Yes	NO	
Rer	narks:							Present?	Yes	No	
Rer								Present?	Yes	NO	
Rer								Present?	Yes	NO	
Rer								Present?	Yes	NO	
								Present?	Yes	NO	
нү	narks: DROLOGY	bgy Indicators						Present?	Yes	NO	
HY We	narks: DROLOGY tland Hydrolo	ogy Indicators		equired;	check all that a	(עומפו				n of two is required)	
HY We	narks: DROLOGY tland Hydrolo	ogy Indicators rrs (minimum		equired;	<u>check all that a</u> True Aquatic					n of two is required)	
HY We	narks: DROLOGY tland Hydrole nary Indicato _ Surface Wa	ogy Indicators rrs (minimum ter (A1)		equired;	True Aquatic	Plants (B14)			<u>cators (minimun</u> Surface Soil C	n of two is required) iracks (B6)	(B8)
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HY We Prir 	narks: DROLOGY tland Hydrolo <u>mary Indicato</u> Surface Wa High Water Saturation Water Mar Sediment D Drift Depos Iron Deposi Inundation Water-Stain Aquatic Fau d Observatic face Water P ter Table Pre- uration Prese Iudes capilla	ogy Indicators rs (minimum ter (A1) Table (A2) (A3) ks (B1) peposits (B2) its (B3) r Crust (B4) its (B5) Visible on Ae ned Leaves (B ina (B13) ons: resent? sent? ent? ry fringe)	<u>of one is r</u> rial Image 9) Yes Yes Yes	ry (B7)	_ True Aquatic Hydrogen Su Oxidized Rhiz Presence of f Recent Iron F Thin Muck Su Other (Explai	Plants (B14) Ifide Odor (C1) copheres on Livi Reduction in Till& eduction in Till& Ifface (C7) n in Remarks) Depth (inch Depth (inch)	1) ed Soils (C6) 25) 25) 25)	Secondary Indi	<u>cators (minimur</u> Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lir Dry-Season W Crayfish Burr Saturation Vi Stunted or St Geomorphic I Shallow Aquir Microtopogra FAC-Neutral T	n of two is required) racks (B6) etated Concave Surface terns (B10) vater Table (C2) ows (C8) sible on Aerial Imagery ressed Plants (D1) Position (D2) tard (D3) aphic Relief (D4) Fest (D5)	
HY We Prir 	narks: DROLOGY tland Hydrolo mary Indicato Surface Wa High Water Saturation Water Mar Sediment D Drift Depos Algal Mat o Iron Deposi Inundation Water-Stain Aquatic Fau d Observatio face Water P ter Table Pre- uration Prese cludes capilla scribe Record	ogy Indicators rs (minimum ter (A1) Table (A2) (A3) ks (B1) peposits (B2) its (B3) r Crust (B4) its (B5) Visible on Ae ned Leaves (B ina (B13) ons: resent? sent? ent? ry fringe)	<u>of one is r</u> rial Image 9) Yes Yes Yes	ry (B7)	_ True Aquatic Hydrogen Su Oxidized Rhiz Presence of f Recent Iron F Thin Muck Su Other (Explai	Plants (B14) Ifide Odor (C1) copheres on Livi Reduction in Till& eduction in Till& Ifface (C7) n in Remarks) Depth (inch Depth (inch)	1) ed Soils (C6) 25) 25) 25)	Secondary Indi	<u>cators (minimur</u> Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lir Dry-Season W Crayfish Burr Saturation Vi Stunted or St Geomorphic I Shallow Aquir Microtopogra FAC-Neutral T	n of two is required) racks (B6) etated Concave Surface terns (B10) vater Table (C2) ows (C8) sible on Aerial Imagery ressed Plants (D1) Position (D2) tard (D3) aphic Relief (D4) Fest (D5)	
HY We Prir 	narks: DROLOGY tland Hydrolo mary Indicato Surface Wa High Water Saturation Water Mar Sediment D Drift Depos Algal Mat o Iron Deposi Inundation Water-Stain Aquatic Fau d Observatio face Water P ter Table Pre uration Prese cludes capilla scribe Record marks:	ogy Indicators ors (minimum ter (A1) Table (A2) (A3) ks (B1) peposits (B2) its (B3) r Crust (B4) its (B5) Visible on Ae ned Leaves (B una (B13) ons: resent? sent? sent? ry fringe) ed Date (streamed)	rial Image 9) Yes Yes Yes am gauge,	ry (B7)	_ True Aquatic Hydrogen Su Oxidized Rhiz Presence of f Recent Iron F Thin Muck Su Other (Explai	Plants (B14) Ifide Odor (C1) copheres on Livi Reduction in Till& eduction in Till& Ifface (C7) n in Remarks) Depth (inch Depth (inch)	4) ed Soils (C6) es) es) es) s inspectior	Secondary Indi 	<u>cators (minimur</u> Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lir Dry-Season W Crayfish Burr Saturation Vi Stunted or St Geomorphic I Shallow Aquir Microtopogra FAC-Neutral T	n of two is required) racks (B6) etated Concave Surface terns (B10) vater Table (C2) ows (C8) sible on Aerial Imagery ressed Plants (D1) Position (D2) tard (D3) aphic Relief (D4) Fest (D5)	

Project/Site:	North Branch Trail	City/County:	Rockville, Mo	ontgomery	Sampling	Date:	7-Jan-13
Applicant/Owner	: MNCPPC			State:	Maryland Sampling	Point: A	A Upland
nvestigator(s):	D. Merkey				wnship, Range:		
	pe, terrace, etc.):			Local relief	(concave, convex, none):		
ope (%):		Lat:		Long:		Datum:	
oil Map Unit Nar					NWI classification:		
· ·	ologic conditions on the si			Yes	X No	(If no, explain in r	•
re Vegetation	Soil	or Hydrology	Significantly o		Are "Normal Circumstand	•	es <u>X</u>
re Vegetation	Soil	or Hydrology	naturally prol	Diematic	(If neede	N d, explain any answ	-
UMMARY OF F	INDINGS - Attach site m	an showing samplin	g noint locatio	ons transed	cts, important features, e		ers in remarks.
	Attach site in		s point locatio		is, important reatures, t		
vdrophytic Vege	etation Present? Yes X	No			Is the Sampled Area withir	na Yes	No X
ydric Soil Presen		No	X		Wetland?		
etland Hydrolog	gy Present? Yes	No	Х				
marks: unlan	d sample point near propo	sed trail					
	u sample point near propt	Jseu trail.					
	Jse scientific names of p	alante					
	se selentine names of p						
		Absolute	Dominant	Indicator			
ee Stratum (P	Plot size:) % Cover	Species?	Status	Dominance Test worksh	oot.	
	us pennsylvanica		Yes	FACW	Number of Dominant Spe		
	s serotina	20	Yes	FACU	OBL, FACW, or FAC:		9 (/
3 Acer r		20	Yes	FAC			(
	nus caroliniana	20	Yes	FAC	Total Number of Domina	nt Species	
	erus virginiana	15	No	FACU	across All Strata:		11 (
0 <u>00p</u> 0		100	= Total Cover				(
					Percent of Dominant Spe	cies that are OBL,	
apling/Shrub Str	atum (Plot size:)			FACW, or FAC:	,	82% (
	gnus umbellata	25	Yes	FAC			
	nultiflora	10	Yes	FACU	Prevalence Index works	neet	
3 Carpin	nus caroliniana	10	Yes	FAC	Total % Cove	er of:	Multiply by
4 Berbe	ris thunbergii	5	No	FACU	OBL species	x	1
5					FACW species	x	2
		50	= Total Cover	r	FAC species	x	3
					FACU species	x	4
erb Stratum (I	Plot size:)			UPL species	X	5
1 Unkno	own grass	60	NA	NA	Column Totals:	(A	A)(
2 Micros	stegium vimineum	60	Yes	FAC			
3						ce Index = B/A =	
4					Hydrophytic Vegetation		
5						drophytic Vegetation	n
6			<u> </u>		X Dominance Test is		
		60	= Total Cover	r	Prevalence Index		
loody Vine Strat	<u> </u>)	Ma a	FAC		aptations* (Provide	
	x rotundifolia	20	Yes	FAC		emarks or on a sepa	,
	era japonica	<u> </u>	Yes	FAC	Problematic Hydr	ophytic Vegetation*	(Explain)
	odendron radicans		Yes	FAC	*Indicators of hus	tric coil and wattend	budrology
4 Vitis ri	ιρατιά	5	No	FACW		Iric soil and wetland	, .
5						unless disturbed or	problematic.
					Hydrophytic Vegetation Present?	Yes X	No
6							
		45	= Total Cover	r		<u></u>	

SOIL										Sampling Point:	AA upland
	scription: (Des	cribe to	the depth	needed to	o docu	ment the ind	icator or confi	irm the absence	of indicators.)	1 0	•
	N	Лatrix				Redox	Features				
Depth	Color			Color							
(Inches)	(moist)	%		(Moist))	%	Type*	Loc**	Texture	Remarks	
1-4	10YR 3/3		100						loam		
4-12	7.5YR 4/4		100						loamy sand wi	th gravel	
12+	10YR 4/6		100						sandy loam wi	th gravel	
	_										
	-										
						-					
*Type: C=0	Concentration	D=Den	letion RM	-Reduced	Matri	x CS=Covere	d or Coated Sa	and Grains			
	n: PL= Pore Lin		-	Incuaccu	i wia ci iz	, co -covere					
Hydric Soil Indi		111g, 1v1-	Watny						Indicators for	Problematic Hydric S	oile***•
Histostol (A				Dark Si	urfacor	(57)			2 cm Muck (A1	•	
	-			Dark Su				<u> </u>			
Histic Epip							S8) (MLRA 147	, 148)		dplain Soils (F19)	
Black Histi						. , .	.RA 147, 148)		·	LRA 136, 147)	
	Sulfide (A4)				•	d Matrix (F2)			Red Parent Ma	· · ·	
Stratified L						trix (F3)		_		Dark Surface (TF12)	
	(A10) (LRR N)					urface (F6)			Other (Explain	in Remarks)	
	Below Dark Su		A11)			k Surface (F7)				
	Surface (A12)		<u> </u>			sions (F8)					
Sandy Muo	cky Material (S	51) (LRR	N,	Iron-M	angane	ese Masses (F12) (LRR N, N	1LRA 136)			
	MLRA 147, 14	48)		Umbrid	: Surfa	ce (F13) (MLF	RA 136, 122)		***Indicators	of hydrophytic veget	ation
Sandy Gley	ed Matrix (S4)		Piedmo	ont Flo	odplain Soils	(F19), (MLRA	148)	and wetland h	ydrology must be pre	esent,
Sandy Red	ox (S5)								unless disturbe	ed or problematic.	
Stripped N	1atrix (S6)										
Restrictive Laye	er (if observed):									
Type:								Hydric Soils			
Depth (inc	hes):							Present?	Yes	No	х
Remarks:											
HYDROLOGY											
Wetland Hydro	logy Indicators	s:									
Primary Indicat			s required	check all	that a	(ylqq		Secondary Indi	cators (minimum	of two is required)	
Surface W	ater (A1)			True A	quatic	Plants (B14)			Surface Soil Cr	acks (B6)	
High Wate	r Table (A2)			Hydrog	gen Sul	fide Odor (C1	L)		Sparsely Veget	ated Concave Surfac	e (B8)
Saturation	(A3)			Oxidize	d Rhiz	opheres on L	iving Roots (C	3)	Drainage Patte	erns (B10)	
Water Mai						educed Iron			Moss Trim Line		
	Deposits (B2)						Tilled Soils (C6)) —	Dry-Season Wa		
Drift Depo						rface (C7)			Cravfish Burro	. ,	
· · ·	or Crust (B4)		_			n in Remarks)			ble on Aerial Imager	v (C9)
Iron Depos	. ,				слріан	i in Kennarks)			essed Plants (D1)	y (C)
		rial Ima	aam (D7)					_			
	NVisible on Ae		вега (р.)						Geomorphic P		
	ined Leaves (B	9)							Shallow Aquita	. ,	
Aquatic Fa	una (B13)								Microtopogra		
								_	FAC-Neutral Te	est (D5)	
								1			
Field Observati											
Surface Water F		Yes	_	No	<u>X</u>	Depth (in					
Water Table Pre	esent?	Yes		No	Х	Depth (in		Wetland Hyd	Irology Present?		
Saturation Pres	ent?	Yes		No	X	Depth (in	ch <u>e</u> s)		Yes	s <u>No</u>	x
(includes capilla											
Describe Record	ded Date (stre	am gaug	ge, monito	ring well,	aerial p	ohotos, previ	ous inspection	ns), if available:			
D											
Remarks:											

Project/Site:	North Branch Tra	ail	Ci	ty/County:	Rockville, Mo	ontgomery	Sampling	Date:		7-Jan-1	13
Applicant/Owner:	MNCPPC					State:	Sampling	Point:	WL E	3B	
Investigator(s):	D. Merkey					Section, To	ownship, Range:				
Landform (hillslope	e, terrace, etc.):		Floodplain	l		Local relief	f (concave, convex, none):				
Slope (%):				it:		Long:		Datum:			
Soil Map Unit Nam				nery Silt loam			NWI classification:		NA		
Are climatic/hydro	-				•	Yes	<u>X</u> No	_(If no, explai		'	
Are Vegetation		bil		Hydrology	Significantly o		Are "Normal Circumstance	es" present?	Yes	<u>x</u>	
Are Vegetation	Sc	oil	0	Hydrology	naturally prol	plematic?	/if 1		No	. ——	
		h cit	to man ch	wing complin	a naint lacati	ne tranco	cts, important features, ef	, explain any a	answers	in rema	arks.)
SOMMART OF TH	NDINGS - Attaci	1 31	te map site	Swing Sampin	g point locatio	, transe	cts, important leatures, et				
Hydrophytic Veget	ation Present? Ye	es	х	No			Is the Sampled Area within	a Yes	Х	No	
Hydric Soil Present		es		No			Wetland?				
Wetland Hydrology	y Present? Ye	es	Х	No							
Remarks:											
VEGETATION - U	se scientific nam	nes	of plants.								
							1				
				Absolute	Dominant	Indicator					
	ot size:)	% Cover	Species?	Status	Dominance Test workshe	et:			
1 <u>Acer ru</u>				75	Yes	FAC	Number of Dominant Spec	cies That are			
	us occidentalis			5	No	FACW	OBL, FACW, or FAC:				3 (A)
3							-				
4							Total Number of Dominan	t Species			
5							across All Strata:				4 (B)
				80	= Total Cover	•					
Caralia a /Charala Chara	turn (Distained			,			Percent of Dominant Spec	ies that are OI	3L,	75	0/ / 0 /1
Sapling/Shrub Stra					Vaa	FACU	FACW, or FAC:			/5	<u>%</u> (A/I
1 <u>Rosa m</u> 2	luitijiora			10	Yes	FACU	Prevalence Index worksh				
3							Total % Cover			Multiply	v hv
4							OBL species	01.	x 1	wattpi	<u>y Dy.</u>
5							FACW species				
5					= Total Cove		FAC species		x 3		
				10			FACU species		x 4		
Herb Stratum (Pl	lot size:)				UPL species		x 5		
1 Unknov			,	80	NA	NA	Column Totals:		(A)		(B)
	ra japonica			10	Yes	FAC	-				_ • •
3 Juncus				5	Yes	FACW	- Prevalence	e Index = B/A	=		
4 Carex s	pp.			5	NA	NA	Hydrophytic Vegetation I	ndicators:			
5							Rapid Test for Hyd	rophytic Veget	tation		
6							X Dominance Test is	>50%			
7							Prevalence Index Is	s < or = 3.0*			
8				_			Morphological Ada	ptations* (Pro	ovide su	pporting	g
9							-	marks or on a	•	,)
10							Problematic Hydro	phytic Vegeta	tion*(E	kplain)	
				15	= Total Cover	•					
							*Indicators of hydr				
	<u>ım</u> (Plot size:)			must be present, u	nless disturbe	d or pro	oblemati	ic.
							Hydrophytic Vegetation				
1 <u>NA</u>							Present?	Vac	v	Nie	
					= Total Cove		- Fresent:	Yes	x	No	

SOIL									Sampling Point:	WL BB
Profile Des	cription: (Des	cribe to the d	epth needeo	d to docu	ment the indica	ntor or confi	rm the absence	e of indicators.)		
	N	/latrix			Redox Fe	atures				
Depth	Color		Colo	r						
(Inches)	(moist)	%	(Mo	ist)	%	Туре*	Loc**	Texture	Remarks	
1-5	7.5YR 5/2	10	00					clay loam		
5-8	2.5YR 5/8	8	30					coarse sand w	ith gravel	
8+	10YR 6/1	8	30 5YR	5/8	20	RM	М	loam		
							_			
*Type: C=C	Concentration,	D=Depletion	, RM=Reduc	ed Matrix	x, CS=Covered o	or Coated Sa	ind Grains.			
**Location	: PL= Pore Lin	ing, M= Matri	х							
Hydric Soil Indic	ators:							Indicators for	Problematic Hydric So	oils***:
Histostol (A	A1)		Dark	Surfaces	; (S7)			2 cm Muck (A1	LO) (MLRA 147)	
Histic Epipe	edon (A2)		Poly	value Bel	ow Surface (S8)	(MLRA 147	, 148)	Piedmont Floo	odplain Soils (F19)	
Black Histic	c (A3)		Thin	Dark Sur	face (S9) (MLRA	A 147, 148)		(M	LRA 136, 147)	
Hydrogen S	Sulfide (A4)		Loar	ny Gleyed	d Matrix (F2)			Red Parent Ma	aterial (TF2)	
X Stratified L	ayers (A5)		X Depl	eted Mat	trix (F3)			Very Shallow [Dark Surface (TF12)	
2 cm Muck	(A10) (LRR N)		Redo	ox Dark Si	urface (F6)			Other (Explain	in Remarks)	
Depleted B	elow Dark Su	rfaces (A11)	Depl	eted Dar	k Surface (F7)					
Thick Dark	Surface (A12)		Redo	ox Depres	ssions (F8)					
Sandy Muc	ky Material (S	1) (LRR N,	Iron-	-Mangane	ese Masses (F12	2) (LRR N <i>,</i> M	LRA 136)			
	MLRA 147, 14	18)	Umb	oric Surfa	ce (F13) (MLRA	136, 122)		***Indicators	of hydrophytic vegeta	tion
Sandy Gley	ed Matrix (S4)	Pied	mont Flo	odplain Soils (F	19), (MLRA 1	148)	and wetland h	ydrology must be pre	sent,
Sandy Red	ox (S5)							unless disturbe	ed or problematic.	
Stripped M	latrix (S6)									
Restrictive Laye	r (if observed):								
Type:							Hydric Soils	S		
Depth (incl	hes):						Duccest	Yes	X No	
							Present?	163	<u></u> 10	
Remarks:	Soil exhibit	s evidence of	historic hyd	ric chara	cteristics (grey	@ 8+) with v		ering from more re		
Remarks:	Soil exhibit	s evidence of	historic hyd	ric chara	cteristics (grey	@ 8+) with v				
Remarks:	Soil exhibit	s evidence of	historic hyd	ric chara	cteristics (grey	@ 8+) with v				
	Soil exhibit	s evidence of	historic hyd	ric chara	cteristics (grey	@ 8+) with v				
HYDROLOGY			historic hyd	ric chara	cteristics (grey	@ 8+) with v				
HYDROLOGY Wetland Hydrol	ogy Indicators					@ 8+) with v	water born layı	ering from more re	cent disturbance.	
HYDROLOGY Wetland Hydrol Primary Indicato	ogy Indicators ors (minimum		uired; check	all that a	(עוממ	@ 8+) with v	water born layı	ering from more re dicators (minimum	cent disturbance.	
HYDROLOGY Wetland Hydrol <u>Primary Indicato</u> Surface Wa	ogy Indicators ors (minimum ater (A1)		uired; check	<u>all that a</u> Aquatic	<u>pply)</u> Plants (B14)	@ 8+) with v	water born layı	ering from more re dicators (minimum Surface Soil Cr	cent disturbance. of two is required) acks (B6)	(10)
HYDROLOGY Wetland Hydrol <u>Primary Indicato</u> Surface Wa High Water	ogy Indicators ors (minimum ater (A1) r Table (A2)		<u>uired; check</u> True Hydı	all that a Aquatic	<u>pply)</u> Plants (B14) fide Odor (C1)		water born laye	ering from more re dicators (minimum Surface Soil Cr Sparsely Veget	cent disturbance. of two is required) acks (B6) tated Concave Surface	e (B8)
HYDROLOGY Wetland Hydrol Primary Indicato Surface Wa High Water Saturation	ogy Indicators ors (minimum ater (A1) r Table (A2) (A3)		uired; check True Hydr Oxid	all that a Aquatic rogen Sul ized Rhiz	<u>pply)</u> Plants (B14) fide Odor (C1) opheres on Livi	ng Roots (Ci	water born laye	ering from more re dicators (minimum Surface Soil Cr Sparsely Veget X Drainage Patte	cent disturbance. of two is required) acks (B6) tated Concave Surface erns (B10)	e (B8)
HYDROLOGY Wetland Hydrol Primary Indicato Surface Wa High Water Saturation Water Mar	ogy Indicators ors (minimum ater (A1) r Table (A2) (A3) rks (B1)		uired; check True Hydu Oxid Pres	all that a Aquatic rogen Sul ized Rhiz ence of R	<u>pply)</u> Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C4	ng Roots (C: 4)	water born layo <u>Secondary In</u> 3)	ering from more re dicators (minimum Surface Soil Cr Sparsely Veget X Drainage Patte Moss Trim Line	cent disturbance. of two is required) acks (B6) tated Concave Surface erns (B10) es (B16)	e (B8)
HYDROLOGY Wetland Hydrol Primary Indicato Surface Wa High Water Saturation Water Mar Sediment D	ogy Indicators ors (minimum ater (A1) r Table (A2) (A3) rks (B1) Deposits (B2)		uired; check True Hydr Oxid Pres Rece	all that a Aquatic I rogen Sul ized Rhiz ence of R ent Iron R	<u>pply)</u> Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C eduction in Tillo	ng Roots (C: 4)	water born layo <u>Secondary In</u> 3)	ering from more re dicators (minimum Surface Soil Cr Sparsely Veget X Drainage Patte Moss Trim Line Dry-Season Wa	cent disturbance. of two is required) acks (B6) tated Concave Surface erns (B10) es (B16) ater Table (C2)	e (B8)
HYDROLOGY Wetland Hydrol Primary Indicato Surface Wa High Water Saturation Water Mar Sediment D X Drift Depos	ogy Indicators ors (minimum ater (A1) r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3)		uired; check True Hydr Oxid Pres Rece Thin	all that a Aquatic 'ogen Sul' ized Rhiz ence of R ent Iron R Muck Su	<u>pply)</u> Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C eduction in Tillo rface (C7)	ng Roots (C: 4)	water born layo <u>Secondary In</u> 3)	ering from more re dicators (minimum Surface Soil Cr Sparsely Veget X Drainage Patte Moss Trim Line Dry-Season Wa Crayfish Burro	cent disturbance. of two is required) acks (B6) tated Concave Surface erns (B10) es (B16) ater Table (C2) ws (C8)	
HYDROLOGY Wetland Hydrol Primary Indicato Surface Wa High Water Saturation Water Mar Sediment D X Drift Depos Algal Mat c	ogy Indicators ors (minimum ater (A1) r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)		uired; check True Hydr Oxid Pres Rece Thin	all that a Aquatic 'ogen Sul' ized Rhiz ence of R ent Iron R Muck Su	<u>pply)</u> Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C eduction in Tillo	ng Roots (C: 4)	water born layo <u>Secondary In</u> 3)	ering from more re dicators (minimum Surface Soil Cr Sparsely Veget X Drainage Patte Moss Trim Line Dry-Season W: Crayfish Burro Saturation Visi	cent disturbance. <u>of two is required)</u> acks (B6) tated Concave Surface erns (B10) es (B16) ater Table (C2) ws (C8) ible on Aerial Imagery	
HYDROLOGY Wetland Hydrol Primary Indicato Surface Wa High Water Saturation Water Mar Sediment D X Drift Depos Algal Mat c Iron Depos	ogy Indicators ors (minimum ater (A1) r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) its (B5)	:: of one is requ	uired; check True Hydr Oxid Pres Rece Thin Othe	all that a Aquatic 'ogen Sul' ized Rhiz ence of R ent Iron R Muck Su	<u>pply)</u> Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C eduction in Tillo rface (C7)	ng Roots (C: 4)	water born layo <u>Secondary In</u> 3)	ering from more re dicators (minimum Surface Soil Cr Sparsely Veget Moss Trim Line Dry-Season Wi Crayfish Burro Saturation Visi Stunted or Stro	cent disturbance. <u>of two is required)</u> acks (B6) tated Concave Surface erns (B10) es (B16) ater Table (C2) ws (C8) ible on Aerial Imagery essed Plants (D1)	
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Project/Site: North Branch Trail	City/County:	Rockville, Mo	ontgomerv	Sampling	Date:	7-Jan-13
Applicant/Owner: MNCPPC			State:	Maryland Sampling		BB Upland
Investigator(s): D. Merkey				wnship, Range:		·
Landform (hillslope, terrace, etc.):			Local relief	(concave, convex, none):		
Slope (%):	Lat:		Long:		Datum:	
Soil Map Unit Nam <u>e:</u>				NWI classification:		
Are climatic/hydrologic conditions on the site			Yes	X No	_ (If no, explain in	remarks)
Are Vegetation Soil	or Hydrology	Significantly of		Are "Normal Circumstanc	-	Yes X
Are Vegetation Soil	or Hydrology	naturally pro	blematic?	<i>(16</i>)		No
	a chowing complia	a naint la cati	one tronce	•	d, explain any answ	vers in remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing samplin	g point locatio	ons, transet	its, important reatures, e		
Hydrophytic Vegetation Present? Yes X	No			Is the Sampled Area within	a Yes	No X
Hydric Soil Present? Yes	No	x		Wetland?	<u> </u>	<u>No</u>
Wetland Hydrology Present? Yes	No	x				
		·				
Remarks: upland sample point near propose						
VEGETATION - Use scientific names of pla	nto					
vederation - use scientific fiames of pla	ints.					
	Absoluto	Deminent	Indiantan			
Trop Stratum (Plat size:	Absolute) % Cover	Dominant	Indicator	Dominance Test worksha		
Tree Stratum (Plot size: 1 Acer rubrum	<u>30</u>	Species?	Status FAC	Dominance Test workshe		
2 Platanus occidentalis	<u> </u>	Yes Yes	FAC	Number of Dominant Spe OBL, FACW, or FAC:		6 (A)
3	10	165	FACVV	UDL, FACVV, OF FAC.		<u> </u>
3 4		<u> </u>		Total Number of Dominar	nt Species	
5		<u> </u>		across All Strata:	it species	8 (B)
5	40	= Total Cove	r			<u> </u>
	40		1	Percent of Dominant Spec	ries that are OBI	
Sapling/Shrub Stratum (Plot size:	ì			FACW, or FAC:		75% (A
1 Lindera benzoin	/ 15	Yes	FAC	Thew, of the.		<u>(</u> (A)
2 Acer rubrum	10	Yes	FAC	Prevalence Index worksh	eet	
3 Rosa multiflora	10	Yes	FACU	Total % Cove		Multiply by:
4				OBL species		(1
5		·		FACW species		< 2
	35	= Total Cove	r	FAC species	;	x 3
				FACU species		× 4
Herb Stratum (Plot size:	_)			UPL species		< 5
1 Lonicera japonica	25	Yes	FAC	Column Totals:		(A) (B)
2 Rosa multiflora	15	Yes	FACU			
3 Allium canadense	10	No	FACU		e Index = B/A =	
4 Waldestenia fragaroides	10	No	NA	Hydrophytic Vegetation I	ndicators:	
5				Rapid Test for Hyd		on
6		<u> </u>		X Dominance Test is		
	60	= Total Cove	r	Prevalence Index I		
Woody Vine Stratum (Plot size:)			Morphological Ad		
2 Vitis riparia	10	Yes	FACW		emarks or on a sep	,
3		·		Problematic Hydro	opnytic Vegetation	ı*(Explain)
4		·		*****	sta anti di st	al la cala d
5		·		*Indicators of hyd		, ,,
<u>6</u>		<u> </u>		must be present, u	iniess disturbed of	r problematic.
				Hydrophytic Vegetation		
7				Duran and 2		
		= Total Cove		Present?	Yes	K No

SOIL								Sampling Point:	BB upland
	scription: (Deso	ribe to the de	epth needed to do	cument the indi	cator or confi	rm the absence o	of indicators.)		
		latrix			eatures		,		
Depth	Color		Color						
(Inches)	(moist)	%	(Moist)	%	Type*	Loc**	Texture	Remarks	
1-6	7.5YR 4/3	10					sandy loam		
6-10	10YR 4/2	10					clayey loam		
10+	1011(4/2	10						impenetrable grave	l and clay
101								Impenetrable grave	ranu ciay
							·		
							. <u></u>		
*=									
<i>,</i> .			, RM=Reduced Mat	rix, CS=Covered	f or Coated Sa	and Grains.			
	n: PL= Pore Lini	ng, M= Matri	x						
Hydric Soil India								Problematic Hydric So	oils***:
Histostol (/	-		Dark Surfac			_		10) (MLRA 147)	
Histic Epip	edon (A2)		Polyvalue B	elow Surface (S	8) (MLRA 147	, 148)	Piedmont Flo	odplain Soils (F19)	
Black Histi	c (A3)		Thin Dark S	urface (S9) (ML	RA 147, 148)		(N	1LRA 136, 147)	
Hydrogen	Sulfide (A4)		Loamy Gley	ed Matrix (F2)			Red Parent M	aterial (TF2)	
Stratified L	ayers (A5)		Depleted N	latrix (F3)			Very Shallow	Dark Surface (TF12)	
2 cm Muck	(A10) (LRR N)		Redox Dark	Surface (F6)			Other (Explair	n in Remarks)	
Depleted E	Below Dark Sur	faces (A11)	Depleted D	ark Surface (F7)			_		
Thick Dark	Surface (A12)		Redox Depr	essions (F8)					
Sandy Mud	cky Material (S	1) (LRR N,	Iron-Manga	inese Masses (F	12) (LRR N, M	ILRA 136)			
	, MLRA 147, 14	8)	Umbric Sur	face (F13) (MLR	A 136, 122)		***Indicators	of hydrophytic vegeta	tion
Sandy Glev	, ed Matrix (S4)	,		loodplain Soils		148)		ydrology must be pre	
Sandy Red				•		,		ed or problematic.	
Stripped N									
Restrictive Laye									
Type:			le gravel and clay			Hydric Soils			
Depth (inc	hes).	10	he graver and clay			Present?	Yes	No	х
Depth (inc	1103).	10				riesent:	163	10	<u>^</u>
Remarks:									
Remarks.									
HYDROLOGY									
Wetland Hydrol	0,								
								6 N	
Surface Wa	ator (A1)	or one is requ	ired; check all that			Secondary Indic		n of two is required)	
	. ,	or one is requ	True Aquat	ic Plants (B14)		Secondary India	Surface Soil C	racks (B6)	<i>(</i>)
	r Table (A2)	or one is requ	True Aquati Hydrogen S	ic Plants (B14) ulfide Odor (C1		_	Surface Soil C Sparsely Vege	racks (B6) tated Concave Surface	· (B8)
High Wate Saturation	r Table (A2)	or one is requ	True Aquati Hydrogen S	ic Plants (B14)		_	Surface Soil C	racks (B6) tated Concave Surface	e (B8)
Saturation Water Mar	r Table (A2) (A3) rks (B1)	<u>or one is requ</u>	True Aquati Hydrogen S Oxidized Rh	ic Plants (B14) ulfide Odor (C1	ving Roots (C	_	Surface Soil C Sparsely Vege	racks (B6) tated Concave Surface erns (B10)	(B8)
Saturation Water Mar	r Table (A2) (A3)	<u>or one is requ</u>	True Aquat Hydrogen S Oxidized Rh Presence of	ic Plants (B14) ulfide Odor (C1 izopheres on Li	ving Roots (Cá C4)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin	racks (B6) tated Concave Surface erns (B10)	· (B8)
Saturation Water Mar	r Table (A2) (A3) rks (B1) Deposits (B2)	or one is requ	True Aquat Hydrogen S Oxidized Rh Presence of	ic Plants (B14) ulfide Odor (C1 iizopheres on Li Reduced Iron (Reduction in Ti	ving Roots (Cá C4)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin	racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2)	· (B8)
Saturation Water Mar Sediment I Drift Depo	r Table (A2) (A3) rks (B1) Deposits (B2)	<u>or one is requ</u>	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S	ic Plants (B14) ulfide Odor (C1 iizopheres on Li Reduced Iron (Reduction in Ti	ving Roots (Cá C4)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro	racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2)	
Saturation Water Mar Sediment I Drift Depo	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)	<u>or one is requ</u>	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S	ic Plants (B14) ulfide Odor (C1 izopheres on Li F Reduced Iron (Reduction in Ti Surface (C7)	ving Roots (Cá C4)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis	racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2) wws (C8)	
Saturation Water Man Sediment I Drift Depo Algal Mat o Iron Depos	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4)		True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 izopheres on Li F Reduced Iron (Reduction in Ti Surface (C7)	ving Roots (Cá C4)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis	racks (B6) tated Concave Surface erns (B10) es (B16) Yater Table (C2) ows (C8) ible on Aerial Imagery ressed Plants (D1)	
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	rial Imagery (I	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 izopheres on Li F Reduced Iron (Reduction in Ti Surface (C7)	ving Roots (Cá C4)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F	racks (B6) tated Concave Surface erns (B10) es (B16) Vater Table (C2) ows (C8) sible on Aerial Imagery ressed Plants (D1) Position (D2)	
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on Aer ined Leaves (B	rial Imagery (I	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 izopheres on Li F Reduced Iron (Reduction in Ti Surface (C7)	ving Roots (Cá C4)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit	racks (B6) tated Concave Surface erns (B10) (ater Table (C2) ows (C8) tible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3)	
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on Aer ined Leaves (B	rial Imagery (I	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 izopheres on Li F Reduced Iron (Reduction in Ti Surface (C7)	ving Roots (Cá C4)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit	racks (B6) tated Concave Surface erns (B10) (ater Table (C2) ows (C8) tible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4)	
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) or Visible on Aer ined Leaves (B	rial Imagery (I	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 izopheres on Li F Reduced Iron (Reduction in Ti Surface (C7)	ving Roots (Cá C4)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra	racks (B6) tated Concave Surface erns (B10) (ater Table (C2) ows (C8) tible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4)	
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Ae ined Leaves (B una (B13)	rial Imagery (I	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 izopheres on Li F Reduced Iron (Reduction in Ti Surface (C7)	ving Roots (Cá C4)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra	racks (B6) tated Concave Surface erns (B10) (ater Table (C2) ows (C8) tible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4)	
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai Aquatic Fa	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Ae ined Leaves (B una (B13) ons:	rial Imagery (I 9)	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 lizopheres on Li f Reduced Iron (Reduction in Ti Surface (C7) ain in Remarks)	ving Roots (C3 C4) Iled Soils (C6)	3)	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra	racks (B6) tated Concave Surface erns (B10) (ater Table (C2) ows (C8) tible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4)	
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai Aquatic Fa Field Observatio Surface Water F	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Ae ined Leaves (B una (B13) ons: Present?	rial Imagery (I 9) Yes	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 lizopheres on Li f Reduced Iron (Reduction in Ti Surface (C7) ain in Remarks) <u>X</u> Depth (inc	ving Roots (C: C4) Iled Soils (C6) 	3) 	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	racks (B6) tated Concave Surface erns (B10) es (B16) /ater Table (C2) ows (C8) ible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4) jest (D5)	
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai Aquatic Fa Field Observati Surface Water F Water Table Pre	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aei ined Leaves (B una (B13) ons: Present?	rial Imagery (I 9) Yes Yes	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 izopheres on Li f Reduced Iron (Reduction in Ti Surface (C7) ain in Remarks) X Depth (inc X Depth (inc	ving Roots (C: C4) Iled Soils (C6) 	3) 	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2) ows (C8) ible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4) rest (D5)	(C9)
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai Aquatic Fa Field Observati Surface Water F Water Table Press	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aei ined Leaves (B una (B13) ons: Present? esent? ent?	rial Imagery (I 9) Yes	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 lizopheres on Li f Reduced Iron (Reduction in Ti Surface (C7) ain in Remarks) <u>X</u> Depth (inc	ving Roots (C: C4) Iled Soils (C6) 	3) 	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	racks (B6) tated Concave Surface erns (B10) es (B16) /ater Table (C2) ows (C8) ible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4) jest (D5)	
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai Aquatic Fa Field Observati Surface Water F Water Table Pres Saturation Press (includes capilla	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aei ined Leaves (B una (B13) ons: Present? esent? ent? ary fringe)	rial Imagery (I 9) Yes Yes Yes Yes	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl 37)	ic Plants (B14) ulfide Odor (C1 izopheres on Li f Reduced Iron (Reduction in Ti Surface (C7) ain in Remarks) X Depth (inc X Depth (inc X Depth (inc	ving Roots (C3 C4) Iled Soils (C6) <u>hes)</u> <u>hes)</u>	3) _	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2) ows (C8) ible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4) rest (D5)	(C9)
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai Aquatic Fa Field Observati Surface Water F Water Table Pres Saturation Press (includes capilla	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aei ined Leaves (B una (B13) ons: Present? esent? ent? ary fringe)	rial Imagery (I 9) Yes Yes Yes Yes	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl	ic Plants (B14) ulfide Odor (C1 izopheres on Li f Reduced Iron (Reduction in Ti Surface (C7) ain in Remarks) X Depth (inc X Depth (inc X Depth (inc	ving Roots (C3 C4) Iled Soils (C6) <u>hes)</u> <u>hes)</u>	3) _	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2) ows (C8) ible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4) rest (D5)	(C9)
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai Aquatic Fa Field Observati Surface Water F Water Table Pres Saturation Press (includes capilla	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aei ined Leaves (B una (B13) ons: Present? esent? ent? ary fringe)	rial Imagery (I 9) Yes Yes Yes Yes	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl 37)	ic Plants (B14) ulfide Odor (C1 izopheres on Li f Reduced Iron (Reduction in Ti Surface (C7) ain in Remarks) X Depth (inc X Depth (inc X Depth (inc	ving Roots (C3 C4) Iled Soils (C6) <u>hes)</u> <u>hes)</u>	3) _	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2) ows (C8) ible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4) rest (D5)	(C9)
Saturation Water Mar Sediment I Drift Depor Algal Mat o Iron Depos Inundation Water-Stai Aquatic Fa Field Observatio Surface Water F Water Table Pres (includes capilla Describe Record	r Table (A2) (A3) (ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aer ined Leaves (B una (B13) ons: Present? esent? ent? ary fringe) ded Date (streat	rial Imagery (I 9) Yes Yes Yes am gauge, mo	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl 37)	ic Plants (B14) ulfide Odor (C1 izopheres on Li f Reduced Iron (Reduction in Ti Surface (C7) ain in Remarks) X Depth (inc X Depth (inc X Depth (inc	ving Roots (C3 C4) Iled Soils (C6) <u>hes)</u> <u>hes)</u>	3) _	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2) ows (C8) ible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4) rest (D5)	(C9)
Saturation Water Mar Sediment I Drift Depo Algal Mat o Iron Depos Inundation Water-Stai Aquatic Fa Field Observatio Surface Water F Water Table Pres Saturation Press (includes capilla	r Table (A2) (A3) rks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) n Visible on Aei ined Leaves (B una (B13) ons: Present? esent? ent? ary fringe)	rial Imagery (I 9) Yes Yes Yes am gauge, mo	True Aquat Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Other (Expl 37)	ic Plants (B14) ulfide Odor (C1 izopheres on Li f Reduced Iron (Reduction in Ti Surface (C7) ain in Remarks) X Depth (inc X Depth (inc X Depth (inc	ving Roots (C3 C4) Iled Soils (C6) <u>hes)</u> <u>hes)</u>	3) _	Surface Soil C Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2) ows (C8) ible on Aerial Imagery ressed Plants (D1) Position (D2) ard (D3) phic Relief (D4) rest (D5)	(C9)

		١	WETLAN	ID DETERMINATI	ON DATA FORI	M - Eastern	Mountains and Pied	nont		
Project/Site:	North Branch	Trail		City/County:	Rockville, Mo	ontgomery	Samp	ling Date:		10-Jan-13
Applicant/Owner:	MNCPPC					State:	Maryland Samp	ling Point:	WL (CC
Investigator(s):	D. Merkey &	J. Cur	nmings			Section, To	ownship, Range:			
Landform (hillslope	, terrace, etc.)):				Local relief	(concave, convex, none	e):		
Slope (%):				Lat:		Long:		Datum:		
Soil Map Unit Nam			e silt loar				NWI classification:		PEM1	
Are climatic/hydrol	logic condition		the site t			Yes	X No	(If no, expla		•
Are Vegetation		Soil		_or Hydrology	Significantly o		Are "Normal Circumst	ances present?	Yes	X
Are Vegetation		Soil		or Hydrology	naturally prob	plematic?	(If no	eded, explain any	No	in romarks)
SUMMARY OF FI	NDINGS - Att	ach s	ite map	showing samplin	g point locatio	ons, transeo	cts, important feature	, , ,	unswers	in remarks.
Hydrophytic Veget	ation Present?	Yes	Х	No			Is the Sampled Area wi	thin a Yes	Х	No
Hydric Soil Present		Yes	Х	No			Wetland?			
Wetland Hydrology	Present?	Yes	Х	No						
	upslope area	there	is no ne	ed to do an upland	•	l and Lake Fi	rank. Due to this & upla	nd vegetation visi	ble on	
				Absolute	Dominant	Indicator				
Tree Stratum (Plo	ot size:)	% Cover	Species?	Status	Dominance Test worl	ksheet:		
1 Acer rul	brum			50	Yes	FAC	Number of Dominant	Species That are		
2 Acer sa	ccharinum			10	No	FACW	OBL, FACW, or FAC:			<u> </u>
3 <u>Platanu</u>	s occidentalis			5	No	FACW	_			
4							Total Number of Dom	inant Species		
5							across All Strata:			<u> </u>
				65	= Total Cover	•				
	(5)			,			Percent of Dominant	Species that are C)BL,	
Sapling/Shrub Strat	tum (Plot siz	:e:)			FACW, or FAC:			<u> </u>
1 <u>NA</u> 2							Prevalence Index wo	which o o t		
3							Total % C			Multiply by:
4							OBL species		x 1	watipiy by.
4 5							FACW species		x 2	
				0	= Total Cover		FAC species		x3	
				0			FACU species		x 4	
Herb Stratum (Pl	ot size:)				UPL species		x 5	
1 Unknov			,	75	NA	NA	Column Totals:		(A)	(B)
2 Mitchel	la repens			50	Yes	FACU	-			
3 Carex s				25	NA	NA	Preva	lence Index = B/A	=	
4							Hydrophytic Vegetati	on Indicators:		
5							Rapid Test for	Hydrophytic Vege	etation	
6							X Dominance Te	st is >50%		
7								dex Is < or = 3.0*		
8								l Adaptations* (Pi		
9							-	n Remarks or on a	•	,
10							Problematic H	ydrophytic Veget	ation*(Ex	kplain)
				50	= Total Cover	•	*1. 11	la valuta a stilla d		
Moody Mine Chart	m (Dlat-!-			N				hydric soil and we		
Woody Vine Stratu	III (Plot size)	•)				nt, unless disturb	eu or pro	buematic.
1 <u>NA</u> 2							Hydrophytic Vegetati Present?	on Yes	х	No
<u> </u>					= Total Cover			Tes	<u>^</u>	
Remarks: (include)	photo number	s here	or on a	separate sheet)			1			
Despite		fiable	hydric h	erbaceous indicato	rs due to time o	of year, the s	strong hydrologic and so	il indicators with	the tree	

SOIL						Sampling Point:	WL CC	
Profile Description: (Describe to the	depth needed to docu	ment the indica	tor or confi	rm the absence	e of indicators.)			
Matrix		Redox Fe	atures					
Depth Color	Color			<u>.</u>				
(Inches) (moist) %	(Moist)	%	Type*	Loc**	Texture	Remarks		
0-3 7.5YR 3/1 1	.00				loamy clay			
3-11 7.5YR 4/6 1	.00				coarse sand			
11+ 7.5YR 4/6	85 Gley1 5/5GY	15	RM	М	loamy sand			
*Type: C=Concentration, D=Depletio	n, RM=Reduced Matrix	k, CS=Covered o	r Coated Sa	and Grains.				
**Location: PL= Pore Lining, M= Mat	rix							
Hydric Soil Indicators:					Indicators for	Problematic Hydric Sc	oils***:	
Histostol (A1)	Dark Surfaces	(S7)			2 cm Muck (A	10) (MLRA 147)		
Histic Epipedon (A2)	Polyvalue Bel	ow Surface (S8)	(MLRA 147	, 148)	Piedmont Floo	odplain Soils (F19)		
Black Histic (A3)		face (S9) (MLRA	-	· · ·		ILRA 136, 147)		
Hydrogen Sulfide (A4)	Loamy Gleyed			-	Red Parent M			
X Stratified Layers (A5)	Depleted Mat			-	Very Shallow	Dark Surface (TF12)		
2 cm Muck (A10) (LRR N)	Redox Dark Si			-	Other (Explain			
Depleted Below Dark Surfaces (A11)	Depleted Dar			-				
Thick Dark Surface (A12)	Redox Depres							
Sandy Mucky Material (S1) (LRR N,		ese Masses (F12) (IRR N M	II RA 136)				
MLRA 147, 148)		ce (F13) (MLRA	, ,		***Indicators	of hydrophytic vegeta	tion	
Sandy Gleyed Matrix (S4)		odplain Soils (F:		 ***Indicators of hydrophytic vegetation and wetland hydrology must be present, 				
Sandy Redox (S5)				1.0)		ed or problematic.	,ciit,	
Stripped Matrix (S6)						ed of problematic.		
Restrictive Layer (if observed):								
Type:				Hydric Soils				
Depth (inches):				Present?	Yes	X No		
Depen (moneo)								
Remarks:								
Remarks:								
Remarks:								
Remarks:								
Remarks:								
HYDROLOGY								
	uired; check all that a	pply)						
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is rec					dicators (minimum	of two is required)		
HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is rec</u> Surface Water (A1)	True Aquatic	Plants (B14)			<u>dicators (minimum</u> Surface Soil Ci	<u>of two is required)</u> racks (B6)	. (B8)	
HYDROLOGY Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is rec</u> Surface Water (A1) High Water Table (A2)	True Aquatic Hydrogen Sul	Plants (B14) fide Odor (C1)	ng Roots (C)	Secondary Inc	<u>dicators (minimum</u> Surface Soil Ci Sparsely Vege	<u>o of two is required)</u> racks (B6) tated Concave Surface	· (B8)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is rec Surface Water (A1) High Water Table (A2) X Saturation (A3)	True Aquatic Hydrogen Sul Oxidized Rhiz	Plants (B14) fide Odor (C1) opheres on Livi		Secondary Inc	<u>dicators (minimum</u> Surface Soil Ci Sparsely Vege Drainage Patt	<u>n of two is required)</u> racks (B6) tated Concave Surface erns (B10)	- (B8)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is rec Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C4	1)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Ci Sparsely Vege Drainage Patt Moss Trim Lin	<u>n of two is required)</u> racks (B6) tated Concave Surface erns (B10) es (B16)	- (B8)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is rec Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C ² eduction in Tille	1)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Ci Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2)	- (B8)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is rec Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3)	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C ² eduction in Tille rface (C7)	1)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Ci Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) 'ater Table (C2) ows (C8)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is rec Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4)	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C ² eduction in Tille rface (C7)	1)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Ci Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) rater Table (C2) wws (C8) ible on Aerial Imagery		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is reconstructed by the second by the	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C ² eduction in Tille rface (C7)	1)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Ci Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) l'ater Table (C2) ws (C8) ible on Aerial Imagery essed Plants (D1)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is reconstructed by the second by the	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C ² eduction in Tille rface (C7)	1)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Ci Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burrc Saturation Vis Stunted or Str Geomorphic F	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) l'ater Table (C2) ws (C8) ible on Aerial Imagery essed Plants (D1) Position (D2)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is red Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery X Water-Stained Leaves (B9)	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C ² eduction in Tille rface (C7)	1)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Ci Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burrc Saturation Vis Stunted or Str Geomorphic F Shallow Aquit	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) l'ater Table (C2) ws (C8) ible on Aerial Imagery essed Plants (D1) l'osition (D2) ard (D3)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is reconstructed by the second by the	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C ² eduction in Tille rface (C7)	1)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Cr Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ows (C8) ible on Aerial Imagery essed Plants (D1) Position (D2) ard (D3) phic Relief (D4)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is rec Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery X Water-Stained Leaves (B9)	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C ² eduction in Tille rface (C7)	1)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Ci Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burrc Saturation Vis Stunted or Str Geomorphic F Shallow Aquit	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ws (C8) ible on Aerial Imagery essed Plants (D1) Position (D2) ard (D3) phic Relief (D4)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is reconstruction) Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery X Water-Stained Leaves (B9) Aquatic Fauna (B13)	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C ² eduction in Tille rface (C7)	1)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Cr Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ws (C8) ible on Aerial Imagery essed Plants (D1) Position (D2) ard (D3) phic Relief (D4)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is reconstruction of the second	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain (B7)	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C4 eduction in Tille rface (C7) n in Remarks)	ı) ed Soils (C6)	Secondary Inc - - - 3)	dicators (minimum Surface Soil Cr Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ws (C8) ible on Aerial Imagery essed Plants (D1) Position (D2) ard (D3) phic Relief (D4)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is reconstructed by the second by the	True Aquatic Hydrogen Sul Oxidized Rhiz Neresence of R Recent Iron R Thin Muck Su Other (Explain (B7)	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C4 eduction in Tille rface (C7) n in Remarks)	1) ed Soils (C6)	Secondary Inc - - - - - - - - - - - - - - - - - - -	dicators (minimum Surface Soil Cr Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ws (C8) ible on Aerial Imagery essed Plants (D1) Position (D2) ard (D3) phic Relief (D4)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is red Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery X Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain (B7)	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C4 eduction in Tille rface (C7) n in Remarks)	4) ed Soils (C6) 25) 25) 12	Secondary Inc - - - - - - - - - - - - - - - - - - -	dicators (minimum Surface Soil Co Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	a of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ows (C8) ible on Aerial Imagery essed Plants (D1) losition (D2) ard (D3) phic Relief (D4) est (D5)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is red Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery X Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes	True Aquatic Hydrogen Sul Oxidized Rhiz Neresence of R Recent Iron R Thin Muck Su Other (Explain (B7)	Plants (B14) fide Odor (C1) opheres on Livi educed Iron (C4 eduction in Tille rface (C7) n in Remarks)	4) ed Soils (C6) 25) 25) 12	Secondary Inc - - - - - - - - - - - - - - - - - - -	dicators (minimum Surface Soil Co Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	n of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ws (C8) ible on Aerial Imagery essed Plants (D1) Position (D2) ard (D3) phic Relief (D4)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is red Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery X Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Saturation Present? Yes	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain (B7) No X X No X X No	Depth (inch Depth (inch Depth (inch Depth (inch Depth (inch	4) ed Soils (C6) <u>25)</u> <u>25</u>) 12 <u>25</u>) 3	Secondary Inc 	dicators (minimum Surface Soil Co Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	a of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ows (C8) ible on Aerial Imagery essed Plants (D1) losition (D2) ard (D3) phic Relief (D4) est (D5)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is red Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery X Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain (B7) No X X No X X No	Depth (inch Depth (inch Depth (inch Depth (inch Depth (inch	4) ed Soils (C6) <u>25)</u> <u>25</u>) 12 <u>25</u>) 3	Secondary Inc 	dicators (minimum Surface Soil Co Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	a of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ows (C8) ible on Aerial Imagery essed Plants (D1) losition (D2) ard (D3) phic Relief (D4) est (D5)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is red Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery X Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Saturation Present? Yes	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain (B7) No X X No X X No	Depth (inch Depth (inch Depth (inch Depth (inch Depth (inch	4) ed Soils (C6) <u>25)</u> <u>25</u>) 12 <u>25</u>) 3	Secondary Inc 	dicators (minimum Surface Soil Co Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	a of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ows (C8) ible on Aerial Imagery essed Plants (D1) losition (D2) ard (D3) phic Relief (D4) est (D5)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is red Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery X Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Concludes capillary fringe) Describe Recorded Date (stream gauge, m	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain (B7) No X X No X X No	Depth (inch Depth (inch Depth (inch Depth (inch Depth (inch	4) ed Soils (C6) <u>25)</u> <u>25</u>) 12 <u>25</u>) 3	Secondary Inc 	dicators (minimum Surface Soil Co Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	a of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ows (C8) ible on Aerial Imagery essed Plants (D1) losition (D2) ard (D3) phic Relief (D4) est (D5)		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is red Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) X Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery X Water-Stained Leaves (B9) Aquatic Fauna (B13) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Saturation Present? Yes	True Aquatic Hydrogen Sul Oxidized Rhiz X Presence of R Recent Iron R Thin Muck Su Other (Explain (B7)	Depth (inch Depth (inch Depth (inch Depth (inch Depth (inch	4) ed Soils (C6) <u>25)</u> <u>25</u>) 12 <u>25</u>) 3	Secondary Inc 	dicators (minimum Surface Soil Co Sparsely Vege Drainage Patt Moss Trim Lin Dry-Season W Crayfish Burro Saturation Vis Stunted or Str Geomorphic F Shallow Aquit Microtopogra FAC-Neutral T	a of two is required) racks (B6) tated Concave Surface erns (B10) es (B16) later Table (C2) ows (C8) ible on Aerial Imagery essed Plants (D1) losition (D2) ard (D3) phic Relief (D4) est (D5)		

		WETLAN	D DETERMINATIO	ON DATA FOR	M - Eastern	Mountains and Piedm	nont		
Project/Site:	North Branch Tra	il	City/County:	Rockville, M	ontgomerv	Samnli	ng Date:		10-Jan-13
Applicant/Owner:				NOCKVINC, IVI	State:		ng Point:	WL D	
Investigator(s):	D. Merkey & J. Ci	ummings				wnship, Range:			
Landform (hillslope						(concave, convex, none)	:		
Slope (%):	, , , ,		Lat:		Long:	,,,,,,,,	Datum:		
Soil Map Unit Nam	e: Ha	tboro Silt I	-		_	NWI classification:	L2USCh		
Are climatic/hydro		n the site t	ypical for this time	of year?	Yes	X No	(If no, explai	n in rem	narks)
Are Vegetation	Soi		_or Hydrology	, Significantly	disturbed?	Are "Normal Circumsta	<u> </u>	Yes	x
Are Vegetation	So	il	or Hydrology	naturally pro				No	
SUMMARY OF FI	NDINGS - Attach	site map	showing samplin	g point locatio	ons, transed	(If nee cts, important features	ded, explain any a 5, etc.	answers	in remarks.)
Hydrophytic Veget	ation Procent? Vo	c V	No			Is the Sampled Area with	hin a Yes	x	No
Hydric Soil Present			No			Wetland?	inina res	^	
Wetland Hydrology		s <u>x</u> s X	No			wettanu:			
	-		_						
Remarks:			f steep slope down ed to do an upland	•	d and Lake Fi	rank. Due to this & uplan	a vegetation visib	ie on	
VEGETATION - U	•		•						
			Absolute	Dominant	Indicator				
Tree Stratum (Pl	ot size:)	% Cover	Species?	Status	Dominance Test works	sheet:		
1 Salix ni	gra		10	Yes	OBL	Number of Dominant S	Species That are		
2 Platanı	ıs occidentalis		5	Yes	FACW	OBL, FACW, or FAC:			4 (A)
3						-			
4						Total Number of Domi	nant Species		
5						across All Strata:			4 (B)
			15	= Total Cove	r	Percent of Dominant S	nacias that are O	BI	
Sapling/Shrub Stra	tum (Plot size:)			FACW, or FAC:	pecies that are U	∪∟,	100% (A/B)
	i tomentosa) 35	Yes	FACW				100% (A/B)
2				100		Prevalence Index work	ksheet		
3						Total % Co			Multiply by:
4						OBL species		x 1	
5						FACW species			
			35	= Total Cove	r	FAC species		x 3	
						FACU species			
Herb Stratum (Pl	lot size:)				UPL species		x 5	
	ria sagittata	,	80	Yes	OBL	Column Totals:		(A)	(B)
2 Unknov	5		30	NA	NA	-			、
	lla repens		15	No	FACU	Prevale	ence Index = B/A	=	
4						Hydrophytic Vegetatio	on Indicators:		
5						Rapid Test for H	Hydrophytic Vege	tation	
6						X Dominance Tes	t is >50%		
7						Prevalence Inde	ex ls < or = 3.0*		
8						Morphological	Adaptations* (Pro	ovide su	pporting
9						-	Remarks or on a	•	,
10						Problematic Hy	drophytic Vegeta	tion*(Ex	(plain)
			95	= Total Cove	r				
			,				ydric soil and we		
Woody Vine Stratu							it, unless disturbe	d or pro	blematic.
1 <u>NA</u>						Hydrophytic Vegetatio		v	No
2				= Total Cove	r	Present?	Yes	<u>x</u>	No
Remarks: (include	nhoto numbers bo	re or on a	senarate cheet)		1				
			Separate sheet.)						

SOIL									Sampling Point:	WL DD
	Description: (Des	cribe to the	e depth	needed to doci	ument the indi	cator or confi	irm the absence of	of indicators.)		
	N	Aatrix			Redox F	eatures				
Depth	Color			Color						
(Inches)	(moist)	%		(Moist)	%	Туре*	Loc**	Texture	Remarks	
0-5	7.5YR 4/2		85	7.5YR 4/6	15			silty clay	faint oxidized rhizo	pheres
5+	5Y 5/1		80	10R 4/8	20			silt	faint oxidized rhizo	pheres
						_				
*Type: 0	C=Concentration	, D=Depleti	on, RM=	Reduced Matr	ix, CS=Covered	or Coated Sa	and Grains.			
**Locat	ion: PL= Pore Lin	ing, M= Ma	itrix							
Hydric Soil In									r Problematic Hydric So	oils***:
	Histostol (A1) Dark Surfaces (S7)								A10) (MLRA 147)	
·	oipedon (A2)				low Surface (S		7, 148)	Piedmont Flo	odplain Soils (F19)	
Black Hi	. ,				rface (S9) (MLI	RA 147, 148)			MLRA 136, 147)	
	en Sulfide (A4)			_ · ·	ed Matrix (F2)				/laterial (TF2)	
	d Layers (A5)		X	Depleted Ma					Dark Surface (TF12)	
2 cm Mi	uck (A10) (LRR N)			Redox Dark				Other (Explai	in in Remarks)	
·	d Below Dark Su	•)	Depleted Da	rk Surface (F7)					
	ark Surface (A12)			Redox Depre						
Sandy N	lucky Material (S	51) (LRR N,			nese Masses (F		1LRA 136)			
	MLRA 147, 14				ace (F13) (MLR	-			s of hydrophytic vegeta	
	leyed Matrix (S4)		Piedmont Flo	oodplain Soils (F19), (MLRA	148)		hydrology must be pre	sent,
	edox (S5)							unless distur	bed or problematic.	
	Matrix (S6)									
	ayer (if observed):								
Type:							Hydric Soils			
Depth (i	nches):						Present?	Yes	<u>X</u> No	
Demerilier										
Remarks:										
HYDROLOG	v									
	rology Indicators									
-	ators (minimum		auirad	chock all that	annly)		Secondary Indi	cators (minimu	m of two is required)	
	Water (A1)		equireu,		2 Plants (B14)		Secondary Indi	Surface Soil (
	iter Table (A2)		х		lfide Odor (C1)		<u> </u>		etated Concave Surface	(B8)
X Saturati			x		zopheres on Li			Drainage Pat		
	Aarks (B1)		x		Reduced Iron (. .		Moss Trim Li		
	nt Deposits (B2)		~		Reduction in Ti		. –		Nater Table (C2)	
	posits (B3)			Thin Muck S				Crayfish Burr	. ,	
	at or Crust (B4)				in in Remarks)			_ ·	isible on Aerial Imagery	((())
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	orded Date (stre	am gauge	monitor	ing well, aerial	photos, previo	ous inspection	ns), if available			
							,,			
Remarks:										

				- I ···			.			
Project/Site: Applicant/Owner:	North Branch Trail		City/County:	Rockville, Mo		Maryland	Sampling D Sampling P		WL	10-Jan-13
Investigator(s):	D. Merkey & J. Cu	nmings		<u> </u>	State:	wnship, Range:	Sampling P		VVL	<u></u>
Landform (hillslop	· /	mmgs				(concave, conv	ex none).			
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Soil Map Unit Nan	ne: Bloc		nnery Silt Loams			NWI classifica	tion:	NA		
•	ologic conditions on			of year?	Yes	X No		(If no, explai	n in ren	narks)
Are Vegetation	Soil		or Hydrology	Significantly o	disturbed?	Are "Normal (Circumstance	s" present?	Yes	x
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SUMMARY OF F	INDINGS - Attach s	ite map sl	nowing samplin	g point locatio	ons, transeo	cts, important	features, et	с.		
Hydrophytic Vege	tation Present? Yes	x	No			Is the Sampled	Area within a	a Yes	х	No
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3										
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	own grass		5	NA	NA	Hydrophytic V		•		
5 Lonice	ra japonica		5	No	FAC	Rapid	Test for Hydr	ophytic Veget	tation	
6						X Domin	ance Test is >	>50%		
7						Preval	ence Index Is	< or = 3.0*		
8						Morph	nological Ada	ptations* (Pro	ovide su	upporting
9								marks or on a	•	,
10						Proble	matic Hydrop	phytic Vegeta	tion*(E	xplain)
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							•	ic soil and wet		
	um (Plot size:							nless disturbe	d or pro	oblematic.
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2			7	= Total Cove	<i></i>	Present?		Yes	X	No

SOIL										Sampling Point:	WL EE		
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4+	10YR 6/2		70	5YR 4/6		30	RM	both	fine sandy silt				
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									·				
*7 0 4						<u> </u>	<u> </u>		·				
	Concentration			=Reduced Ma	trix, CS=CC	overed o	r Coated Sa	and Grains.					
-	n: PL= Pore Lin	ing, M= N	latrix										
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Water Ma	. ,		^	Presence o				.5)	Moss Trim Line				
	Deposits (B2)			Recent Iror		•	'	· —	Dry-Season Wa				
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·	or Crust (B4)			Other (Exp		-		_	,	ole on Aerial Imager	v (C9)		
Iron Depos					annin Ken	101 K3/		—		ssed Plants (D1)	y (CJ)		
· · ·	n Visible on Ae	rial Image	erv (B7)					_	Geomorphic Po				
	ined Leaves (B							_	Shallow Aquita				
Aquatic Fa	•	,51						_	Microtopograp				
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Field Observati	ons:												
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Saturation Pres	ent?	Yes	x	No		th (inche			Yes	X No			
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Describe Record	ded Date (stre	am gauge	, monito	ring well, aeri	al photos,	previou	s inspection	ns), if available:					
Remarks:													

IX. APPENDIX F – PHOTOS



Forest Stand 1



Forest Stand 2



Forest Stand 3



Forest Stand 4



Forest Stand 5



Forest Stand 6



Forest Stand 7



Forest Stand 8



Forest Stand 9



Forest Stand 10





Forest Stand 13



Forest Stand 14



Forest Stand 15



Forest Stand 16



Forest Stand 17



Forest Stand 18

APPENDIX D

DNR_FS Response Letter/ DNR_WH Response Letter/ USDI Response Letter



Martin O'Malley, Governor Anthony G. Brown, Lt. Governor John R. Griffin, Secretary Joseph P. Gill, Deputy Secretary

August 31, 2011

Dr. David H. Merkey Greenman-Pedersen, Inc. 10977 Guilford Road Annapolis Junction, MD 20701

RE: Environmental Review for North Branch Trail Preliminary Design – Aspen Hill and Olney, Montgomery County, Maryland.

Dear Dr. Merkey:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. Please note however that the utilization of state funds, the need to obtain a state-authorized permit, or changes to the plan might warrant additional evaluations that could lead to protection or survey recommendations by the Wildlife and Heritage Service. Please contact us again for further coordination if this project falls into one of those categories.

We would also like to point out that our initial evaluation of this project should not be interpreted as meaning that it is not possible for rare, threatened or endangered species to be present. Certain species could be present without documentation because adequate surveys may not have been conducted in the past. Although the Wildlife and Heritage Service is not requiring any surveys, we would like to bring to your attention that our Natural Heritage database records do indicate that the species listed below are known to occur within close proximity of the project site. If the appropriate habitat is present for these species they could potentially occur on the project site itself. Since populations of these native plants have declined historically we would encourage efforts to help conserve them across the state. Feel free to contact us if you would like technical assistance regarding the conservation of these important species. They are:

Scientific Name	Common Name	State Status
Calystegia spithamea	Low Bindweed	Rare
Melica mutica	Two-flowered Melicgrass	Threatened
Iris cristata	Crested Iris	Endangered
Castanea dentata	American Chestnut	Rare

Habitat for Low Bindweed is described as: Fields, roadsides and calcareous slopes (Fernald 1950); dry, rocky, or sandy soil, fields and open woods (Gleason & Cronquist 1991). Habitat for Two-flowered Melicgrass is described as: Dry woods and road banks (Radford et al 1968); dry open woods and thickets (Fernald 1950); rocky woods (Terrell 1970); floodplain or upland rocky woods (MDNHP).

Page 2

Habitat for Crested Iris is described as: Rich wooded slopes (Radford et al 1968); rich woods, wooded bottoms and ravines or bluffs (Fernald 1950); rocky woods, floodplain forests (MDNHP). Habitat for American Chestnut is described as: Rich woods (Radford et al 1968); dry, rich, usually acid, gravelly or rocky ground, often of uplands (Hough 1983).

Our analysis of the information provided also suggests that the forested area on or adjacent to the project site contains Forest Interior Dwelling Bird habitat. Populations of many Forest Interior Dwelling Bird Species (FIDS) are declining in Maryland and throughout the eastern United States. The conservation of FIDS habitat is strongly encouraged by the Department of Natural Resources. The following guidelines will help minimize the project's impacts on FIDS and other native forest plants and wildlife:

- 1. Avoid placement of new trails or related construction in the forest interior. If forest loss or disturbance is absolutely unavoidable, restrict development to the perimeter of the forest (i.e., within 300 feet of the existing forest edge), and avoid trail placement in areas of high quality FIDS habitat (e.g., old-growth forest). Maximize the amount of remaining contiguous forested habitat.
- 2. Do not remove or disturb forest habitat during April-August, the breeding season for most FIDS. This seasonal restriction may be expanded to February-August if certain early nesting FIDS (e.g., Barred Owl) are present.
- 3. Maintain forest habitat as close as possible to the trail, and maintain canopy closure where possible.
- 4. Maintain grass height at least 10" during the breeding season (April-August).

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely, Louia. Bym

Lori A. Byrne Environmental Review Coordinator Wildlife and Heritage Service MD Dept. of Natural Resources

ER # 2011.1039.mo Cc: D. Brinker, DNR



Martin O'Malley, Governor Anthony G. Brown, Lt. Governor John R. Griffin, Secretary Joseph P. Gill, Deputy Secretary

February 13, 2013

Carol Perfit Greenman-Pedersen 10977 Guilford Road Annapolis Junction, MD 20701

Subject: Fisheries Information for the Proposed North Branch Trail, from the Rock Creek Trail Connection to the Preserve at Rock Creek, in Aspen Hill and Olney, Maryland.

Dear Ms. Perfit,

The above referenced project has been reviewed to determine fisheries species in the vicinity of the proposed project. The proposed activities include the construction of the North Branch Trail, from the Rock Creek Trail Connection to the Preserve at Rock Creek, in Aspen Hill and Olney, Maryland.

North Branch Rock Creek (Washington Metropolitan River Basin) and tributaries near the site are classified as either Use III streams (Natural Trout Waters) or Use IV streams (Recreational Trout Waters). Generally, no instream work is permitted in Use III streams during the period of October 1 through April 30, inclusive, during any year, and no instream work is permitted in Use IV streams during the period of March 1 through May 31, inclusive, during any year.

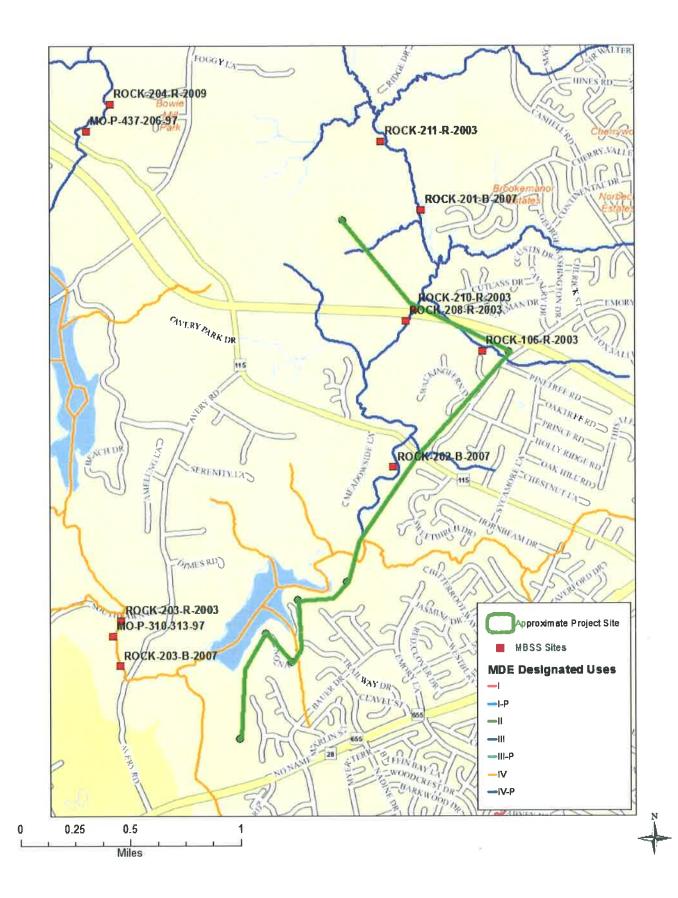
No anadromous fish have been documented near the project site. However, these streams may support many resident fish species documented by our Maryland Biological Stream Survey. There are Maryland Biological Stream Survey (MBSS) stations near the project location. The species collected at one of these stations has been itemized in the attached list. MBSS data can be accessed via the MDDNR web page at http://mdimap.towson.edu/streamhealth/, allowing access to resource surveys in neighboring tributaries.

If you have further questions, please contact the Environmental Review Program at 410-260-8799.

Sincerely,

Ken Yetman Environmental Review Program

13-MIS-128



The following fishes were collected at ROCK-202-B-2007

ř.

Common name	Percent of total
LARGEMOUTH BASS	26.7
LONGNOSE DACE	26.3
POTOMAC SCULPIN	14.4
BLACKNOSE DACE	9.1
YELLOW BULLHEAD	9.1
SPOTTAIL SHINER	3.5
WHITE SUCKER	3.2
MARGINED MADTOM	2.1
TESSELLATED DARTER	2.1
CUTLIP MINNOW	1.4
FALLFISH	1.1
NORTHERN HOGSUCKER	0.7
BLUNTNOSE MINNOW	0.4



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Chesapeake Bay Field Office 177 Admiral Cochrane Drive Annapolis, Maryland 21401 http://www.fws.gov/chesapeakebay

September 20, 2011

Greenman-Pedersen, Inc. 10977 Guilford Road Annapolis Junction, MD 20701

RE: North Branch Trail

Dear Dr. David H. Merkey:

This responds to your letter, received August 9, 2011, requesting information on the presence of species which are federally listed or proposed for listing as endangered or threatened within the vicinity of the above reference project area. We have reviewed the information you enclosed and are providing comments in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

Except for occasional transient individuals, no federally proposed or listed endangered or threatened species are known to exist within the project impact area. Therefore, no Biological Assessment or further section 7 Consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For information on the presence of other rare species, you should contact Lori Byrne of the Maryland Wildlife and Heritage Division at (410) 260-8573.

Effective August 8, 2007, under the authority of the Endangered Species Act of 1973, as amended, the U.S. Fish and Wildlife Service (Service) removed (delist) the bald eagle in the lower 48 States of the United States from the Federal List of Endangered and Threatened Wildlife. However, the bald eagle will still be protected by the Bald and Golden Eagle Protection Act, Lacey Act and the Migratory Bird Treaty Act. As a result, starting on August 8, 2007, if your project may cause "disturbance" to the bald eagle, please consult the "National Bald Eagle Management Guidelines" dated May 2007.





If any planned or ongoing activities cannot be conducted in compliance with the National Bald Eagle Management Guidelines (Eagle Management Guidelines), please contact the Chesapeake Bay Ecological Services Field Office at 410-573-4573 for technical assistance. The Eagle Management Guidelines can be found at:

http://www.fws.gov/migratorybirds/issues/BaldEagle/NationalBaldEagleManagementGuid elines.pdf.

In the future, if your project can not avoid disturbance to the bald eagle by complying with the Eagle Management Guidelines, you will be able to apply for a permit that authorizes the take of bald and golden eagles under the Bald and Golden Eagle Protection Act, generally where the take to be authorized is associated with otherwise lawful activities. This proposed permit process will not be available until the Service issues a final rule for the issuance of these take permits under the Bald and Golden Eagle Protection Act.

An additional concern of the Service is wetlands protection. Federal and state partners of the Chesapeake Bay Program have adopted an interim goal of no overall net loss of the Basin's remaining wetlands, and the long term goal of increasing the quality and quantity of the Basin's wetlands resource base. Because of this policy and the functions and values wetlands perform, the Service recommends avoiding wetland impacts. All wetlands within the project area should be identified, and if construction in wetlands is proposed, the U.S. Army Corps of Engineers, Baltimore District, should be contacted for permit requirements. They can be reached at (410) 962-3670.

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interests in these resources. If you have any questions or need further assistance, please contact Devin Ray at (410) 573-4531.

Sincerely,

Jon Mi

Leopoldo Miranda Supervisor

APPENDIX E

16

Community Meeting Minutes



MEETING REPORT

MEETING DATE:	September 19, 2012, 7:0	00 p.m., Shady Grove Training Room
STAFF ATTENDING:	Marian Elsasser Kim Paniati Doug Ludwig Dave Merkey Chuck Kines	Mitra Pedoeem Tricia McManus Grace Yick Steve Kelly Jim Humerick
SUBJECT:	Public Meeting for North	Branch Trail Facility Plan

The staff and consultant team presented a PowerPoint presentation that provided an overview of the scope of the project, the proposed alignment, and alternatives for connections. The trail will extend from the east side of the dam at Lake Frank to Muncaster Mill Road and generally follows the alignment of the existing road and trail on the east side of Lake Frank. The existing parking lots and road on the east side of Lake Frank would be removed and planted. A small trailhead and parking area would be provided on the south side of Muncaster Mill Road near the intersection with Emory Road.

The trail will cross Muncaster Mill Road and continue along Emory Road. This crossing and trail along Emory Road will be constructed by the Montgomery County Department of Transportation (DOT). This section of trail will connect to an existing trail and the bikeway along the Intercounty Connector (ICC). A new park trail segment will connect the ICC trail under a highway bridge and extend north through parkland to a future trail that will be built by the developer of the Preserve at Rock Creek, terminating at Sequoyah Elementary School. The trail will be ten feet wide with two-foot wide grass shoulders on each side. The trail cross section may become narrower in sensitive environmental areas with a minimum proposed width of eight feet wide with no shoulders. Railings may be required if there are steep drops in grade immediately adjacent to the trail.

Approximately 20-25 people attended the meeting. The following topics were discussed after the presentation.

- The safety of the trail crossing at Muncaster Mill Road was discussed. Alternatives for
 providing a traffic light or pedestrian refuge will be studied by DOT. The trail along
 Muncaster Mill Road would be separated and set back from the road, and traffic calming
 measures on Muncaster Mill Road may also be provided to slow down the traffic in this area.
- There was a question as to whether the parking lots along Lake Frank should remain, so that they could be used in the future. Staff indicated that the removal of the parking lots was part of the previous Planning Board approval for the Lake Frank trail connector, and that a commitment had been made to the community to remove the parking lots as part of this project.

- There was a suggestion to consider different types of natural habitat that might be created when the parking lots are removed. There are bluebirds nesting in the open parking lot areas, and they prefer meadow habitat. It would be nice to provide both meadow and forested areas.
- There was a question of whether a fishing pier would be provided at Lake Frank. This facility is included in the master plan, but staff does not have plans to build it as part of this project. Staff asked whether the community would want this facility to be included in the project. The response was that this facility would be used, but it would increase the traffic and parking in the neighborhood and would not be desirable. There was a question as to whether the concrete boat ramp would be removed. Park staff indicated that the boat ramp is needed for maintenance access to the riser in the lake.
- There was a suggestion that trail amenities be considered, including benches, picnic tables, and a drinking fountain with a dog dish and water bottle filling spout.
- There was a question whether a natural surface trail would be provided parallel to the Lake Frank hard surface trail, as recommended in the Rock Creek Regional Park Master Plan. Staff indicated that building two trails within the same corridor has not been a common practice in the Department of Parks in recent years, because it results in unnecessary environmental impact. Staff indicated that this could be studied if the community felt there was a compelling need to provide a second trail.
- There was discussion of other future trails and a question as to the timing of the DOT project to build an off-road trail from the ICC bikeway to Lake Needwood and over the causeway on Needwood Road.
- The segment of the future trail north of the Lake Frank parking lots includes a lot of blind curves and there could be safety issues with cyclists and hikers using the same trail. The intent for the new trail would be to widen the existing trail, straighten it, and clear lower-growing shrubby vegetation immediately adjacent to the trail to increase sight distances for user safety.
- There was a suggestion that there should be a vehicular turn-around built at the terminus of Trailway Drive with a few parking spaces for cyclists and fishermen who currently park there. This would allow some parking further removed from the homes at the end of the street.
- There was a request that the concrete piers that supported road guardrails and old drinking fountains that no longer work be removed when the existing roads and parking lots at Lake Frank are removed. There will be a new drinking fountain provided at the new parking lot and trailhead.
- There was discussion of environmental issues and constraints, including erosion that is occurring where the existing trail crosses the stream. There will likely be some stream stabilization work that occurs in this location, as well as providing a bridge as part of the project.
- On the northeast side of Lake Frank there are beavers, waterfowl and eagles and a concern that the new trail will cut off access for the beavers to habitat. The project will investigate habitat issues. The consultant's preliminary assessment is that the trail should not adversely affect the beavers, since there is already an existing trail in this location. Beavers

tend to be nocturnal, so there is usually not a lot of contact or conflict with users. The consultant will determine whether there is a specific resource that wildlife would be trying to reach on the other side of the trail and supplement habitat as necessary.

- A proposal was presented by staff to provide a new pedestrian bridge crossing of the stream at the location of the stepping stone crossing to provide access to natural surface trails that lead to Meadowside Nature Center. The intent is that this would be a hiking only access point to fairly steep trails that lead to the nature center. Bike racks would be provided in this location with signage instructing people to dismount from bikes before crossing the bridge. There was a suggestion that this bridge be narrow in width.
- There is an additional optional trail connection that could be made further to the north that would provide a hard surface trail and another bridge crossing of the stream. This connection would provide an accessible, paved access route from the main trail to the driveway that leads to the nature center. The connection point to the driveway would be roughly halfway between Muncaster Mill Road and the Smith Environmental Center. Cyclists could stay on the driveway to access the Smith Center and Meadowside Nature Center. They could also access the existing paved trail on Muncaster Mill Road that leads west towards Avery Road. A paved sidewalk would be provided along the edge of the driveway for pedestrian access to the nature center.
- Several individuals commented that there should be paved access provided for families with young children, disabled users and cyclists to the nature center. Others expressed a preference for natural surface trails and means to ensure that cyclists follow the rules and stay off the hiking only trails. There was discussion of the need to post signage and rely on people to follow the rules. A cyclist mentioned that many people using the park have their dogs off leash and are not following the rules.
- There was a request for a natural surface trail for bicycles to use on east side the stream in addition to the hard surface trail, so that mountain bikers won't be tempted to use the natural surface trails near the nature center on the west side of the stream.
- Park staff clarified that the Department has two use classifications for natural surface trails; hiking only, and trails open to all users, including hikers, cyclists and equestrians.
- There was a question about the timing for completion of work by the Maryland State Highway (SHA) within the park. Staff mentioned that there is a leak in a large WSSC sewer line and that SHA will finish restoring the southern parking lot as soon as sewer work is completed.
- There was a question about the duration of the construction project to build the new trail along the east side of Lake Frank. Staff estimated that the construction would take a year or less, but the project would likely be built in sections that would be opened for use as each section is completed. The project schedule proposes to complete the facility plan study by next summer, and present it to the Montgomery County Planning Board for review. If the project is approved, it would be placed in the Department of Parks Capital Improvements Program next fall to obtain construction funding in the Fiscal Year 2015-2020 program. It may take several years before construction funding is obtained.
- There were questions about whether the trail could be striped with a white hatched line down the middle to have users stay to the right with cyclist passing on the left. Staff will

consider this suggestion but mentioned that the trail should be at least ten feet wide to be striped.

- There were also questions about existing steep locations of the trail that are slick when wet. Staff will address these areas in the design of the trail. In addition, the trail would be built with a cross slope to drain the trail so that it sheds water.
- There were questions on what provisions would be made to accommodate maintenance vehicles. Staff responded that trails and bridges are built to accommodate a 10,000 lb. load for pick-up trucks for general maintenance, access for the tree crews, and access for park police vehicles.

The meeting concluded, and community members were encouraged to follow up by submitting additional comments to the Park Project Manager by e-mail.

Ms. Elsasser,

I received the public notice about the upcoming meeting to discuss the North Branch Hiker-Biker Trail. I would like to submit my requests about this project. I live at 16612 Summertree Ct. which backs to the North Branch Stream that feeds into Lake Frank. Since the plan has been modified, I would really like the board to consider establishing a stream crossing from the east side of the stream to the west side and attaching to the trail that is being discussed. This is the area to the north of the ICC, where there is currently a natural surface trail on the east side of the stream. I have been hiking on these trails since my family moved here in 2006 and have always wanted there to be a permanent structure built to cross the stream. There are often simple rocks and trees thrown across it to facilitate getting over it. Unfortunately, this method often deteriorates the flow of the stream. Thank you for considering my request.

Sincerely, Kevin Neidhart 301-260-2541