6/27 NW

AL
N

JOINT FEDERAL/STATE APPLICATION FOR THE ALTERATION OF ANY FLOODPLAIN, WATERWAY, TIDAL OR NONTIDAL WETLAND IN MARYLAND

matt-m

FOR AGENCY USE ONLY

Application Number _____
Date Received by State _____
Date Received by Corps _____
Type of State permit needed _____
Type of Corps permit needed _____

Date Determined Complete _____
Date(s) Returned _____ Paul-m
Date of Field Review _____
Agency Performed Field Review _____

++

- Please submit 1 original and 6 copies of this form, required maps and plans to the Wetlands and Waterways Program as noted on the last page of this form.
- Any application which is not completed in full or is accompanied by poor quality drawings may be considered incomplete and result in a time delay to the applicant.

Lot E

Please check one of the following: 18-3189 PAID $750

RESUBMITTAL: ____ **APPLICATION AMENDMENT:** ____ **MODIFICATION TO AN EXISTING PERMIT:** ____
JURISDICTIONAL DETERMINATION ONLY ____ **APPLYING FOR AUTHORIZATION** ____
PREVIOUSLY ASSIGNED NUMBER (RESUBMITTALS AND AMENDMENTS) _____
DATE _____

DMT

1. APPLICANT INFORMATION: AI 161808 201861137

8/17

APPLICANT NAME:

A. Name: Zebulin Culver
B. Daytime Telephone: 410-721-7939
C. Company: Allegany Junction Limited Partnership
D. Email Address: zculver@wodagroup.com
E. Address: 191 Main Street, Suite 205
F. City: Annapolis State: Maryland Zip: 21401

AGENT/ENGINEER INFORMATION:

A. Name: Kay Morin
B. Daytime Telephone: 443-689-0439
C. Company: Site Resources, Inc.
D. Email Address: kmorin@siteresourcesinc.com
E. Address: 14315 Jarrettsville Pike
F. City: Phoenix State: Maryland Zip: 21131

ENVIRONMENTAL CONSULTANT:

A. Name: Robert M. Freda
B. Daytime Telephone: 614-837-4750
C. Company: Spence Environmental Consulting, Inc.
D. Email Address: robert.freda@spenceenv.com
E. Address: 70 West Columbus Street
F. City: Pickerington State: Ohio Zip: 43147

CONTRACTOR (If known): **Woda Construction, Inc.**

A. Name: Andrew Durant
B. Daytime Telephone: 614-396-5067
C. Company: Woda Construction, Inc.
D. Email Address: adurant@wodagroup.com
E. Address: 500 S. Front Street, 10th Floor
F. City: Columbus State: Ohio Zip: 43215

RECEIVED JUL 03 2018 WATER AND SCIENCE ADMIN. REGULATORY SERVICES COORD.

PRINCIPAL CONTACT:

A. Name: Zebulin Culver
B. Daytime Telephone: 410-721-7939
C. Company: Woda Cooper Companies, Inc.
D. Email Address: zculver@wodagroup.com
E. Address: 191 Main Street, Suite 205

MHT DNR

6/29

F. City: Annapolis State: Maryland Zip: 21401

2. PROJECT DESCRIPTION

a. GIVE WRITTEN DESCRIPTION OF PROJECT:

The project is a 40 unit family housing building in Allegany County, Maryland

Has any portion of the project been completed? _____ Yes __X__ No If yes, explain _____

Is this a residential subdivision or commercial development? __X__ Yes _____ No
If yes, total number of acres on property __8__ acres

b. ACTIVITY: Check all activities that are proposed in the wetland, waterway, floodplain, and nontidal wetland buffer as appropriate.

A. __X__ filling
B. _____ dredging
C. _____ excavating
D. _____ flooding or impounding water
E. __X__ draining
F. __X__ grading
G. __X__ removing or destroying vegetation
H. __X__ building structures

Area for item(s) checked: Wetland 750 PEM (sq. ft.) Buffer (Nontidal Wetland Only) 6900 (sq. ft.)
Expanded Buffer (Nontidal Wetland Only) NA (sq. ft.)
Area of stream impact 236 (sq. ft.) No
Length of stream affected 236 (linear feet)

c. TYPE OF PROJECTS: Project Dimensions

For each activity, give overall length and width (in feet), in columns 1 and 2. For multiple activities, give total area of disturbance in square feet in column 3. For activities in tidal waters, give maximum distance channelward (in feet) in column 4. For dam or small ponds, give average depth (in feet) for the completed project in column 5. Give the volume of fill or dredged material in column 6.

		Length (Ft.) 1	Width (Ft.) 2	Area Sq. Ft. 3	Maximum/Average Channelward Encroachment 4		Pond Depth 5	Volume of fill/dredge material (cubic yards) below MHW or OHW 6
A.	_____ Bulkhead							
B.	_____ Revetment							
C.	_____ Vegetative Stabilization							
D.	_____ Gabions							
E.	_____ Groins							
F.	_____ Jetties							
G.	_____ Boat Ramp							
H.	_____ Pier							
I.	_____ Breakwater							
J.	_____ Repair & Maintenance							
K.	_____ Road Crossing							
L.	_____ Utility Line							
M.	_____ Outfall Construction							
N.	_____ Small Pond							
O.	_____ Dam							
P.	_____ Lot Fill							18.25
Q.	_____ Building Structures							
R.	_____ Culvert							
	_____ Bridge							
T.	_____ Stream Channelization							
U.	_____ Parking Area							

V. _____ Dredging _____ _____ _____ _____ _____ _____

1. _____ New 2. _____ Maintenance 3. _____ Hydraulic 4. _____ Mechanical

V. _____ Other (explain) _____

d. PROJECT PURPOSE: Give brief written description of the project purpose:

The site will be used for the development and construction of a 40 unit apartment building and associated parking.

3. PROJECT LOCATION:
a. LOCATION INFORMATION:

A. County: Allegany B. City: Frostburg C. Name of waterway or closest waterway Winebrenner Run
D. State stream use class designation: III
E. Site Address or Location: 11900 Old Legislative Road, SW, Frostburg, MD

F. Directions from nearest intersection of two state roads: Take Exit 33 on US 68 (Frostburg) and travel south on Old Legislative Road (County Road 736) approximately 0.5 miles. The site is located on the left just south of All Safe Self Storage.

G. Is your project located in the Chesapeake Bay Critical Area (generally within 1,000 feet of tidal waters or tidal wetlands)?:
____ Yes X No
H. County Book Map Coordinates (Alexandria Drafting Co.); Excluding Garrett and Somerset Counties:
Map: ____ Letter: ____ Number: ____ (to the nearest tenth)
I. FEMA Floodplain Map Panel Number (if known): ____
J. 1. 39.630007° latitude 2. -78.948244° longitude

b. ACTIVITY LOCATION: Check one or more of the following as appropriate for the type of wetland/waterway where you are proposing an activity:

A. ____ Tidal Waters
B. ____ Tidal Wetlands
C. ____ Special Aquatic Site (e.g., mudflat, vegetated shallows)
D. X Nontidal Wetland
E. X 25-foot buffer (nontidal wetlands only)
F. ____ 100-foot buffer (nontidal wetland of special State concern)
G. ____ In stream channel
1. ____ Tidal 2. ____ Nontidal
H. ____ 100-year floodplain (outside stream channel)
I. ____ River, lake, pond
J. ____ Other (Explain)

c. LAND USE:

A. Current Use of Parcel Is: 1. ____ Agriculture: Has SCS designated project site as a prior converted cropland?
____ Yes ____ No 2. X Wooded 3. ____ Marsh/Swamp 4. ____ Developed
5. ____ Other

B. Present Zoning Is: 1. X Residential 2. ____ Commercial/Industrial 3. ____ Agriculture 4. ____ Marina 5. ____ Other

C. Project complies with current zoning X Yes ____ No

THE FOLLOWING INFORMATION IS REQUIRED BY THE STATE (blocks 4-7):

REDUCTION OF IMPACTS: Explain measures taken or considered to avoid or minimize wetland losses in F. Also check items A-E if any of these apply to your project.

A. ____ Reduced the area of B. ____ Reduced size/scope of C. ____ Relocated structures

disturbance project D. _____ Redesigned project

E. _____ Other _____

F. Explanation Applicant explored reconfiguring its planned site design to avoid impacting the wetland, but the wetland's location in the center of the property made this impossible. Minimization was not feasible because the wetland is so small and of minimal value to begin that minimizing the impacts would not have resulted in a useful resource.

Describe reasons why impacts were not avoided or reduced in Q. Also check Items G-P that apply to your project.

G. _____ Cost
H. _____ Extensive wetlands on site
I. _____ Engineering/design constraints
J. _____ Other natural features
K. _____ Parcel size
L. _____ Other regulatory requirement
M. _____ Failure to accomplish project purpose
N. _____ Safety/public welfare issue
O. _____ Inadequate zoning
P. _X_ Other _____

Q. Description Applicant explored reconfiguring its planned site design to avoid impacting the wetland, but the wetland's location in the center of the property made this impossible. Minimization was not feasible because the wetland is so small and of minimal value to begin that minimizing the impacts would not have resulted in a useful resource.

5. LETTER OF EXEMPTION: If you are applying for a letter of exemption for activities in nontidal wetlands and/or their buffers, explain why the project qualifies:

A. _____ No significant plant or wildlife value and wetland impact
1. _____ Less than 5,000 square feet
2. _____ In an isolated nontidal wetland less than 1 acre in size

B. _____ Repair existing structure/fill
C. _____ Mitigation Project
D. _____ Utility Line
1. _____ Overhead
2. _____ Underground

E. Other (explain) _____

F. _X_ Check here if you are **not** applying for a letter of exemption.

IF YOU ARE APPLYING FOR A LETTER OF EXEMPTION, PROCEED TO BLOCK 11

6. ALTERNATIVE SITE ANALYSIS: Explain why other sites that were considered for this project were rejected in M. Also check any items in D-L if they apply to your project. **(If you are applying for a letter of exemption, do not complete this block):**

A. _X_ 1 site B. _____ 2 - 4 sites C. _____ 5 or more sites

Alternative sites were rejected/not considered for the following reason(s):

D. _____ Cost
E. _X_ Lack of availability
F. _X_ Failure to meet project purpose
G. _____ Located outside general/market area
H. _____ Greater wetlands impact
I. _____ Water dependency
J. _X_ Inadequate zoning
K. _____ Engineering/design constraints
L. _____ Other _____

M. Explanation: _____

7. **PUBLIC NEED:** Describe the public need or benefits that the project will provide in F. Also check Items in A-E that apply to your project. **(If you are applying for a letter of exemption, do not complete this block):**

A. X Economic
B. _____ Safety
C. _____ Health/welfare
D. _____ Does not provide public benefits
E. X Other Housing

F. Description The project will provide housing opportunities for families in the surrounding areas, as well as provide local jobs during the construction phase.

8. OTHER APPROVALS NEEDED/GRANTED:

A. Agency	B. Date Sought	C. Decision 1. Granted	2. Denied	D. Decision Date	E. Other Status

9. MITIGATION PLAN: Please provide the following information:

a. Description of a monetary compensation proposal, if applicable (for **state requirements** only). Attach another sheet if necessary. Per State of Maryland/Allegany County Guidelines, monetary compensation is $50,8000 per acre. The wetlands site has been delineated at approximately 0.017 acres. Therefore, our anticipated compensation is approximately $863.00.

b. Give a brief description of the proposed mitigation project. N/A

c. Describe why you selected your proposed mitigation site, including what other areas were considered and why they were rejected. N/A

d. Describe how the mitigation site will be protected in the future. N/A

10. HAVE ADJACENT PROPERTY OWNERS BEEN NOTIFIED?: A. _____ Yes B. X No

Provide names and mailing addresses below (Use separate sheet, if necessary):

a. Lowell L. Chapman
11801 Old Legislative Rd SW
Frostburg, MD 21532

b. Derak A. Ruby
19618 Shaft Rd SW
Frostburg, MD 21532

c. All Safe Self Storage, LLC
22 Sunset Drive
LaVale, MD 21502

11. HISTORIC PROPERTIES: Is your project located in the vicinity of historic properties? (For example: structures over 50 years old, archeological sites, shell mounds, Indian or Colonial artifacts). Provide any supplemental information in Section 13.

A. _____ Yes B. X No C. _____ Unknown

12. ADDITIONAL INFORMATION: Use this space for detailed responses to any of the previous items. Attach another sheet if necessary:

Check box if data is enclosed for any one or more of the following (see checklist for required information):

A. ____ Soil borings
B. X Wetland data sheets
C. X Photographs
D. X Field surveys
E. ____ Alternate site analysis
F. ____ Market analysis
G. X Site plan
H. ____ Avoidance and minimization analysis

I. X Other (explain) See "Attachment one" for items B & C, And "Attachment Two" and "Attachment Three" for items D & G.

CERTIFICATION:

I hereby designate and authorize the agent named above to act on my behalf in the processing of this application and to furnish any information that is requested. I certify that the information on this form and on the attached plans and specifications is true and accurate to the best of my knowledge and belief. I understand that any of the agencies involved in authorizing the proposed works may request information in addition to that set forth herein as may be deemed appropriate in considering this proposal. I certify that all Waters of the United States have been identified and delineated on site, and that all jurisdictional wetlands have been delineated in accordance with the Corps of Engineers Wetlands Delineation Manual (Wetlands Research Program Technical Report Y-87-1). I grant permission to the agencies responsible for authorization of this work, or their duly authorized representative, to enter the project site for inspection purposes during working hours. I will abide by the conditions of the permit or license if issued and will not begin work without the appropriate authorization. I also certify that the proposed works are consistent with Maryland's Coastal Zone Management Plan. I understand that none of the information contained in the application form is confidential and that I may request that additional required information be considered confidential under applicable laws. I further understand that failure of the landowner to sign the application will result in the application being deemed incomplete.

LANDOWNER MUST SIGN: _____ DATE: 6/19/18

WHERE TO MAIL APPLICATION

Maryland Department of the Environment
Water Management Administration
Regulatory Services Coordination Office
1800 Washington Boulevard, Suite 430
Baltimore, Maryland 21230
Telephone: (410) 537-3762
1-800-876-0200

BEFORE YOU MAIL... DON'T FORGET...

- **SIGN AND DATE THE APPLICATION. THE LANDOWNER MUST SIGN.**
- **SEVEN (7) COPIES OF ALL DOCUMENTS (APPLICATION, PLANS, MAPS, REPORTS, ETC.) MUST BE RECEIVED TO BEGIN OUR REVIEW.**
- **INCLUDE FIVE COPIES OF A VICINITY MAP (LOCATION MAP) WITH THE PROJECT SITE PINPOINTED.**
- **SEND AN APPLICATION FEE OF $750 ALONG WITH A COPY OF THE FIRST PAGE OF THE APPLICATION TO MARYLAND DEPARTMENT OF THE ENVIRONMENT, P.O. BOX 2057, BALTIMORE, MD 21203-2057. PLEASE REFER TO OUR WEBSITE *http://www.mde.maryland.gov* FOR FURTHER INSTRUCTIONS.**

Revised 7/10

SUPPLEMENTARY INFORMATION TO BE INCLUDED ON PLANS, DRAWINGS, OR VICINITY MAPS

In addition to the information indicated on the previous pages, you should include the following on the 8 1/2 x 11 site plans and any blueprints you have submitted:

1. Delineation of any wetland buffers or expanded buffers, clearly marked and differentiated.

2. Location of mitigation area, if proposed on the same site as the project.

Note: If you are proposing a complex project you may wish to submit engineering blueprints of your project with the application form to expedite review.

Mitigation Location Map: If you are proposing that nontidal wetland mitigation be done at a different location than the proposed project, you should submit a map showing the location of the mitigation site in relation to the proposed nontidal wetland losses.

WETLAND DELINEATION

Wetlands should be identified according to methods described in the publication Corps of Engineers Wetlands Delineation Manual (Wetlands Research Program Technical Report Y-87-1). Copies of the manual may be obtained by calling the U. S. Government Printing Office at 202-783-3238 and requesting document #024-010-00-683-8 at a cost of $7.50. Wetlands must be shown on all plans submitted with the application. All wetlands on site must be delineated and shown on the overall site plan. 8½ x 11 inch plans with topography showing relation of the wetlands and project impacts must be submitted. Copies of the wetland reports and data sheets used in making the determination must be included with your application submittal.

Regulatory Agencies

Federal Permits

U.S. Army Corps of Engineers
Baltimore District
Attention: CENAB-OP-R
P. O. Box 1715
Baltimore, MD 21203-1715
Telephone: (410) 962-3670

Coastal Zone Consistency Statement

MD Dept. of the Environment
Water Management Administration
Wetlands and Waterways Program
1800 Washington Blvd, Ste 430
Baltimore, MD 21230
Telephone: (410) 537-3745

State Authorizations

MD Dept. of the Environment
Water Management Administration
Tidal Wetlands Division
1800 Washington Blvd, Ste 430
Baltimore, MD 21230
Telephone: (410) 537-3837

MD Dept. of the Environment
Water Management Administration
Nontidal Wetlands and Waterways Division
1800 Washington Blvd, Ste 430
Baltimore, MD 21230
Telephone: (410) 537-3768

C104
ALLEGANY JUNCTION
SITERESOURCES
MARKS, THOMAS ARCHITECTS
LEGEND
OLD LEGISLATIVE ROAD

Wetlands and Waterways Program
Attachment Four

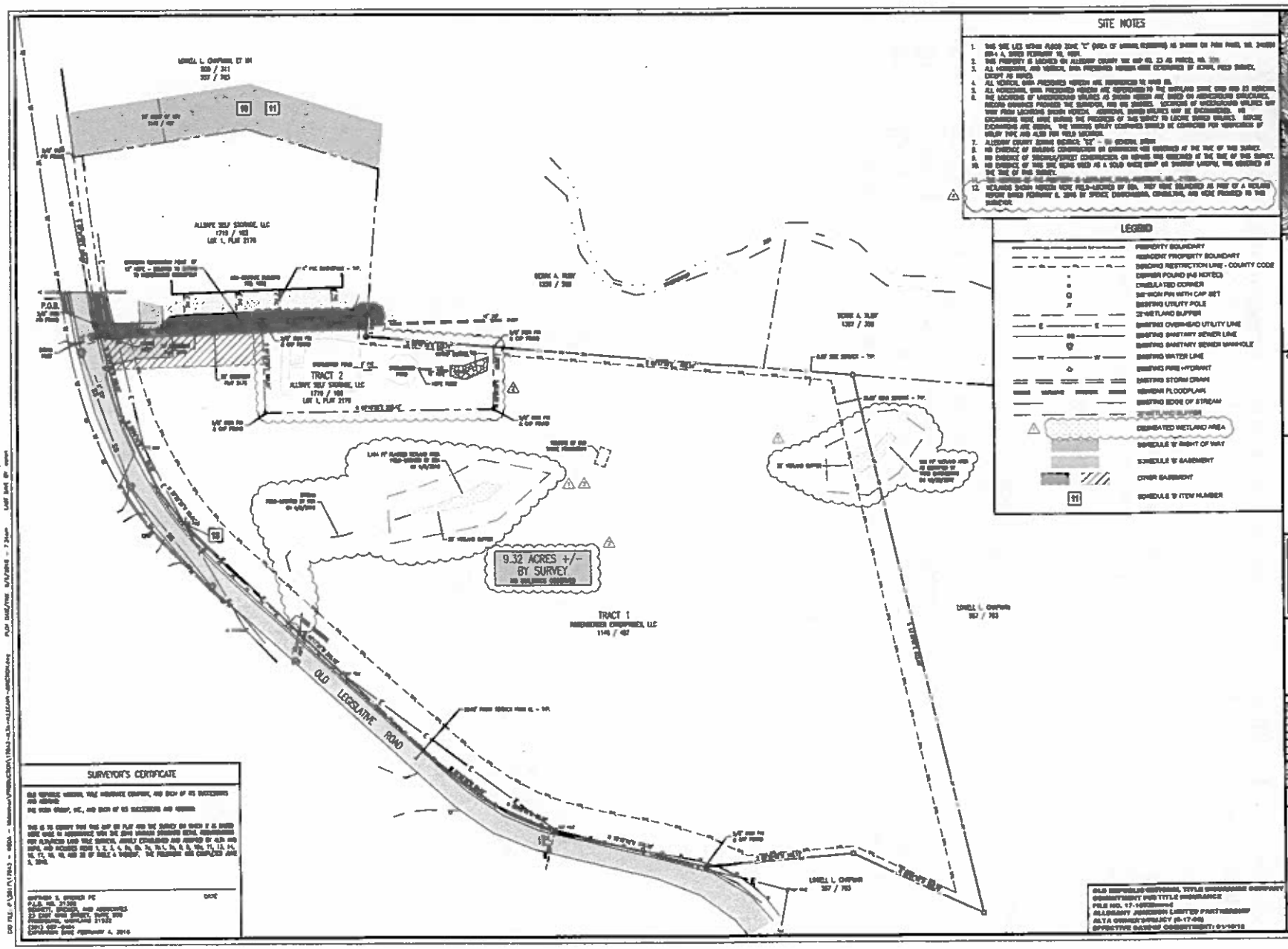
1. A description of construction access and methodology and a proposed construction schedule, with an estimated completion date.

Woda Construction will install a stable construction entrance complete with Geotech fabric for soil stabilization and a stone base. In addition, the surface will have a layer of larger stone to assist with tire cleaning prior to vehicles entering the roadway.

Current schedule target dates include a September 1, 2018 start and an August 30, 2019 completion date.

2. Description of stabilization for temporary impacts.

Woda Construction will install all necessary storm water management features deemed necessary to manage the water flow throughout and around the site to eliminate any negative effects on the site stability. These features will also work in concert with the final storm water management features constructed for the completion of the project.



SITE NOTES

1. THIS SITE LIES WITHIN FLOOD ZONE "X" (AREA OF MINIMAL FLOODING) AS SHOWN ON FIRM PANEL NO. 3[illegible]-A, DATED FEBRUARY 16, 1996.
2. THIS PROPERTY IS LOCATED IN ALLEGANY COUNTY TAX MAP NO. 23 AS PARCEL NO. [illegible].
3. ALL HORIZONTAL AND VERTICAL DATA PRESENTED HEREON WERE DETERMINED BY ACTIVE FIELD SURVEY, EXCEPT AS NOTED.
4. ALL VERTICAL DATA PRESENTED HEREON ARE REFERENCED TO NAVD 88.
5. ALL HORIZONTAL DATA PRESENTED HEREON ARE REFERENCED IN THE MARYLAND STATE GRID NAD 83 DATUM.
6. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON ABOVEGROUND STRUCTURES, RECORD DRAWINGS PROVIDED THE SURVEYOR, AND OTHER SOURCES. LOCATIONS OF UNDERGROUND UTILITIES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES. BEFORE EXCAVATIONS ARE MADE, THE VARIOUS UTILITY COMPANIES SHOULD BE CONTACTED FOR VERIFICATION OF UTILITY TYPE AND ALSO FOR FIELD LOCATION.
7. ALLEGANY COUNTY ZONING DISTRICT: "GI" – GENERAL INDUSTRY.
8. NO EVIDENCE OF BUILDING CONSTRUCTION OR ADDITIONS WAS OBSERVED AT THE TIME OF THIS SURVEY.
9. NO EVIDENCE OF CEMETERIES/BURIAL CONSTRUCTION ON REPORTED WAS OBSERVED AT THE TIME OF THIS SURVEY.
10. NO EVIDENCE OF THIS SITE BEING USED AS A SOLID WASTE DUMP OR SANITARY LANDFILL WAS OBSERVED AT THE TIME OF THIS SURVEY.
11. [illegible]
12. WETLANDS SHOWN HEREON WERE FIELD-LOCATED BY BBA. THEY WERE DELINEATED AS PART OF A WETLAND REPORT DATED FEBRUARY 6, 2018 BY SPECIES CONSULTANTS, CONSULTING, AND WERE PLACED IN THIS SURVEY.

LEGEND

- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- BUILDING RESTRICTION LINE - COUNTY CODE
- CORNER FOUND (AS NOTED)
- CALCULATED CORNER
- 5/8" IRON PIN WITH CAP SET
- EXISTING UTILITY POLE
- 25' WETLAND BUFFER
- EXISTING OVERHEAD UTILITY LINE
- EXISTING SANITARY SEWER LINE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING WATER LINE
- EXISTING FIRE HYDRANT
- EXISTING STORM DRAIN
- APPROXIMATE FLOODPLAIN
- EXISTING EDGE OF STREAM
- 25' WETLAND BUFFER
- DELINEATED WETLAND AREA
- SCHEDULE 'B' RIGHT OF WAY
- SCHEDULE 'B' EASEMENT
- OTHER EASEMENT
- 11 SCHEDULE 'B' ITEM NUMBER

SURVEYOR'S CERTIFICATE

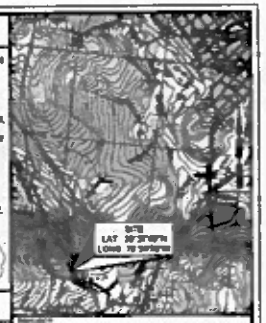
OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, AND EACH OF ITS SUCCESSORS AND ASSIGNS

THE WODA GROUP, INC., AND EACH OF ITS SUCCESSORS AND ASSIGNS

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6, 8, 9, 10, 11, 13, 14, 16, 17, 18, 19, AND 20 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED JUNE 6, 2016.

[illegible] PE DATE
P.L.S. NO. 21302
SURVEY, BOUNDARY, AND ASSOCIATES
22 EAST MAIN STREET, SUITE 300
FRUITLAND, MARYLAND 21826
(301) 607-[illegible]
EXPIRATION DATE FEBRUARY 4, 2019

OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
COMMITMENT FOR TITLE INSURANCE
FILE NO. 17-1072Amend
ALLEGANY JUNCTION LIMITED PARTNERSHIP
ALTA OWNER'S POLICY (6-17-06)
EFFECTIVE DATED COMMITMENT: 01/16/18



ALLEGANY JUNCTION
ALTA / NSPS SURVEY

TITLE COMMITMENT NO.
17-1072Amend
EFFECTIVE: JANUARY 16, 2018

CLIENT:
THE WODA GROUP, INC.
229 HUBER VILLAGE BLVD., SUITE 100
WESTERVILLE, OHIO 43081

N
W E
S
50 0 50 100
GRAPHIC SCALE – 1 INCH = 50 FEET

bba
Surveyors | Engineers | Planners
Bennett Bowser & Associates, LLC

Drawn	ADB	Date	[illegible]
Checked	[illegible]	Scale	1" = 50'
Approved	[illegible]	Project No.	2017043

BBA# 2017043

SHEET TITLE
ALTA / NSPS SURVEY
ALLEGANY JUNCTION
DRAFT 06/06/2018

SHEET #
1 of 2

SCHEDULE B - SECTION II SPECIAL EXCEPTIONS

[illegible]

ZONING

[illegible]

PARKING REQUIREMENTS

[illegible]

SURVEYED DESCRIPTION

[illegible]

EXHIBIT "A" LEGAL DESCRIPTION

[illegible]

PROJECT

ALLEGANY JUNCTI
ALTA / NSPS SUR

TITLE COMMITMENT NO.
17-1072Amend
EFFECTIVE: JANUARY 16, 2018

CLIENT

THE WODA GROUP, INC.
229 HUBER VILLAGE BLVD., SUITE 100
WESTERVILLE, OHIO 43081

bba
Surveyors | Engineers | Planners

BBA# 20 | 7043

SHEET TITLE

ALTA / NSPS SURVEY
ALLEGANY JUNCTION

DRAFT 06/06/2018

SHEET #

2 of 2

Joint Federal/State Application for The Alteration of any Floodplain, Waterway, Tidal or Nontidal Wetland in Maryland

(Original Copy – Includes Application Fee)

June 25, 2018

Submitted To:

Maryland Department of the Environment
Water Management Administration
Regulatory Services Coordination Office
1800 Washington Boulevard, Suite 430
Baltimore, MD 21230

Submitted By:

Allegany Junction Limited Partnership/
Woda Cooper Communities, Inc.
191 Main Street, Suite 430
Annapolis, MD 21401

Subject Property:

11900 Old Legislative Road, SW
Frostburg, MD

Contact Information:

Zebulin Culver – Assistant Vice President
Woda Cooper Companies, Inc.
191 Main Street, Suite 205
Annapolis, MD 21401
(410) 721-7939
zculver@wodagroup.com

Application Checklist

Wetlands and Waterways Program:

Checklist for Floodplain, Waterway, Tidal or Nontidal Wetlands Application

X Processing Fee Enclosed.

X Applicant's name, mailing address, telephone number, email address and fax number.

See "Application" Section One.

X Authorized agent's (or primary contact and other contact) names, mailing addresses, telephone numbers, email addresses and fax numbers.

See "Application" Section One.

X Any existing authorization numbers or previously assigned numbers.

Not Applicable

X The name of the city or town, waterbody, and county where the project is located.

See "Application" Section Three.

X Clear directions to project site.

See "Application" Section Three.

X Latitude and longitude from a central location within project limits.

See "Application" Section Three.

X Wetland, Waterway/Stream, Buffer, Floodplain Description.

See "Application" Sections Two and Three.

X Itemized calculation of all permanent and temporary wetland, stream, buffer, floodplain impacts.

See "Application" Section Two.

X A delineation report of the area of all wetlands and buffers on the site and associated wetland data sheets. The report map should include the location of all streams, 100-year floodplains, open water and other surface waters on the site the limits of Chesapeake Bay Resource Protection Areas, (RPAs), Wetland types should be noted according to their Cowardin (SUFWS-National Wetlands Inventory) classification or similar terminology.

See "Attachment One".

X Description of How Impacts were Avoided or Reduced.

See "Application" Section Four.

X Mitigation Proposal, if applicable.

See "Application" Section Nine.

Plans

X A detailed vicinity map of the project area, including the project boundary. The map should identify the project site, property boundaries, and adjacent property owners.

See "Attachment Two".

X Plans showing distance of all proposed structures to all contiguous property lines and any appropriate County or State property line building restriction setbacks, right-of-ways and/or easements.

See "Attachment Two" and "Attachment Three".

X A plan view depicting existing and proposed conditions and structures. All plan view sketches should include, but are not limited to: north arrow; existing and proposed contours and/or grades; limit of surface water areas; ebb and flow direction of all water bodies (e.g., streams, tidal waters); applicant name and address; all horizontal dimensions of all proposed structures and impacts, existing conditions of the project site which includes all existing structures at or near the project site including neighbors; existing areas of wetland vegetation or mapped wetlands and buffers; the project boundary and a boundary demarcating the limits of disturbance. A section view showing existing and proposed conditions and structures.

See "Attachment One", "Attachment Two", and "Attachment Three".

X A description of construction access and methodology and a proposed construction schedule, with an estimated completion date.

See "Attachment Four".

X Description of stabilization for temporary impacts.

See "Attachment Four".

All Tidal Projects

Not Applicable

All Non-Tidal Projects

X Large-sized impacts map (at a scale no smaller than 1"=200'): use match lines if the entire site cannot fit on one sheet at this scale.

See "Attachment One".

Preliminary Jurisdictional Determination Report
Allegany Junction
Approximately 8 Acre Property
11900 Old Legislative Road, SW
Frostburg, MD

Prepared for:

The Woda Group, Inc.

February 8, 2018

SPENCE
Environmental
Consulting, Inc.

70 West Columbus Street • Pickerington, Ohio • 43147 • (614) 837-4750 • fax (614) 837-4755

Preliminary Jurisdictional Determination Report
Allegany Junction
Approximately 8 Acre Property
11900 Old Legislative Road, SW
Frostburg, MD

Prepared for:

The Woda Group, Inc.

Client: Ms. Anne Little, Vice President
The Woda Group, Inc.
229 Huber Village Blvd., Suite 100
Westerville, Ohio 43081

Project No.: Woda-01(18)

Distribution: Ms. Anne Little (Electronic Copy)
SEC File (Electronic

Date: Copy) February 8, 2018

Prepared by:

Robert M. Freda, Senior Engineer

Spence Environmental Consulting, Inc.
70 West Columbus Street
Pickerington, Ohio 43147
614.837.4750

TABLE OF CONTENTS

1.0 INTRODUCTION

SUMMARY

Spence Environmental Consulting, Inc. (SEC) subcontracted Mr. Nathaniel Grundy of Mine Services Company, Inc. to conduct field work on January 10, 2018 associated with a preliminary jurisdictional determination request for the Allegany Junction Project property located at 11900 Old Legislative Road, SW, Frostburg, MD, to determine the presence of wetlands and other waters of the United States. The owner intends to develop the property and is in the process of conducting the proper regulatory due diligence.

PURPOSE

The landowner is looking to develop approximately 8-acres in Allegany County, Maryland. This report represents the professional opinion of SEC and Mr. Grundy regarding the presence/absence of wetland conditions and other waters of the United States and their boundaries within the project area. Final determination of regulatory jurisdiction and verification of report findings are to be established by the U.S. Army Corps of Engineers.

The Property is comprised of approximately 8-acres of land, of which the majority is comprised of both scrub/shrub and forested areas. The Property has a hill near the center and generally slopes down to the north and east toward Winebrenner Run. Additionally, based on our review of historical documentation, the Property appears to have not changed dramatically since the early 1990's.

SEC performed this wetland delineation in order to identify the presence and approximate boundary of wetlands and drainage features on the Property. The United States Army Corps of Engineers (Corps) and the United States Environmental Protection Agency (USEPA) jointly define wetlands as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. The Corps system of wetland determinations generally requires that positive indicators for wetlands be present for the three mandatory wetland criteria of hydric soils, wetland hydrology, and hydrophytic vegetation.

LOCATION DESCRIPTION

The site lies near the city of Frostburg in Allegany County, Maryland. See Appendix A for the USGS Topographic Map showing the location.

The site lies within the North Branch of the Potomac River drainage basin which is under the jurisdiction of the U.S. Corps of Engineers, Baltimore District, Maryland – Northern Section.

2.0 METHODS

2.1 *DESCRIPTION OF METHOD*

Wetlands

A "Routine Onsite Inspection Determination" was utilized for this delineation as described by the Field Guide for Wetland Delineation 1987 Corps of Engineers Manual. Preliminary data gathering involved the use of all of the maps listed in Section 2.3. These maps were reviewed to determine the likelihood of wetland and/or non-wetland habitats within the project area. The maps are included in the Appendices. Following the background review, a field study was conducted to (1) characterize the vegetation, (2) inspect surface and groundwater hydrology, (3) examine the soils, and (4) based on this information determine whether jurisdictional wetlands and/or waters of the United States were present in the project area as in accordance to the three criterion established by the Army Corps of Engineers.

Major vegetative communities were investigated to determine the dominant vegetation present onsite. A minimum (per availability) of three species were chosen in each stratum, to determine if wetland vegetation was present. The wetland indicator status for each of the dominant species was obtained using the U.S. Fish and Wildlife Service's National List of Vascular Plant Species the Occur in Wetlands that classify plants into the specific scientific name, region, sub-region, and Plant Indicator Status Category. The method for selecting dominant plant species to determine the presence of hydrophytic vegetation was: (1) 5-ft. radius for herb and saplings/shrubs and (2) 30-ft. radius for trees and woody vines. All plants were subjectively selected based on measure of dominant species and greatest mass.

Determination of hydrologic activity was examined to be present if in fact that one primary indicator and/or at least two secondary indicators were observed. Any portion of the area having a positive wetland hydrology indicator has wetland hydrology. If positive wetland hydrology indicators are present in all community types, the entire area has wetland hydrology. If no plant community type has a wetland hydrology indicator, none of the area has wetland hydrology.

Hydric soils are deemed present in any plant community type in which: (1) all dominant species have an indicator status of OBL, (2) or all dominant species have an indicator status of OBL, or FACW, and the wetland boundary (when present) is abrupt. In addition, a soil is hydric if the presence of visible hydric indicators is present and visible within the soil profile described in the Corps of Engineers Wetland Delineation Manual.

Final determinations of wetlands were based upon the three criteria, the naturally occurring indicators, the ORAM score, and the professional judgment of the qualified wetland delineator.

Streams
A literature review was conducted using the available maps. These maps were reviewed to determine the location and potential watershed areas of streams within the project area. Field review of the delineation area included inspection on foot for any additional stream bodies not annotated on the preliminary review sources.

2.2 Existing Data Sources

A review of the following data sources was conducted to identify any indicators of wetlands on the Property. These data sources include:

1. United States Geological Survey (USGS) 7.5-minute quadrangle topographic map, Frostburg, MD (2014);

2. Aerial photographs dated 2016, 2015, 2013, 2011, 2009, 2008, 2007, 2005, and 1995;

3. United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map;

4. Web Soil Survey; United States Department of Agriculture, Natural Resources Conservation Service;

The following sections summarize our review of each of the aforementioned data sources.

Topographical Map
USGS topographic maps are useful in identifying the general delineation of open water areas, drainage patterns, and general land uses, such as cleared (e.g., agricultural or pasture), forested, or urban areas. Our review of the USGS topographic map indicates the Property is situated at an elevation of approximately 1,880 to 1,960 feet above mean sea level (AMSL). Additionally, the topographic map indicates that highest elevations at the Property are near the center of the site, and that the Property generally slopes down to the north and east. Furthermore, the topographic map does not depict any drainage features located on or adjacent to the Property. Winebrenner Run is located just off of the Property to the north and east and flows from northwest to southeast. The applicable portion of the USGS topographic map is shown on Figure 1.

Aerial Photographs
SEC reviewed the available aerial photography in an effort to assess the current use and condition of the Property and the potential presence of wetland and/or drainage features. Aerial photographs provide a detailed view of an area; thus, land use and other features (e.g., general type and aerial extent of plant

communities, stressed or non-planted row-crop farmland, and the degree of inundation of the area when the photograph was taken) can be determined.

The historical aerial photographs, dated 1985 to 2016 show that the Property currently and historically consists primarily scrub/shrub and forested habitats. The adjoining property to the north was developed approximately in 2010 and now houses a small storage facility. Overall, these aerial photographs show that very little has occurred on the property during the last twenty years. The historical aerial photographs discussed above are not included herein, but are on file with SEC, and may be provided for review upon request.

National Wetland Inventory Maps

The USFWS NWI maps identify potential Waters of the United States on a property. The wetland boundaries of NWI maps are based on the presumed presence of at least one of the three mandatory wetland criteria required by the Corps. Wetlands are identified on the NWI map based on stereoscopic analysis of high altitude aerial photography. The NWI map specifies that there is a margin of error inherent in the use of the aerial photographs and as a result, wetlands are sometimes erroneously identified, missed, or misidentified. The USFWS suggests that the presence and extent of each potential area denoted on the NWI map should be field verified.

The NWI map of this area obtained from the USFWS online NWI map database has been included as Appendix B. According to our review, no wetland areas were mapped on the Property.

Soil Survey

The United States Department of Agriculture, Web Soil Survey for the area shows 7 soils occurring within the delineation area. The soils identified in the soil report are all non-hydric meaning they are not known to be commonly saturated, flooded, or inundated, thus supporting wetland conditions. Please refer to Appendix C for a soil report of the property.

2.3 Wetland Determination Summary

Streams

The Property is situated on a slope between Old Legislative Road and Winebrenner Run. The site drains to the northeast into Winebrenner Run. During the site visit, one ephemeral stream was identified flowing from west to east near the center of the Property. Stream 1 originates on the west side of the Property from a culvert that drains the west side of Old Legislative Road. The area had recently had as much as 5 inches of snow prior to the site visit. The temperature at the time of our visit was approximately 66 degrees. As a result, the snow was melting and Stream 1 had a depth of approximately 8 inches. The channel became weak as the stream flowed east into WD-A (See description below). As

the gradient of the stream flattened, the channel stopped and no discharge was identified leaving WD-A.

Stream 1 was identified as a non-jurisdictional ephemeral do to the condition of the channel as it entered WD-A. The presence of both and bed and bank as well as an ordinary high-water mark were difficult to identify near WD-A.

Please refer to Figure 2 (the Wetland Delineation Area Map) for the location and length of Stream 1.

Wetlands

During our field activities, the Property was evaluated in accordance with the methodology described in Section 2.1. During our field activities, we observed apparent wetland conditions consisting predominantly of hydrophytic vegetation, hydric soil indicators and visual evidence of saturated soil or standing water in the aforementioned small area of trees in the southwest portion of the Property and in two areas along the scrub/shrub vegetation boundary between the storage area and the agricultural field in the northern portion of the Property.

Seven sampling points were completed across the site to determine the presence of the three wetland indicators.

WD-A was identified in the central portion of the Property. WD-A exhibited herbaceous vegetation dominated by *Carex sp.* (OBL), *Juncus sp.* (FACW), *Typha angustifolia* (OBL), and *Epilobium coloratum* (FACW). Each of these species are considered hydrophytic species; therefore, the area of Sample Point WD-A satisfied the wetland vegetation criteria. The soil present at WD-A exhibited a soil matrix color of 10YR 4/1 at a depth of 0 to 8 inches. The soil profile observed at WD-A would be considered indicative of a hydric soil. WD-A was inundated around the center to a depth of 3 inches and exhibited soil saturation at the surface, which are considered primary indicators of wetland hydrology. In addition, Stream 1 drains directly into WD-A as the primary source of hydrology. Despite this, no discharge was identified originating from WD-A.

Based on our observations, WD-A exhibited a dominance of hydrophytic vegetation, the presence of wetland hydrology, and satisfied the hydric soil criteria. However, no direct connection to Winebrenner Run was identified. Therefore, WD-A appears to be a non-jurisdictional PEM wetland.

Please refer to the Wetland Delineation Area Map for the location and length of WD-A.

The property is comprised of both old field and deciduous forest habitat. These areas were evaluated during the site visit. In the remaining areas of the Property, no wetland conditions were noted. The Wetland Determination Data Forms used in the determination and delineation process are located in Appendix D. These

forms are the written documentation of how representative sample locations meet or do not meet each of the three mandatory wetland criteria.

2.4 Property Photographs

Photographs of the observation points and portions of the Property are located in Appendix E. These are intended to provide representative visual samples of our observations at the Property.

3.0 Conclusions

Based on SECs review of the background information, the results of the field assessment activities completed by Mine Services Company, and the criteria established by the Corps, the following conclusions are set forth:

- The Property is comprised of approximately 8 acres of land, which is primarily unused and consists of scrub/shrub and forested habitats. The property ranges from 1,880 to 1,960 feet above mean sea level (AMSL) and has slopes as steep as 16%.
- One stream (Stream 1) is located near the center of the site and is approximately 236 linear feet. Stream 1 originates from a ditch located on the west side of Old Legislative Road. The ditch drains to the east through a culvert under the road and Stream 1 is formed from the discharge. Stream 1 drains into WD-A which does not discharge. Stream 1 is a non-jurisdictional ephemeral stream.
- One area (WD-A), approximately 0.017 acres, appeared to exhibit all three wetland criteria in the central portion of the Property at the end of Stream 1. The wetland does not show signs of having a surface discharge and was identified as a non-jurisdictional wetland.

Under the current policy, the Corps administers Section 404 of the Clean Water Act, which regulates the discharge of fill or dredged material into all "waters of the U.S.," and is the regulatory authority that must make the final determination as to the jurisdictional status of the Property.

The Corps regulates only those wetlands that are waters of the U.S. and/or are ultimately tributaries to waters of the U.S. The Corps protects jurisdictional wetlands and waters of the United States against direct discharge of dredged or fill material.

If characterized as waters of the U.S., any impacts to the identified wetlands would likely require a permit from the Corps in accordance with Section 404 of the Clean Water Act. However, as previously discussed, the Corps is the regulatory authority that must make final determination regarding the jurisdictional status of the identified drainage feature. Therefore, it would likely be necessary to obtain a Jurisdictional Determination from the Baltimore District of the Corps to determine the regulatory status of the drainage feature identified at the Property.


Wetland A (0.017 ac.)
Stream 1 (236 feet)
Delineation Area
1 Data Points
Allegany Junction: Wetland Delineation Area
Google Earth
WD-A
Stream 1
1
2
3
4
5
6

Appendix B

USFWS NWI Map

U.S. Fish and Wildlife Service

National Wetlands Inventory

Allegany Junction NWI Map

January 3, 2018

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

Appendix C

NRCS Soil Survey

United States Department of Agriculture

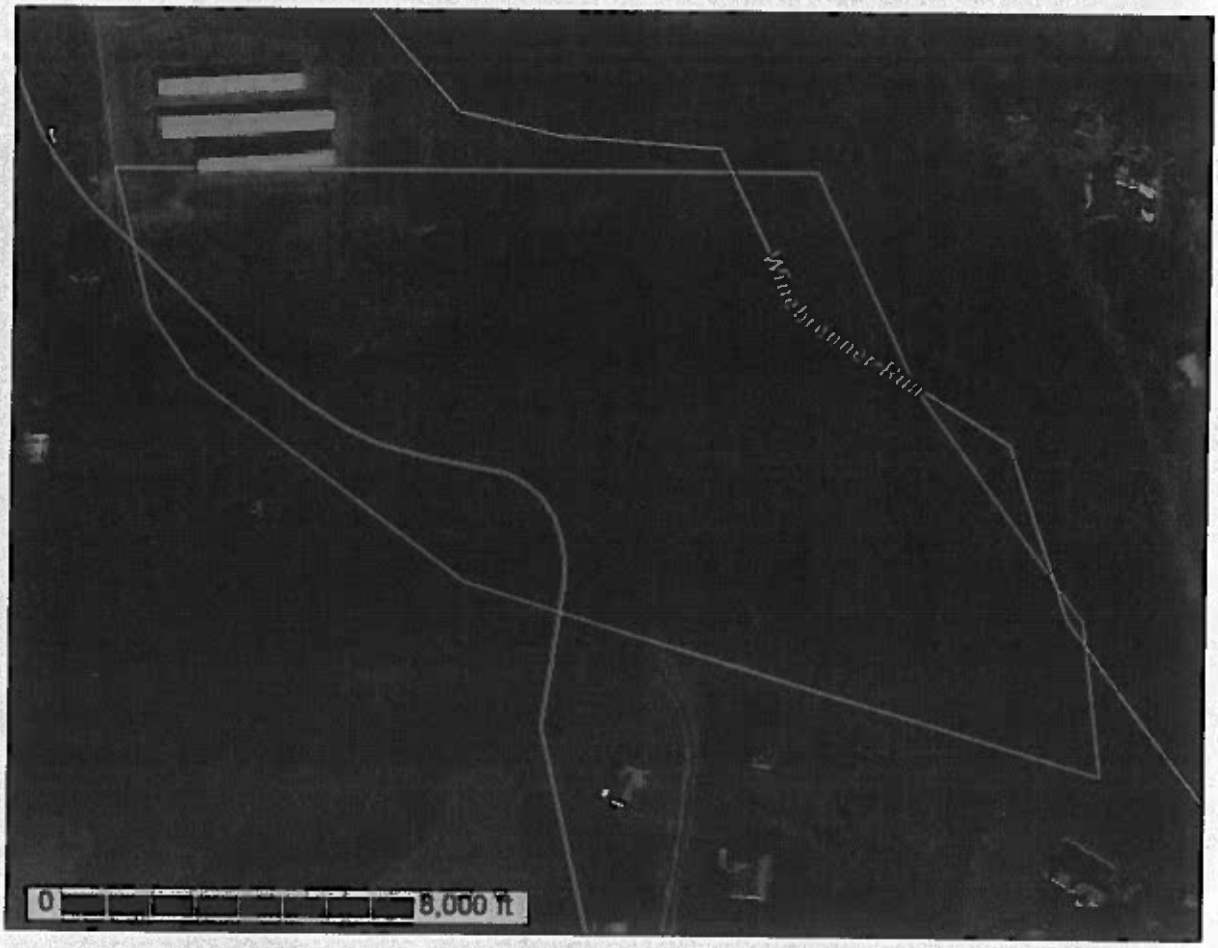
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Allegany County, Maryland

Allegany Junction Project Area



January 3, 2018

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

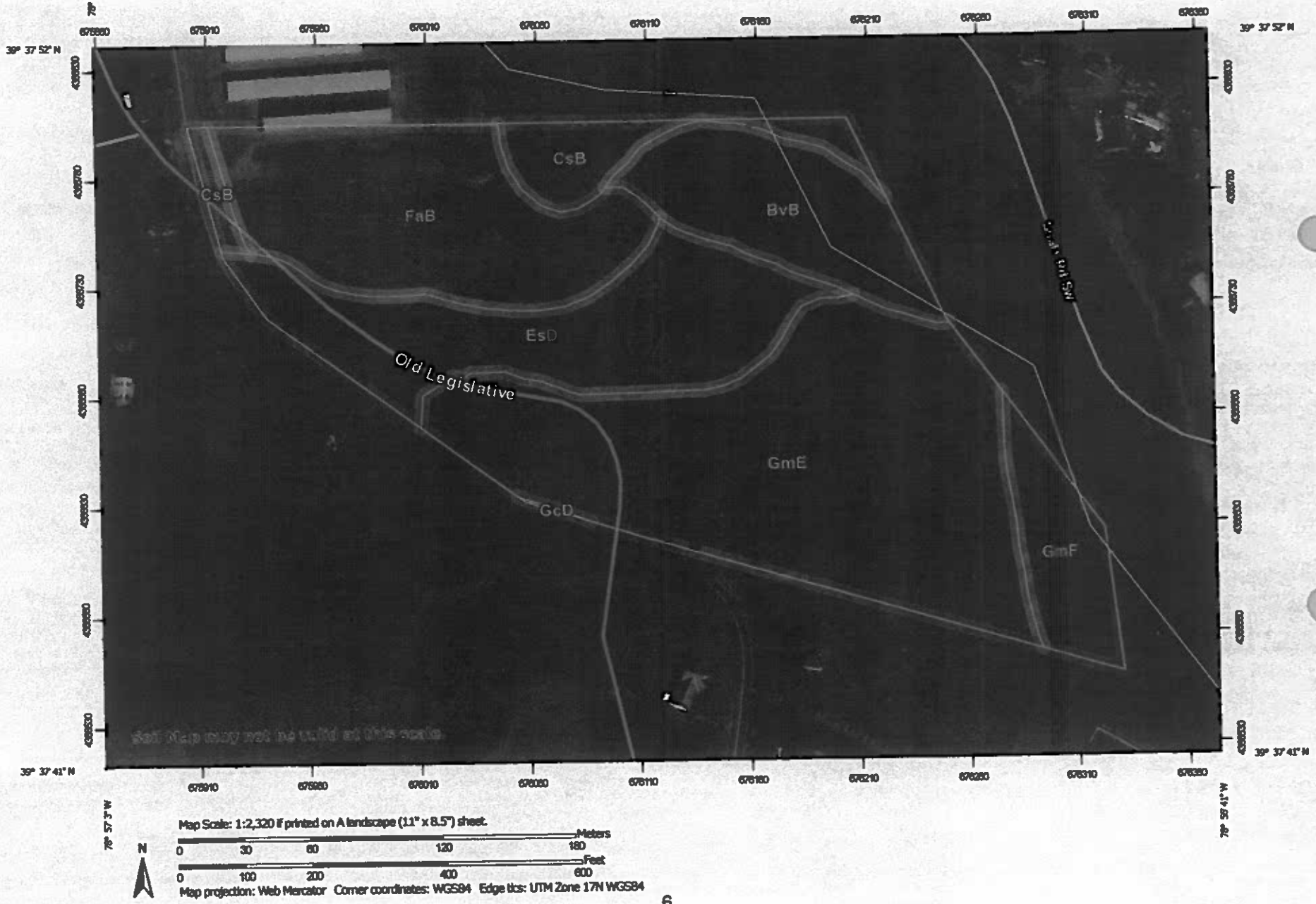
alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:2,320 if printed on A landscape (11" x 8.5") sheet.

Meters: 0 30 60 120 180

Feet: 0 100 200 400 600

N

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Allegany County, Maryland
Survey Area Data: Version 11, Sep 13, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 23, 2010—Mar 10, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BvB	Buchanan gravelly loam, 3 to 8 percent slopes, extremely stony	1.7	11.3%
CsB	Craigsville cobbly fine sandy loam, 3 to 8 percent slopes, very stony, occasionally flooded	0.8	5.4%
EsD	Ernest silt loam, 15 to 25 percent slopes, very stony	2.8	18.6%
FaB	Fairpoint channery loam, 0 to 8 percent slopes	3.0	19.8%
GcD	Gilpin channery silt loam, 15 to 25 percent slopes, very stony	0.0	0.0%
GmE	Gilpin very stony-Macove very rubbly complex, 25 to 45 percent slopes	5.9	38.7%
GmF	Gilpin very stony-Macove very rubbly complex, 45 to 65 percent slopes	0.9	6.1%
Totals for Area of Interest		15.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They

generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Allegany County, Maryland

BvB—Buchanan gravelly loam, 3 to 8 percent slopes, extremely stony

Map Unit Setting

National map unit symbol: 2sty6
Elevation: 710 to 2,850 feet
Mean annual precipitation: 38 to 50 inches
Mean annual air temperature: 45 to 49 degrees F
Frost-free period: 126 to 165 days
Farmland classification: Not prime farmland

Map Unit Composition

Buchanan and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Buchanan

Setting

Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Mountainbase, base slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Acid fine-loamy colluvium derived from sandstone and siltstone

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
Oe - 1 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: gravelly loam
E - 4 to 8 inches: gravelly loam
BE - 8 to 17 inches: gravelly loam
Bt - 17 to 29 inches: gravelly loam
Btx - 29 to 49 inches: gravelly loam
C - 49 to 80 inches: very gravelly loam

Properties and qualities

Slope: 3 to 8 percent
Percent of area covered with surface fragments: 9.0 percent
Depth to restrictive feature: 24 to 32 inches to fragipan
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 15 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C/D
Hydric soil rating: No

Minor Components

Laidig

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Hazleton

Percent of map unit: 4 percent
Landform: Hillslopes
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

Andover

Percent of map unit: 3 percent
Landform: Hillslopes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Craigsville

Percent of map unit: 3 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

CsB—Craigsville cobbly fine sandy loam, 3 to 8 percent slopes, very stony, occasionally flooded

Map Unit Setting

National map unit symbol: 2llkl
Elevation: 100 to 2,240 feet
Mean annual precipitation: 32 to 42 inches
Mean annual air temperature: 41 to 65 degrees F
Frost-free period: 158 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Craigsville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Craigsville

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly alluvium derived from interbedded sedimentary rock

Typical profile

A - 0 to 5 inches: cobbly fine sandy loam
Bw - 5 to 37 inches: very cobbly sandy loam
2C - 37 to 60 inches: extremely cobbly sandy loam

Properties and qualities

Slope: 3 to 8 percent
Percent of area covered with surface fragments: 2.0 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (1.98 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water storage in profile: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Atkins

Percent of map unit: 5 percent
Landform: Backswamps
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Wetlands (W2)
Hydric soil rating: Yes

Philo

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Concave

Other vegetative classification: Acid Loams (AL2)
Hydric soil rating: No

Pope

Percent of map unit: 5 percent
Landform: Flood plains
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Acid Loams (AL2)
Hydric soil rating: No

EsD—Ernest silt loam, 15 to 25 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2vb8h
Elevation: 670 to 2,710 feet
Mean annual precipitation: 38 to 50 inches
Mean annual air temperature: 45 to 49 degrees F
Frost-free period: 126 to 165 days
Farmland classification: Not prime farmland

Map Unit Composition

Ernest and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ernest

Setting

Landform: Hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave
Across-slope shape: Concave, linear
Parent material: Acid fine-loamy colluvium derived from shale and siltstone

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 4 inches: silt loam
E - 4 to 7 inches: silt loam
BE - 7 to 11 inches: silt loam
Bt - 11 to 23 inches: silty clay loam
Btx - 23 to 56 inches: channery loam
C - 56 to 80 inches: channery silt loam

Properties and qualities

Slope: 15 to 25 percent
Percent of area covered with surface fragments: 2.0 percent
Depth to restrictive feature: 17 to 30 inches to fragipan
Natural drainage class: Moderately well drained

Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 15 to 20 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 3.4 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Rayne
Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Acid Loams (AL3)
Hydric soil rating: No

Gilpin
Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Hydric soil rating: No

FaB—Fairpoint channery loam, 0 to 8 percent slopes

Map Unit Setting
National map unit symbol: 2llmz
Elevation: 560 to 2,890 feet
Mean annual precipitation: 33 to 68 inches
Mean annual air temperature: 43 to 54 degrees F
Frost-free period: 147 to 183 days
Farmland classification: Not prime farmland

Map Unit Composition
Fairpoint and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fairpoint

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop, mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Gravelly earthy fill derived from limestone, sandstone and shale

Typical profile

A - 0 to 9 inches: channery loam
C - 9 to 75 inches: very channery loam

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Gilpin

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop
Down-slope shape: Linear
Across-slope shape: Convex
Other vegetative classification: Acid Loams (AL3)
Hydric soil rating: No

Buchanan

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Other vegetative classification: Very Rocky, Acid Soils (RA2)
Hydric soil rating: No

Cedarcreek

Percent of map unit: 5 percent
Landform: Mountain slopes

Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountainflank, mountaintop
Down-slope shape: Linear
Across-slope shape: Convex
Other vegetative classification: Not Suited (NS)
Hydric soil rating: No

GcD—Gilpin channery silt loam, 15 to 25 percent slopes, very stony

Map Unit Setting

National map unit symbol: 2wsjg
Elevation: 1,050 to 2,740 feet
Mean annual precipitation: 38 to 50 inches
Mean annual air temperature: 45 to 49 degrees F
Frost-free period: 126 to 165 days
Farmland classification: Not prime farmland

Map Unit Composition

Gilpin and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope, interfluve, nose slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid fine-loamy residuum weathered from shale and siltstone and/or fine-grained sandstone

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
A - 2 to 3 inches: channery silt loam
E - 3 to 7 inches: silt loam
Bt - 7 to 24 inches: channery silt loam
C - 24 to 31 inches: extremely channery silt loam
R - 31 to 41 inches: bedrock

Properties and qualities

Slope: 15 to 25 percent
Percent of area covered with surface fragments: 2.0 percent
Depth to restrictive feature: 25 to 40 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to high (0.06 to 2.00 in/hr)
Depth to water table: More than 80 inches

Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Rayne

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope, interfluve, nose slope
Down-slope shape: Convex
Across-slope shape: Convex
Other vegetative classification: Acid Loams (AL3)
Hydric soil rating: No

Ernest

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave
Across-slope shape: Concave, linear
Hydric soil rating: No

GmE—Gilpin very stony-Macove very rubbly complex, 25 to 45 percent slopes

Map Unit Setting

National map unit symbol: 2llx
Elevation: 460 to 2,850 feet
Mean annual precipitation: 32 to 68 inches
Mean annual air temperature: 41 to 65 degrees F
Frost-free period: 147 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Gilpin and similar soils: 70 percent
Macove and similar soils: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Loamy residuum weathered from interbedded sedimentary rock

Typical profile

A - 0 to 8 inches: silt loam
Bt - 8 to 24 inches: channery silt loam
C - 24 to 30 inches: very channery loam
R - 30 to 35 inches: bedrock

Properties and qualities

Slope: 25 to 45 percent
Percent of area covered with surface fragments: 2.0 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Other vegetative classification: Acid Hills (AH3)
Hydric soil rating: No

Description of Macove

Setting

Landform: Hillslopes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Gravelly colluvium derived from acid shale

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
Oe - 2 to 3 inches: moderately decomposed plant material
Oa - 3 to 4 inches: highly decomposed plant material
A - 4 to 6 inches: gravelly sandy loam
BE - 6 to 14 inches: very channery silt loam
Bt1—>Bt4 - 14 to 65 inches: very channery silt loam

Properties and qualities

Slope: 25 to 45 percent
Percent of area covered with surface fragments: 65.0 percent

Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Other vegetative classification: Acid Loams (AL3)
Hydric soil rating: No

Minor Components

Rayne

Percent of map unit: 5 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Acid Loams (AL3)
Hydric soil rating: No

Ernest

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Other vegetative classification: Acid Loams (AL2)
Hydric soil rating: No

GmF—Gilpin very stony-Macove very rubbly complex, 45 to 65 percent slopes

Map Unit Setting

National map unit symbol: 2lly
Elevation: 490 to 2,850 feet
Mean annual precipitation: 32 to 68 inches
Mean annual air temperature: 41 to 65 degrees F
Frost-free period: 147 to 199 days
Farmland classification: Not prime farmland

Map Unit Composition

Gilpin and similar soils: 70 percent
Macove and similar soils: 20 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Loamy residuum weathered from interbedded sedimentary rock

Typical profile

A - 0 to 8 inches: silt loam
Bt - 8 to 24 inches: channery silt loam
C - 24 to 30 inches: very channery loam
R - 30 to 35 inches: bedrock

Properties and qualities

Slope: 45 to 65 percent
Percent of area covered with surface fragments: 2.0 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Other vegetative classification: Acid Hills (AH3)
Hydric soil rating: No

Description of Macove

Setting

Landform: Hillslopes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Gravelly colluvium derived from acid shale

Typical profile

Oi - 0 to 2 inches: slightly decomposed plant material
Oe - 2 to 3 inches: moderately decomposed plant material
Oa - 3 to 4 inches: highly decomposed plant material

A - 4 to 6 inches: gravelly sandy loam
BE - 6 to 14 inches: very channery silt loam
Bt1—>Bt4 - 14 to 65 inches: very channery silt loam

Properties and qualities

Slope: 45 to 65 percent
Percent of area covered with surface fragments: 65.0 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Other vegetative classification: Acid Loams (AL3)
Hydric soil rating: No

Minor Components

Rayne

Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: Acid Loams (AL3)
Hydric soil rating: No

Appendix D

Wetland Determination Data Forms

SEC, Inc.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Allegany Junction City/County: Frostburg/Allegany Sampling Date: January 11, 2018

Applicant/Owner: The Woda Group, Inc. State: MD Sampling Point: WD-A

Investigator(s): Nathaniel Grundy Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0%

Subregion (LRR or MLRA): _____ Lat: 39.630348° Long: -78.948741° Datum: _____

Soil Map Unit Name: GmE NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [X] No [ ] (If no, explain in Remarks.)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes [X] No [ ]

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes [X]	No [ ]	Is the Sampled Area within a Wetland? Yes [X] No [ ]
Hydric Soil Present?	Yes [X]	No [ ]	
Wetland Hydrology Present?	Yes [X]	No [ ]	

Remarks: Community type: Select from list

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [X] Surface Water (A1)
- [ ] High Water Table (A2)
- [X] 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 Plants (B14)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres on Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two 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)
- [X] Geomorphic Position (D2)
- [ ] Shallow Aquitard (D3)
- [X] Microtopographic Relief (D4)
- [X] FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes [X]	No [ ]	Depth (inches): 3"
Water Table Present?	Yes [X]	No [ ]	Depth (inches): N/A
Saturation Present? (includes capillary fringe)	Yes [X]	No [ ]	Depth (inches): Surface

Wetland Hydrology Present? Yes [X] No [ ]

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WD-A

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
		= Total Cover	

Herb Stratum (Plot size: 5 ft radius)			
1. *Typha angustifolia*	10	Y	OBL
2. *Carex sp.*	20	Y	OBL
3. *Juncus sp.*	10	Y	FACW
4. *Epilobium coloratum*	55	Y	FACW
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	95	= Total Cover	

Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	30	x 1 = 30
FACW species	65	x 2 = 130
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	95 (A)	160 (B)

Prevalence Index = B/A = 1.68

Hydrophytic Vegetation Indicators:

- [ ] 1 - Rapid Test for Hydrophytic Vegetation
- [x] 2 - Dominance Test is >50%
- [x] 3 - Prevalence Index is ≤3.0[1]
- [ ] 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes [X] No [ ]

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WD-A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
8	10YR 4/1	95						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147, 148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [x] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147, 148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Red Parent Material (TF2)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes [X] No [ ]

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Allegany Junction City/County: Frostburg/Allegany Sampling Date: January 11, 2018

Applicant/Owner: The Woda Group, Inc. State: MD Sampling Point: 1

Investigator(s): Nathaniel Grundy Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Field/Slope Local relief (concave, convex, none): Convex Slope (%): 2%

Subregion (LRR or MLRA): _____ Lat: 39.630413° Long: -78.949564° Datum: _____

Soil Map Unit Name: FaB NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [X] No [ ] (If no, explain in Remarks.)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes [X] No [ ]

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes [ ]	No [X]	Is the Sampled Area within a Wetland? Yes [ ] No [X]
Hydric Soil Present?	Yes [ ]	No [X]	
Wetland Hydrology Present?	Yes [ ]	No [X]	

Remarks: Community type: Select from list

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [ ] 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 Plants (B14)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres on Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two 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)

Field Observations:

Surface Water Present?	Yes [ ]	No [X]	Depth (inches): _____
Water Table Present?	Yes [ ]	No [X]	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes [ ]	No [X]	Depth (inches): _____

Wetland Hydrology Present? Yes [ ] No [X]

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 1

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
		= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
		= Total Cover	

Herb Stratum (Plot size: 5 ft radius)			
1. *Solidago altissima*	25	Y	FACU
2. *Symphyotrichum sp.*	25	Y	FACU
3. *Phleum pratense*	40	Y	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species	90	x 4 =	360
UPL species		x 5 =	
Column Totals:	90 (A)		360 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

- ☐ 1 - Rapid Test for Hydrophytic Vegetation
- ☐ 2 - Dominance Test is >50%
- ☐ 3 - Prevalence Index is ≤3.0[1]
- ☐ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
7	10YR 4/3	95						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Allegany Junction City/County: Frostburg/Allegany Sampling Date: January 11, 2018

Applicant/Owner: The Woda Group, Inc. State: MD Sampling Point: 2

Investigator(s): Nathaniel Grundy Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Field/Slope Local relief (concave, convex, none): Convex Slope (%): 5%

Subregion (LRR or MLRA): _____ Lat: 39.630521° Long: -78.947916° Datum: _____

Soil Map Unit Name: BvB NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [X] No [ ] (If no, explain in Remarks.)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes [X] No [ ]

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes [ ]	No [X]	Is the Sampled Area within a Wetland? Yes [ ] No [X]
Hydric Soil Present?	Yes [ ]	No [X]	
Wetland Hydrology Present?	Yes [ ]	No [X]	

Remarks: Community type: Select from list

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [ ] 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 Plants (B14)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres on Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two 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)

Field Observations:

Surface Water Present?	Yes [ ]	No [X]	Depth (inches): _____
Water Table Present?	Yes [ ]	No [X]	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes [ ]	No [X]	Depth (inches): _____

Wetland Hydrology Present? Yes [ ] No [X]

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 2

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharum*	30	Y	FACU
2. *Quercus rubra*	30	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	60	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Lonicera tartarica*	30	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	30	= Total Cover	

Herb Stratum (Plot size: 5 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species	90	x 4 =	360
UPL species		x 5 =	
Column Totals:	90 (A)		360 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

- [ ] 1 - Rapid Test for Hydrophytic Vegetation
- [ ] 2 - Dominance Test is >50%
- [ ] 3 - Prevalence Index is ≤3.0[1]
- [ ] 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes [ ] No [X]

Remarks: (include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
6	10YR 4/3	95						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Allegany Junction City/County: Frostburg/Allegany Sampling Date: January 11, 2016

Applicant/Owner: The Woda Group, Inc. State: MD Sampling Point: 3

Investigator(s): Nathaniel Grundy Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Field/Slope Local relief (concave, convex, none): Convex Slope (%): 5%

Subregion (LRR or MLRA): _____ Lat: 39.629997° Long: -78.947428° Datum: _____

Soil Map Unit Name: GmE NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [X] No [ ] (If no, explain in Remarks.)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes [X] No [ ]

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes [ ]	No [X]	Is the Sampled Area within a Wetland? Yes [ ] No [X]
Hydric Soil Present?	Yes [ ]	No [X]	
Wetland Hydrology Present?	Yes [ ]	No [X]	

Remarks: Community type: Select from list

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [ ] 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 Plants (B14)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres on Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two 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)

Field Observations:

Surface Water Present?	Yes [ ]	No [X]	Depth (inches): _____
Water Table Present?	Yes [ ]	No [X]	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes [ ]	No [X]	Depth (inches): _____

Wetland Hydrology Present? Yes [ ] No [X]

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 3

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharum*	35	Y	FACU
2. *Quercus rubra*	30	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	65	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Lonicera tartaria*	25	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	25	= Total Cover	

Herb Stratum (Plot size: 5 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species	90	x 4 =	360
UPL species		x 5 =	
Column Totals:	90 (A)		360 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

- [ ] 1 - Rapid Test for Hydrophytic Vegetation
- [ ] 2 - Dominance Test is >50%
- [ ] 3 - Prevalence Index is ≤3.0[1]
- [ ] 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes [ ] No [X]

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
7	10YR 4/3	95						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Allegany Junction City/County: Frostburg/Allegany Sampling Date: January 11, 2018

Applicant/Owner: The Wade Group, Inc, State: MD Sampling Point: 4

Investigator(s): Nathaniel Grundy Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Field/Slope Local relief (concave, convex, none): Convex Slope (%): 5%

Subregion (LRR or MLRA): _____ Lat: 39.629488° Long: -78.947151° Datum: _____

Soil Map Unit Name: GmE NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [X] No [ ] (If no, explain in Remarks.)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes [X] No [ ]

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes [ ]	No [X]	Is the Sampled Area within a Wetland? Yes [ ] No [X]
Hydric Soil Present?	Yes [ ]	No [X]	
Wetland Hydrology Present?	Yes [ ]	No [X]	

Remarks: Community type: Select from list

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [ ] 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 Plants (B14)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres on Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two 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)

Field Observations:

Surface Water Present?	Yes [ ]	No [X]	Depth (inches): _____
Water Table Present?	Yes [ ]	No [X]	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes [ ]	No [X]	Depth (inches): _____

Wetland Hydrology Present? Yes [ ] No [X]

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 4

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharum*	35	Y	FACU
2. *Quercus rubra*	35	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	70	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Lonicera tartaria*	20	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	= Total Cover	

Herb Stratum (Plot size: 5 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species	90	x 4 =	360
UPL species		x 5 =	
Column Totals:	90 (A)		360 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

- [ ] 1 - Rapid Test for Hydrophytic Vegetation
- [ ] 2 - Dominance Test is >50%
- [ ] 3 - Prevalence Index is ≤3.0[1]
- [ ] 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes [ ] No [X]

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
7	10YR 4/3	95						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- [ ] Histosol (A1)
- [ ] Histic Epipedon (A2)
- [ ] Black Histic (A3)
- [ ] Hydrogen Sulfide (A4)
- [ ] Stratified Layers (A5)
- [ ] 2 cm Muck (A10) (LRR N)
- [ ] Depleted Below Dark Surface (A11)
- [ ] Thick Dark Surface (A12)
- [ ] Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- [ ] Sandy Gleyed Matrix (S4)
- [ ] Sandy Redox (S5)
- [ ] Stripped Matrix (S6)
- [ ] Dark Surface (S7)
- [ ] Polyvalue Below Surface (S8) (MLRA 147, 148)
- [ ] Thin Dark Surface (S9) (MLRA 147, 148)
- [ ] Loamy Gleyed Matrix (F2)
- [ ] Depleted Matrix (F3)
- [ ] Redox Dark Surface (F6)
- [ ] Depleted Dark Surface (F7)
- [ ] Redox Depressions (F8)
- [ ] Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- [ ] Umbric Surface (F13) (MLRA 136, 122)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 148)

Indicators for Problematic Hydric Soils[3]:

- [ ] 2 cm Muck (A10) (MLRA 147)
- [ ] Coast Prairie Redox (A16) (MLRA 147, 148)
- [ ] Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- [ ] Red Parent Material (TF2)
- [ ] Very Shallow Dark Surface (TF12)
- [ ] Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes [ ] No [X]

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Allegany Junction City/County: Frostburg/Allegany Sampling Date: January 11, 2016

Applicant/Owner: The Woda Group, Inc, State: MD Sampling Point: 5

Investigator(s): Nathaniel Grundy Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Field/Slope Local relief (concave, convex, none): Convex Slope (%): 5%

Subregion (LRR or MLRA): _____ Lat: 39.629812° Long: -78.948165° Datum: _____

Soil Map Unit Name: GmE NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [X] No [ ] (If no, explain in Remarks.)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes [X] No [ ]

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes [ ]	No [X]	Is the Sampled Area within a Wetland? Yes [ ] No [X]
Hydric Soil Present?	Yes [ ]	No [X]	
Wetland Hydrology Present?	Yes [ ]	No [X]	

Remarks: Community type: Select from list

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [ ] 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 Plants (B14)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres on Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two 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)

Field Observations:

Surface Water Present?	Yes [ ]	No [X]	Depth (inches): _____
Water Table Present?	Yes [ ]	No [X]	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes [ ]	No [X]	Depth (inches): _____

Wetland Hydrology Present? Yes [ ] No [X]

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 5

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Acer saccharum*	35	Y	FACU
2. *Quercus rubra*	35	Y	FACU
3.			
4.			
5.			
6.			
7.			
8.			
	70	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1. *Lonicera tartarica*	20	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	20	= Total Cover	

Herb Stratum (Plot size: 5 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species	90	x 4 =	360
UPL species		x 5 =	
Column Totals:	90 (A)		360 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

- [ ] 1 - Rapid Test for Hydrophytic Vegetation
- [ ] 2 - Dominance Test is >50%
- [ ] 3 - Prevalence Index is ≤3.0[1]
- [ ] 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes [ ] No [X]

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
6	10YR 4/3	95						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) (LRR N)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) (MLRA 147, 148)
- ☐ Thin Dark Surface (S9) (MLRA 147, 148)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)
- ☐ Umbric Surface (F13) (MLRA 136, 122)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 148)

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) (MLRA 147)
- ☐ Coast Prairie Redox (A16) (MLRA 147, 148)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont

Project/Site: Allegany Junction City/County: Frostburg/Allegany Sampling Date: January 11, 2018

Applicant/Owner: The Woda Group, Inc. State: MD Sampling Point: 6

Investigator(s): Nathaniel Grundy Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Field/Slope Local relief (concave, convex, none): Convex Slope (%): 5%

Subregion (LRR or MLRA): _____ Lat: 39.630076° Long: -78.948843° Datum: _____

Soil Map Unit Name: EsD NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [X] No [ ] (If no, explain in Remarks.)

Are Vegetation [ ], Soil [ ], or Hydrology [ ] significantly disturbed? Are "Normal Circumstances" present? Yes [X] No [ ]

Are Vegetation [ ], Soil [ ], or Hydrology [ ] naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes [ ]	No [X]	Is the Sampled Area within a Wetland? Yes [ ] No [X]
Hydric Soil Present?	Yes [ ]	No [X]	
Wetland Hydrology Present?	Yes [ ]	No [X]	

Remarks: Community type: Select from list

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- [ ] 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 Plants (B14)
- [ ] Hydrogen Sulfide Odor (C1)
- [ ] Oxidized Rhizospheres on Living Roots (C3)
- [ ] Presence of Reduced Iron (C4)
- [ ] Recent Iron Reduction in Tilled Soils (C6)
- [ ] Thin Muck Surface (C7)
- [ ] Other (Explain in Remarks)

Secondary Indicators (minimum of two 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)

Field Observations:

Surface Water Present?	Yes [ ]	No [X]	Depth (inches): _____
Water Table Present?	Yes [ ]	No [X]	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes [ ]	No [X]	Depth (inches): _____

Wetland Hydrology Present? Yes [ ] No [X]

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 6

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	= Total Cover		

Sapling/Shrub Stratum (Plot size: 15 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		

Herb Stratum (Plot size: 5 ft radius)			
1. *Solidago altissima*	40	Y	FACU
2. *Symphyotrichum sp.*	25	Y	FACU
3. *Phleum pratense*	25	Y	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	= Total Cover		

Woody Vine Stratum (Plot size: 30 ft radius)			
1.			
2.			
3.			
4.			
5.			
6.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species	90	x 4 =	360
UPL species		x 5 =	
Column Totals:	90 (A)		360 (B)

Prevalence Index = B/A = 4.0

Hydrophytic Vegetation Indicators:

- [ ] 1 - Rapid Test for Hydrophytic Vegetation
- [ ] 2 - Dominance Test is >50%
- [ ] 3 - Prevalence Index is ≤3.0[1]
- [ ] 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Four Vegetation Strata:

Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes [ ] No [X]

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
8	10YR 4/3	95						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ 2 cm Muck (A10) **(LRR N)**
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1) **(LRR N, MLRA 147, 148)**
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7)
- ☐ Polyvalue Below Surface (S8) **(MLRA 147, 148)**
- ☐ Thin Dark Surface (S9) **(MLRA 147, 148)**
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Iron-Manganese Masses (F12) **(LRR N, MLRA 136)**
- ☐ Umbric Surface (F13) **(MLRA 136, 122)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 148)**

Indicators for Problematic Hydric Soils[3]:

- ☐ 2 cm Muck (A10) **(MLRA 147)**
- ☐ Coast Prairie Redox (A16) **(MLRA 147, 148)**
- ☐ Piedmont Floodplain Soils (F19) **(MLRA 136, 147)**
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Appendix E

Property Photographs

1.

2

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

17.

18.

19.

20.

21.

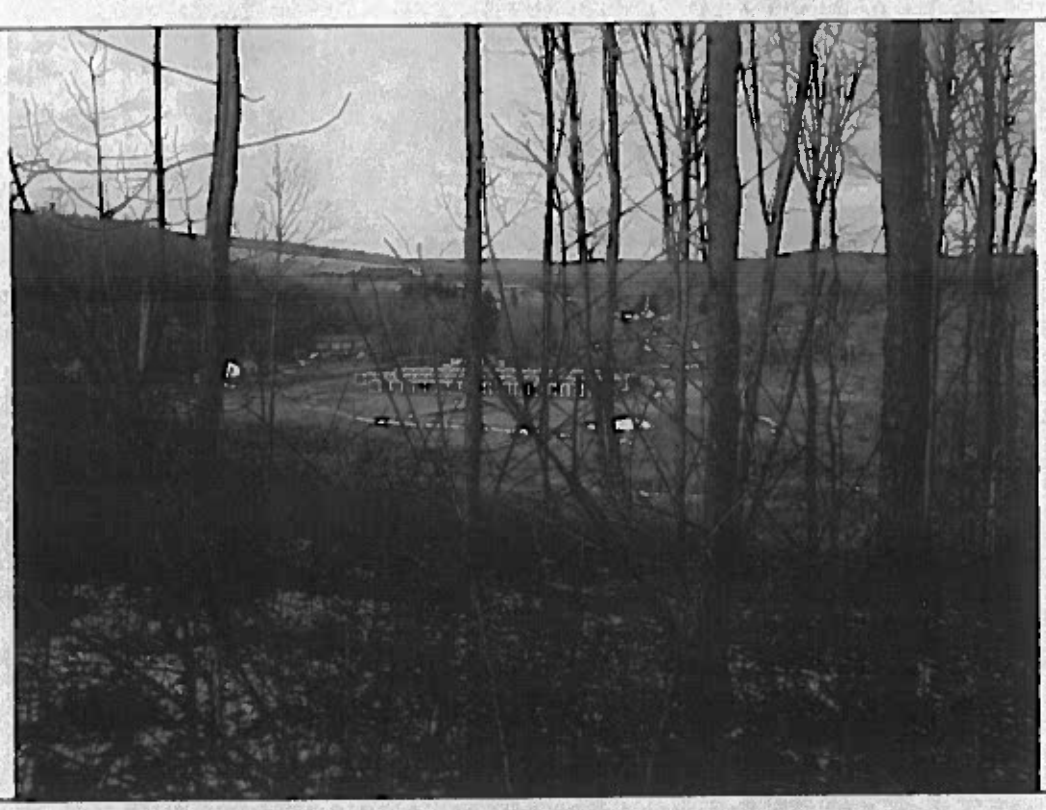
22.

23.

24.

25.

26.

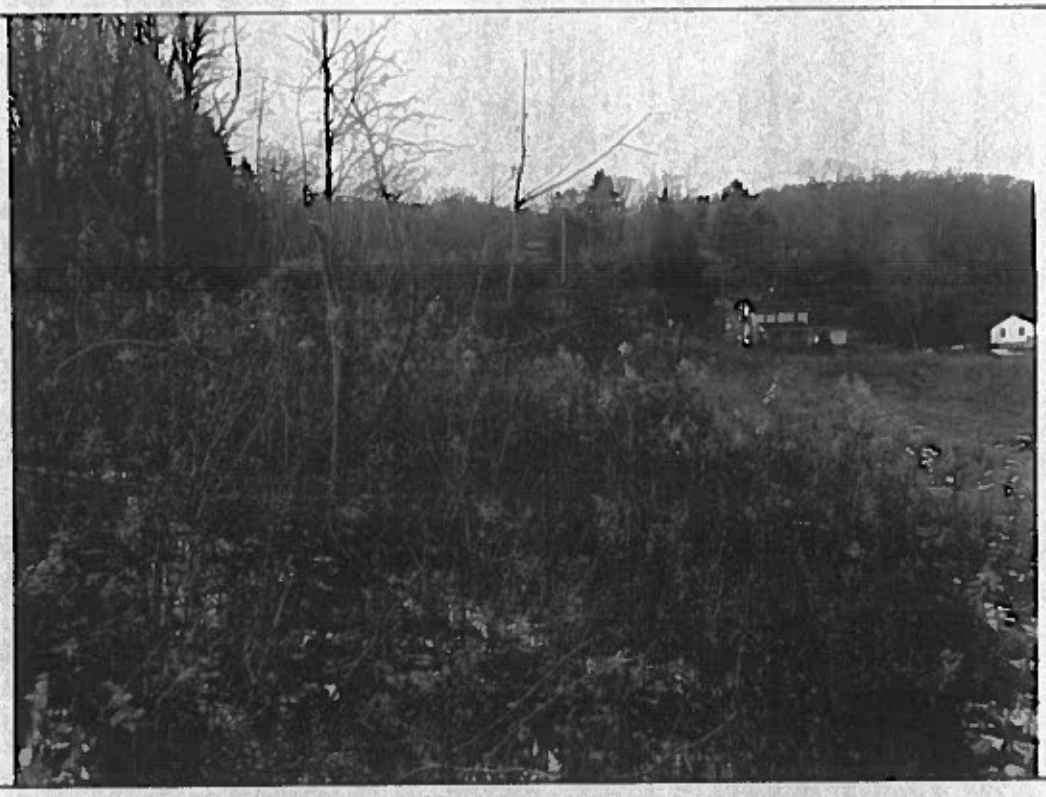


27.

28.

29.

30.



31.

32.

33.

34.

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

Larry Hogan, Governor
Boyd Rutherford, Lt. Governor
Mark Belton, Secretary
Joanne Throwe, Deputy Secretary

July 23, 2018

Amanda Sigillito
Maryland Dept. of Environment
Water Management Administration
1800 Washington Boulevard
4th Floor
Baltimore, MD 21230-3671

Director, DNR Environmental Review Program

RE: JPA #201861137 Allegany County/Allegany Junction

DNR Freshwater Fisheries and Environmental Review Program staff has reviewed the JPA document for Allegany Junction Limited Partnership, LLC to construct at 40 unit housing building in the Winebrenner Run watershed. Winebrenner Run is impacted by acid mine drainage (AMD) a short distance upstream of the proposed project site. Historic surveys (1996) found no fish or benthic macroinvertebrates in the AMD impacted stream near the proposed project. Downstream, Winebrenner Run flows into a complex of fairly large wet ponds and further downstream some reaches are reported to dry up during low flow periods due to past underground mining activity. These conditions limit the connectivity of Winebrenner Run with other streams within the watershed.

However, water quality and habitat in the headwaters of Windbrenner Run upstream of the source of AMD are very good. Both species of coldwater macroinvertebrate taxa, Sweltsa and Tallaperla, were documented by MBSS surveys in 2015. Brook trout were reintroduced in 2012 and a self sustaining population has developed. With the success of AMD remediation activities in the region and the potential for water quality improvements in the project area, Freshwater Fisheries offers the following comments.

Much of the property currently consists of relatively mature forest canopy; an adequate forest buffer should be maintained along Winebrenner Run to provide shade, streambank stability and physical instream habitat. To counter the increase in impervious surfaces resulting from the housing unit, parking areas should incorporate pervious asphalt and underground treatment to reduce the temperature of stormwater runoff if local soil conditions are suitable. Although the details of the stormwater management are difficult to decipher from the enlarged, scanned copy, several retention ponds are evident. Fisheries recommends the use of subsurface stormwater treatment designs in watersheds that contain coldwater resources. All efforts should be made to incorporate the recommendations contained within MDE's Stormwater Design Manual to protect Winebrenner Run
http://mde.maryland.gov/programs/water/StormwaterManagementProgram/Pages/stormwater_design.aspx). The department's preferred option would be to utilize the approach/principles presented in Chapter 5 of the manual (i.e. Environmental Site Design). As recommended in Chapter 5, smaller controls should be utilized to capture and treat runoff closer to the source, thus attempting to approach pre-development runoff characteristics. Chapter 4 also presents a number of recommendations that should be considered to protect coldwater streams such has Winebrenner Run. These recommendations can be found on page 4.3, among others.

Thank you for the opportunity to comment on this proposed project. Please contact me if you have any questions of need additional information.