

## WETLAND TECHNICAL REPORT

### Alignment Selection SDEIS

# APPALACHIAN CORRIDOR H

Elkins to Interstate 81



West Virginia Department  
of Transportation

**Baker**

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## I. INTRODUCTION

This is the *Wetlands Technical Report* of the 1994 *Alignment Selection Supplemental Draft Environmental Impact Statement* (SDEIS) prepared for the construction of Appalachian Corridor H from Elkins, West Virginia, to Interstate 81 in Virginia. The SDEIS has been prepared in accordance with a two-step study process explained in the *Preface of the Corridor H Alignment Selection SDEIS*. Other documents related to the SDEIS include the *Executive Summary*, the *Alignment and Resource Location Plans*, the *Cultural Resources Technical Report*, the *Secondary and Cumulative Impacts Technical Report*, the *Socioeconomics Technical Report*, the *Vegetation and Wildlife Habitat Technical Report*, the *Streams Technical Report*, the *Air, Noise and Energy Technical Report*, the October 21, 1992 *Corridor Selection SDEIS* and associated Technical Reports, and the July 26, 1993 *Decision Document*.

Appalachian Corridor H is one of the economic growth highways designated by Congress to serve the Appalachian Region. There are three alternatives under study: the No-Build Alternative, the Improved Roadway Alternative (IRA), and the Build Alternative. The No-Build Alternative means that Corridor H would not be constructed in any fashion. The Improved Roadway Alternative consists of a proposed two-lane highway which would utilize existing roads as much as possible. The Build Alternative is a proposed four-lane highway which would be constructed entirely on new location. Refer to the SDEIS, Section II-B, for more information on the design criteria and design elements of these alternatives.

The purpose of the *Wetlands Technical Report* is to document the existing conditions of wetlands and the impacts resulting from the construction of the proposed Corridor H project. The wetlands assessment follows the guidance of Federal Highway Administration (FHWA) Technical Advisory T6640.8A (US Department of Transportation, 1987). The Technical Advisory requires the identification of wetland type, quality and functions; assessment of impacts to wetlands; evaluation of alternatives which would avoid wetlands; and identification of practical measures to minimize harm to wetlands. For each proposed alternative the following procedures were followed:

- ♦ Wetlands were identified, delineated, and classified;
- ♦ The functions and values of each delineated wetland were evaluated;
- ♦ The impacts of the proposed alternatives on each wetland were evaluated;
- ♦ Avoidance alternatives for each wetland were evaluated;
- ♦ Practicable measures to minimize harm to the wetlands were identified;
- ♦ Mitigation measures which include preservation, enhancement, restoration, and creation were identified.

This report consists of three major sections. The Methodology section describes the procedures used to identify, delineate, and classify wetlands during field investigations. Procedures for performing the functions



and values evaluation and impact assessment are also described. The Existing Environment and Impacts section describes the wetland conditions present within the proposed project area and a discussion of direct and secondary wetland impacts associated with the Improved Roadway and Build Alternatives. The Avoidance, Minimization and Mitigation section describes specific measures taken to avoid and minimize wetland impacts for the Improved Roadway and Build Alternatives and presents an overview of potential mitigation scenarios.

## ***II. METHODOLOGY***

### **A. WETLAND IDENTIFICATION, DELINEATION, AND CLASSIFICATION**

Wetlands are defined by the Environmental Protection Agency (EPA) and the US Army Corps of Engineers (COE) as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (EPA, 40 CFR 230.3 and COE, 33 CFR 328.3). This definition was followed for the wetland identification and delineation in this wetlands assessment.

#### **1. PRELIMINARY IDENTIFICATION**

Preliminary identification of wetlands in the study area was conducted during preparation of the 1992 *Corridor Selection SDEIS* using a combination of sources that included topographic maps, National Wetland Inventory (NWI) maps, Soil Conservation Service County Soil Surveys, and field reconnaissance. This information was further refined for this wetlands assessment by initially producing a land use and land cover map through the interpretation of 1" = 1,000' scale aerial photography and selected groundtruthing. The photography encompassed an area approximately 3.2 km (2 miles) wide and 192 km (120 miles) in length. Existing land use/land cover was classified to Anderson Level II in accordance with Anderson *et al.* (1976), which includes two wetland classes. This material was compiled within a Geographic Information System (GIS).

#### **2. IDENTIFICATION AND DELINEATION CRITERIA**

After the land cover mapping was complete, the methods outlined in the Corps of Engineers Wetlands Delineation Manual (COE Manual; US Army Corps of Engineers, 1987) were used to identify and delineate wetlands in the field. Wetlands exhibit specific types of vegetation, soils and hydrology, each of which is analyzed and described in a field delineation. All three criteria must be considered together when making a wetland determination.

The first criterion for the classification of an area as a wetland is the predominance of wetland vegetation. This type of vegetation is comprised of plants that are adapted for growth and reproduction in water or on a substrate that is at least periodically deficient in oxygen as a result of excess water content. The US Fish and Wildlife Service (USFWS) has developed a classification scheme that rates plants according to their estimated probability of occurring in a wetland. Table 1 summarizes the USFWS rating scheme, and indicates the relative rate of occurrence in wetlands of each classification of vegetation. When more than 50% of the dominant plant species have an indicator status of obligate, facultative wetland, and/or facultative,



**TABLE 1**  
**US FISH AND WILDLIFE SERVICE LIST OF PLANT INDICATOR CATEGORIES**

INDICATOR CATEGORY	INDICATOR SYMBOL	DEFINITION
Obligate Wetland Plants	OBL	Plants that occur almost always (>99% of the time) in wetlands under natural conditions, but which may also occur rarely (<1%) in nonwetlands.
Facultative Wetland Plants	FACW	Plants that usually occur in wetlands (67% - 99% of the time), but also occur in nonwetlands (1-33% of the time).
Facultative Plants	FAC	Plants with an equal likelihood (33-67% of the time) of occurring in both wetlands and nonwetlands.
Facultative Upland Plants	FACU	Plants that occur sometimes (1-33% of the time) in wetlands, but occur more often (67-99% of the time) in nonwetlands.
Upland Plants	UPL	Plants that occur rarely (<1% of the time) in wetlands, but occur almost always (>99% of the time) in nonwetlands under natural conditions.
Undefined Plants	NI	Species for which insufficient information was available to determine an indicator status.
Undefined Plants	NA	No agreement was made as to the indicator status.

Source: US Fish and Wildlife National List, 1988

the plant community is considered to be hydrophilic and satisfies the wetland vegetative criteria. For the Corridor H wetland assessment, the indicator status of each identified plant was assigned according to the *National List of Plant Species That Occur in Wetlands: Northeast (Region 1)*, (Reed, 1988).

The second criterion for classifying an area as a wetland is the presence of hydric soils. In general, hydric soils are inundated 7 days or saturated to the surface for at least 15 consecutive days during the growing season in most years. The general criteria for hydric soils are published in *Hydric Soils of the United States* (US Department of Agriculture, Soil Conservation Service, 1991). In addition, the Soil Conservation Service identifies specific soil types that are considered hydric in local areas.

A standard field method of determining if a soil is hydric is a comparison of the soil color to a Munsell Soil Color Chart (Munsell Color, 1990). The color of a soil changes during periods of saturation due to lack of oxygen. A gleyed (blue-green), dark gray, or black soil usually indicates long periods of saturation. Soils that experience moderate periods of saturation are predominantly gray with mottles or inclusions of bright orange or brown color. The intensity of gray is termed chroma. A soil is considered hydric if it is gleyed, has a matrix chroma 1 (very dark gray-black) without mottles, or has a chroma of 2 (gray) with mottles.

The final criterion for the classification of an area as a wetland is hydrology. Positive wetland hydrology creates the conditions required to support hydrophilic vegetation and results in development of hydric soils. This characteristic is measured by the length of saturation or flooding at the site, generally requiring saturation of the soil to the surface consecutively for more than 12.5 percent of the growing season. Thus, the range of wetland hydrology varies according to the length of the growing season at a specific site. In the project area, the minimum time varies from a low of 11 days in high elevations of Tucker County, West Virginia, to 27 days in Frederick County, Virginia. Field indicators of wetland hydrology include ponding, flooding, high water table, saturated soils, water marks, drift lines, surface scouring, drainage patterns, water-stained leaves, oxidized root channels, and moss lines.

### 3. WETLAND CLASSIFICATION

Wetland classification was based on a system developed by the USFWS (Cowardin *et al.*, 1979). This classification system is a hierarchical system developed to describe wetlands and deepwater habitats throughout the United States. The classification starts with 'System' as the highest level and progresses to finer subdivisions: subsystem, class, subclass, and dominance type. In addition, special modifiers for water regime, water chemistry and soils are applied to classes, subclasses, and dominance types for further descriptive purposes.



The System level of the classification contains five types of wetland or deepwater habitats: marine, estuarine, riverine, lacustrine, and palustrine. Only palustrine (fresh water) systems were identified and delineated for the Wetlands Assessment. This is because there are no marine or estuarine systems in the project area and riverine and lacustrine systems are addressed in the *Water Resources Technical Report*. The palustrine system hierarchy does not contain the subsystem level of classification. Class is the next taxonomic unit below the subsystem level. Class describes the general appearance of the wetland habitat in terms of the dominant vegetation form or the physiography and composition of the substrate. The class is named according to the tallest vegetation type that comprises at least 30 percent of the plant cover. Typical classes include emergent (herbaceous), scrub-shrub, forested, unconsolidated bottom, and open water. Wetlands can be classified as combined classes, such as scrub-shrub/forested and emergent/open water. This occurs when two or more cover types are present in one area, each encompassing at least 30 percent of the area. Typically, the area is either too small to allow separate delineation of each class or the classes are so evenly interspersed that separate delineation is not possible. Table 2 lists the palustrine system classes and associated subclasses, while Table 3 identifies the modifiers commonly used in the palustrine system. All wetlands were classified to subclass and water regime modifier.

#### 4. FIELD DELINEATIONS

The field delineations were conducted by environmental scientists trained in Federal wetlands determination and delineation procedures. The Routine Onsite Determination Method, as detailed in the COE Manual, was used for wetlands identification and delineation. Detailed data were collected for all wetlands located in the vicinity of the alternatives. Vegetation, hydrology, and soil data were recorded on field data sheets in representative plant communities of each wetland. Delineation data forms for all wetlands are provided in Appendix C. Representative photographs were taken at each wetland. Each delineated wetland was given an alpha-numeric identification code.

The delineated wetlands were mapped in the field at a scale of 1"=200' by using a combination of landmarks, pacing, compass bearings, and portable global positioning system (GPS) meters. Wetlands outside the area of impact were identified, classified, and located on project mapping. Approximate boundary limits were determined using vegetation. All wetland data, including boundaries and vegetation classification were entered into the GIS.

**TABLE 2**  
**PALUSTRINE SYSTEM CLASSES AND SUBCLASSES**

CLASS	SUBCLASS
RB - Rock Bottom	1. Bedrock 2. Rubble
UB - Unconsolidated Bottom	1. Cobble-Gravel 2. Sand 3. Mud 4. Organic
AB - Aquatic Bed	1. Algal 2. Aquatic Moss 3. Rooted Vascular 4. Floating Vascular 5. Unknown Submergent 6. Unknown Surface
US - Unconsolidated Shore	1. Cobble -Gravel 2. Sand 3. Mud 4. Organic 5. Vegetated
ML - Moss-Lichen	1. Moss 2. Lichen
EM - Emergent	1. Persistent 2. Nonpersistent
SS - Scrub-Shrub	1. Broad-Leaved Deciduous 2. Needle-Leaved Deciduous 3. Broad-Leaved Evergreen 4. Needle-Leaved Evergreen 5. Dead 6. Deciduous 7. Evergreen
FO - Forested	1. Broad-Leaved Deciduous 2. Needle-Leaved Deciduous 3. Broad-Leaved Evergreen 4. Needle-Leaved Evergreen 5. Dead 6. Deciduous 7. Evergreen
OW - Open Water (Unknown Bottom)	None

Source: Cowardin *et al.*, 1979

**TABLE 3**  
**WETLAND MODIFIERS AND LABELING**

WATER REGIME (Non-Tidal)	pH MODIFIER	SPECIAL MODIFIER
A - Temporarily Flooded B - Saturated C - Seasonally Flooded D - Seasonally Flooded/ Well Drained E - Seasonally Flooded/Saturated F - Semipermanently Flooded G - Intermittently Exposed H - Permanently Exposed J - Intermittently Flooded K - Artificially Flooded W - Intermittently Flooded/ Temporary Z - Intermittently Exposed/ Permanent U - Unknown	a - Acid t - Circumneutral l - Alkaline	b - Beaver d - Partially Drained/ Ditched f - Farmed h - Diked/Impounded r - Artificial Substrate s - Spoil x - Excavated

Source: Cowardin *et al.*, 1979

## **B. FUNCTIONS AND VALUES EVALUATION**

### **1. WETLAND EVALUATION TECHNIQUE**

A functions and values evaluation for each delineated wetland was conducted using the WET 2.1 computer model. This model is based on the Federal Highway Administration's Wetland Evaluation Technique (WET) (Adamus *et al.*, 1987). WET was designed to conduct a rapid and reproducible assessment of wetland functions and values. The following functions and values are evaluated:

Groundwater Recharge	Production Export
Groundwater Discharge	Wildlife Diversity/Abundance
Floodflow Alteration	Aquatic Diversity/Abundance
Sediment Stabilization	Recreation
Sediment/Toxicant Retention	Uniqueness/Heritage
Nutrient Removal/Transformation	Habitat Suitability

The WET 2.1 program assigns qualitative probability ratings of high, moderate, or low to wetland functions and values in terms of social significance, effectiveness, and opportunity. "Social Significance" addresses the value of a wetland to society due to its natural features, economic value, official status, and location within the watershed. The "Effectiveness" and "Opportunity" evaluations measure the qualitative probability that a wetland has the capability and opportunity to perform a function. "Effectiveness" assesses the qualitative capability of a wetland to perform a function due to its chemical, physical, or biological characteristics. "Opportunity" assesses the probable opportunity of a wetland to perform a function to its level of capability (Adamus *et al.*, 1987). The probability ratings do not represent the importance or magnitude of functions or values of a wetland but are, instead, an estimate of the qualitative probability that a function or value will exist or occur in a wetland.

Two types of WET assessments were performed on wetlands in the project area: the Social Significance Evaluation - Level 1; and Effectiveness and Opportunity Evaluation - Levels 1 and 2. The Social Significance Evaluation - Level 1 was applied to all wetlands, regardless of size. In addition, the Effectiveness and Opportunity Evaluation - Levels 1 and 2 were conducted on wetlands 0.4 hectares (one acre) or larger. Information related to the WET analyses was gathered in the field during the delineation site visits and the documentation was completed in the office.

The WET evaluation is a complex process that requires the compilation of comprehensive background data. Some of the sources of information used for these evaluations included:

- ♦ USGS topographic maps and National Wetlands Inventory Maps
- ♦ US Department of Agriculture County Soil Surveys
- ♦ West Virginia Wetlands Conservation Plan
- ♦ West Virginia Natural Heritage Program, list of threatened and endangered species
- ♦ Monongahela National Forest Management Plan
- ♦ George Washington National Forest Management Plan
- ♦ Regional Wetlands Conservation Plan
- ♦ Potomac River Basin Plan and Monongahela River Basin Plan
- ♦ US Department of Agriculture, Soil Conservation Service Watershed Project Plans
- ♦ Virginia Water Quality Standards, List of Natural Trout Waters

## **2. HABITAT EVALUATION PROCEDURE**

In addition to the WET analysis, a Habitat Evaluation Procedure (HEP) analysis was performed to evaluate wildlife habitat within forested, scrub-shrub, and emergent wetland systems within the construction limits. Documentation of the methodology and results for this analysis can be found in the *Vegetation and Wildlife Habitat Technical Report*.

## **C. IMPACT ASSESSMENT**

### **1. DIRECT IMPACTS**

The importance of wetlands impacted by the project area was determined by comparing the area of impacted wetlands to the total area of wetland resources in the regional project watersheds. A predictive model was developed by comparing the wetland area delineated within 60 m (200') of the alignments construction limits to the National Wetlands Inventory maps (prepared by the US Fish and Wildlife Service), as digitized into the GIS. From the ratios obtained, conversion factors were calculated for each regional project watershed. These conversion factors were then applied to the land area of the regional project watersheds to predict the total regional project watershed wetland areas. Appendix A includes a table that identifies this data.

The severity of the direct impacts to wetlands was evaluated through the comparative analysis of baseline ecological data and preliminary engineering data. Direct impacts were assessed by using the GIS to identify the wetland size, impact size, classification, and location for each proposed alignment. Appendix A contains the tables that identify the impacted wetlands, their size, and the area of impact by regional project watershed. Appendix C contains the individual wetland delineation forms.

Other descriptive characteristics were assigned to directly impacted wetlands to aid in evaluating impact severity. Landscape position was described in three categories: isolated wetlands were defined as

those that have no connection to other surface waters; headwater wetlands were defined as those that are connected to other surface waters and have a drainage area of less than 13 sq. km (5 sq. miles); "other" wetlands were a category defined as those that are connected to surface waters and have a drainage area of more than 13 sq. km (5 sq. miles).

Adjacent land cover was defined with three categories: agricultural cover was defined as areas of crops, pastures, or plowed fields; disturbed cover was defined as areas modified by man, such as power line and road rights-of-way, surface mined areas, or lawns; the third category of "undisturbed" was defined as any natural area.

The type of impact that could occur to wetlands found within the construction limits was described in two categories: a perpendicular impact was defined as one where the alignment crosses the primary water flow of the wetland on a perpendicular path; an edge impact was defined as one where the alignment encounters the edge of a wetland on a path that is parallel to, rather than perpendicular to, the primary water flow of the wetland.

The potential change in wetland function and value caused by construction was assessed in two ways. For each wetland larger than 0.4 ha (1 acre), a hypothetical "post-construction" WET was prepared. This WET was compared to the wetland's "pre-construction" WET. The changes in the probability ratings for each wetland were qualitatively evaluated as follows: "no change" if none of the summary probability ratings changed; "slight decrease" if one of the summary probability rating dropped; and "decrease" if two or more of the summary probability ratings dropped. Appendix B contains the WET summary data forms for the individual wetlands and the hypothetical "post-construction" WET summary data forms (identified as "mods").

For those wetlands smaller than 0.4 ha (1 acre) in size, a "post-construction" WET was not prepared because the Social Significance 1 analysis is not sensitive enough to detect the changes that might occur due to highway construction. Instead, a qualitative assessment of the likely functional change was made according to the proportion of the wetland that would be impacted. The categories used for evaluation were: "no change" if less than 10 percent of the wetland size would be lost; "slight decrease" for impacts to 10 to 30 percent of the wetland size; and "decrease" for impacts to 30 to 80 percent of the wetland size. The wetlands functional values were considered "lost" if over 80 percent of the wetland's area would be impacted.

## 2. SECONDARY AND CUMULATIVE IMPACTS

Secondary wetland impacts are separated into two categories: those that are related to the construction, operation and maintenance of the proposed facility; that is, highway-related secondary impacts

(sometimes called indirect impacts), such as stormwater runoff; and those that are related to development that occurs as the result of the highway; that is, development-related secondary impacts, such as the possible relocation of a perennial stream associated with construction of an industrial park.

Highway related secondary impacts were assessed by using the GIS to identify the number and area of wetlands within 30 m (100 feet) of the construction limits of each proposed alignment. This allowed a subsequent qualitative analysis of the occurrence of secondary impacts, such as those caused by construction activity within the right-of-way, erosion, sedimentation, and pollutants, that could reduce the functions and values of the wetlands. This size of zone was used because studies have shown that buffers of this size provide opportunities to improve water quality in wetlands through capture of sediments, slowing overland water flows, and removing excess nutrients. Another GIS analysis identified those wetlands where the proposed highway would impact more than 80 percent of their area. The entire area of those wetlands was incorporated into the area of impacted wetlands, showing that the entire wetland would be lost, rather than just the portion that was found within the construction limits.

Development related secondary impacts to wetlands were also calculated. Wetland impacts were predicted for industrial park, commercial, and residential development. For detailed methodology of development related impacts, please refer to the *Secondary and Cumulative Impacts Technical Report*.

Cumulative wetland impacts were evaluated in this study in three categories: the additive effects of direct impacts; the additive effects of direct and secondary impacts; and the additive effects of the proposed projects and other reasonably foreseeable future actions.

Direct impacts were cumulatively totaled over broad environmental systems (watersheds) to allow comparisons between these systems. Leibowitz et al. (1992) suggest that an estimate of the value provided by a function (i.e. water quality improvement) within a landscape watershed should be considered relative to other watersheds within the area of interest.

Cumulative impacts related to the additive effect of combining direct and secondary impacts were summarized for wetland resources. Secondary impacts can be considered "incremental consequences of an action" and should be added to "past actions" (direct impacts) to assess cumulative impacts.

Cumulative impacts related to the development of foreseeable future actions was limited to known Federal actions that are currently ongoing or are in the formulative stages of study. Five Federal actions were identified and impacts associated with these actions are discussed below.



### ***III. EXISTING ENVIRONMENT AND IMPACTS***

#### **A. OVERVIEW**

The most current estimate of the amount of wetlands in West Virginia reports that there are 41,278 ha (102,000 acres) of fresh water wetlands found in the state (Tiner, 1987). Approximately 14 percent of West Virginia's wetlands are concentrated in the Canaan Valley complex and the Meadow River complex, and the remaining 86 percent are scattered throughout the state. During the 23 year period from 1957 through 1980, West Virginia actually had an overall gain in wetlands of approximately 6,677 ha (16,500 acres).

Current estimates for Virginia report that there are 422,856 ha (1,044,900 acres) of wetlands, of which 77 percent are fresh water wetlands (Tiner, 1987). During the 23 year period from 1957 through 1980, Virginia had a net loss of approximately 8,903 ha (22,000 acres) of wetlands.

The proposed project is located in two major physiographic provinces which are divided by the Allegheny Front. The climate and topography of these two physiographic provinces determine, in part, the number and type of wetlands found within the areas.

The western portion of the proposed project is located in the Allegheny Mountain Section of the Appalachian Plateau Province. This province generally contains long, narrow and steep stream valleys with steep side slopes, except for the valleys of Leading Creek near Elkins and Beaver Creek near Davis. Elevations are the highest in the State, ranging from 530 m to 1,450 m (1,750 to 4,760 feet). Elevation differences between the valleys, plateaus, and mountain tops create a diversity of microclimates, with the higher elevations exhibiting relatively cool climate. The Appalachian Plateau Province receives an average of 104 cm to 130 cm (41 to 51 inches) of precipitation a year. This province is part of the Mixed Mesophytic Forest Biome, consisting of a variety of hardwood and softwood forests (Bailey, 1980).

The proposed project within this physiographic province is contained within the Monongahela River System, which drains portions of West Virginia, Pennsylvania, and Maryland toward the Mississippi River. Two watersheds are traversed in this section of the project, the Tygart Valley River and the Cheat River. Wetland types found in these two watersheds are varied. They range from manmade ponds and floodplain wetlands along the wider stream valleys, to high elevation bogs and fens dominated by mosses, lichens, and sedges.

The eastern portion of the study area is located in the Middle Section of the Ridge and Valley Province. This province generally contains long, narrow ridges with steep parallel slopes and level valleys. Elevations range from 220 m to 884 m (725 feet to 2,900 feet). Elevation differences between the valleys and ridges

create a diversity of temperature and precipitation. The Ridge and Valley Province receives 69 cm to 107 cm (27 to 42 inches) of precipitation a year, less than the western portion of the study area, due to the rain shadow effect of the Allegheny Front. This physiographic province is part of the Appalachian Oak Forest Biome, consisting largely of mixed hardwood forests (Bailey, 1980). Wetland types found in this province are mostly small man-made ponds and floodplain wetlands formed along the wider stream valleys.

The proposed project within this physiographic province is contained within the Potomac River System, which drains 337,990 square kilometers (14,669 square miles) of portions of West Virginia, Virginia, Maryland, Pennsylvania, and the District of Columbia toward the Chesapeake Bay and the Atlantic Ocean. The major watersheds within this part of the project area include the North Branch of the Potomac River, the South Branch of the Potomac River, the Cacapon River, and the Shenandoah River.

The existing conditions and impacts to wetlands of the proposed project are presented for each of the six regional project watersheds mentioned above. Within each regional project watershed, the impacts of the IRA and the Build Alternative are compared. The presentation of the wetland information on a regional project watershed basis provides a holistic evaluation of the effects of the proposed project on wetland systems within the regional project watersheds. All identified wetlands are shown on the *Alignment and Resource Location Plans*. The direct impacts to wetland vegetation types due to Line A and the IRA within the regional project watersheds are identified in Table 4. Figures 1 through 6 demonstrate the percentage of impacted wetland types within each regional project watershed. Figures 7 through 10 (scatter diagrams) compare wetland encroachment areas to total wetland size. A cluster of points is generally observed towards the bottom left corner of the scatter diagram. This indicates that the majority of wetland impact areas were small (less than 0.4 hectares or 1 acre) and occurred within individual wetland systems that were also small (less than 0.4 hectares or 1 acre). The direct wetland impacts as a percentage of the regional project watersheds' wetland area are presented in Table 5. The characteristics of directly impacted wetlands are identified in Table 6. Figures 11 through 14 summarize wetland impact characteristics for each regional project watershed. Direct wetland impacts and wetland characteristics within the Option Areas are shown in Table 7 and Table 8.

**TABLE 4**  
**DIRECT WETLAND IMPACTS BY WATERSHED**

Watershed		Forested			Scrub/Shrub			Emergent			Open Water			Total		
		#	Hectares	Acres	#	Hectares	Acres	#	Hectares	Acres	#	Hectares	Acres	#	Hectares	Acres
Tygart Valley River	Line A	0	0.00	0.00	2	0.03	0.07	14	1.86	4.62	1	0.11	0.26	17	2.00	4.95
	IRA	1	0.11	0.26	2	0.15	0.36	13	0.75	1.85	1	0.02	0.06	17	1.03	2.53
Cheat River	Line A	3	0.12	0.30	18	0.95	2.34	60	6.24	15.41	10	0.46	1.14	91	7.77	19.19
	IRA	3	1.02	2.51	5	0.42	1.05	16	3.11	7.68	3	0.33	0.82	27	4.88	12.06
North Branch Potomac River	Line A	2	0.06	0.14	0	0.00	0.00	16	3.07	7.59	5	0.25	0.62	23	3.38	8.35
	IRA	1	0.10	0.24	0	0.00	0.00	9	1.58	3.91	0	0.00	0.00	10	1.68	4.15
South Branch Potomac River	Line A	0	0.00	0.00	1	0.16	0.39	7	0.62	1.52	2	0.03	0.07	10	0.81	1.98
	IRA	0	0.00	0.00	0	0.00	0.00	6	0.56	1.39	2	0.00	0.00	8	0.56	1.39
Cacapon River	Line A	1	0.10	0.24	2	0.06	0.14	10	0.61	1.50	4	0.21	0.51	17	0.98	2.39
	IRA	0	0.00	0.00	0	0.00	0.00	0	0.00	0.00	1	0.08	0.19	1	0.08	0.19
West Virginia Total	Line A	6	0.28	0.68	23	1.20	2.94	107	12.40	30.64	22	1.06	2.6	158	14.94	36.86
	IRA	5	1.23	3.01	7	0.57	1.41	44	6.00	14.83	7	0.43	1.07	63	8.23	20.32
VA- Shenandoah River	Line A	1	0.11	0.28	0	0.00	0.00	4	0.12	0.30	2	0.10	0.24	7	0.33	0.82
	IRA	5	0.07	0.17	6	0.25	0.61	6	0.15	0.36	0	0.00	0.00	17	0.47	1.14
Combined Watershed Total	Line A	7	0.39	0.96	23	1.20	2.94	111	12.52	30.94	24	1.16	2.84	165	15.27	37.68
	IRA	10	1.30	3.18	13	0.82	2.02	50	6.15	15.19	7	0.43	1.07	80	8.70	21.46

Source: Michael Baker Jr., Inc.



# Figure 1

## Impacted Wetlands in the Tygart Valley River Watershed

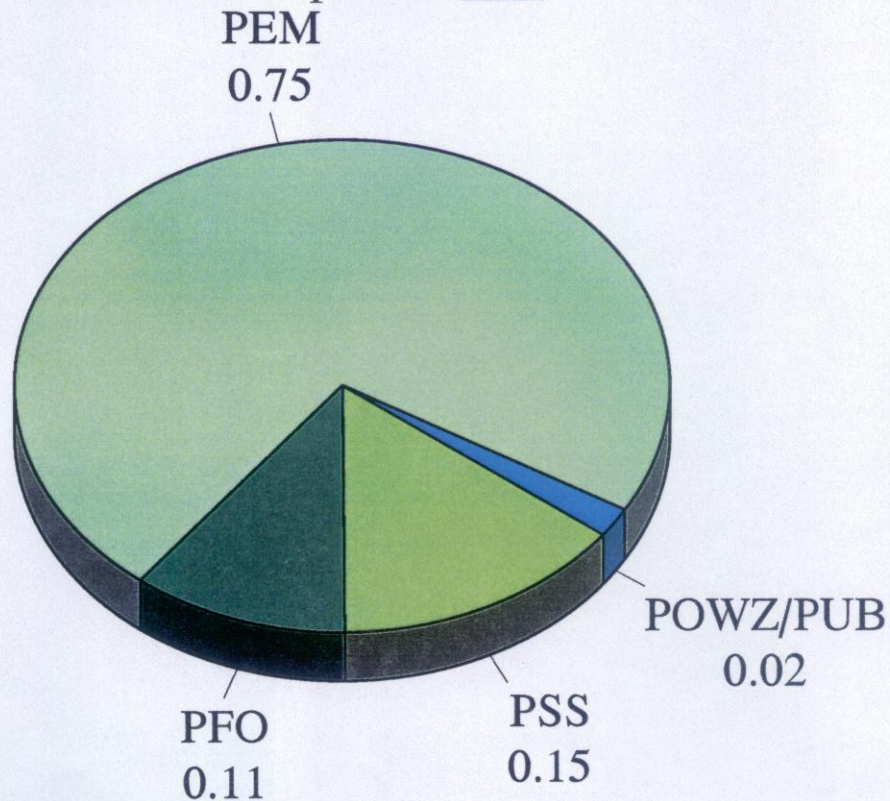
Wetland Hectares: 155.44

Percent Impacted - IRA: 0.663%

Line A: 1.287%

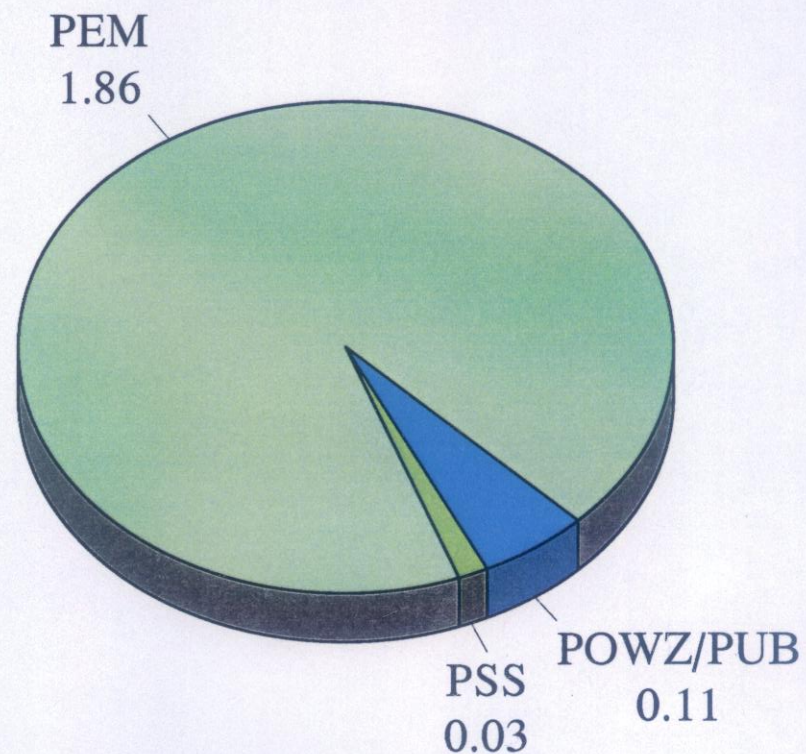
### IRA

Hectares Impacted: 1.03



### Line A

Hectares Impacted: 2.00





## Figure 2

### Impacted Wetlands in the Cheat River Watershed

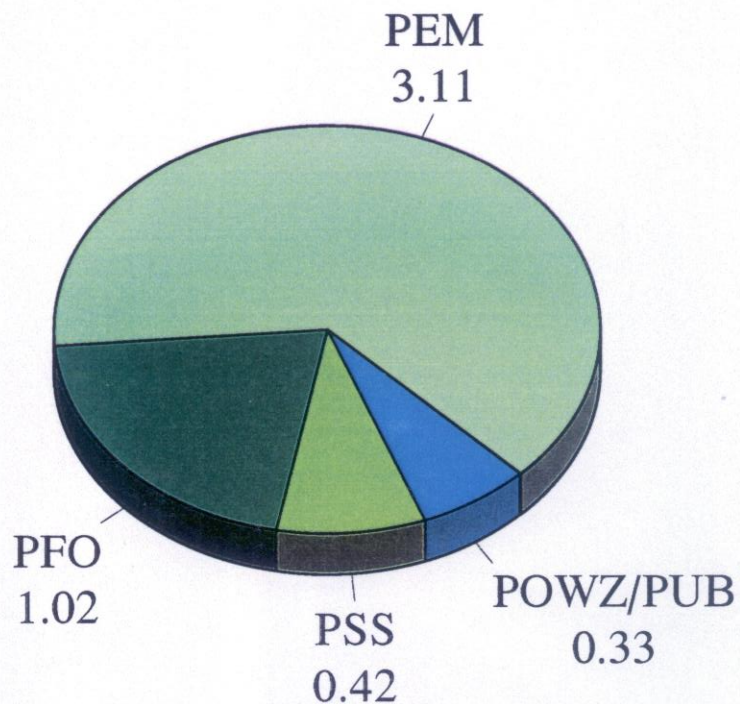
Wetland Hectares: 9102.99

Percent Impacted - IRA: 0.054%

Line A: 0.085%

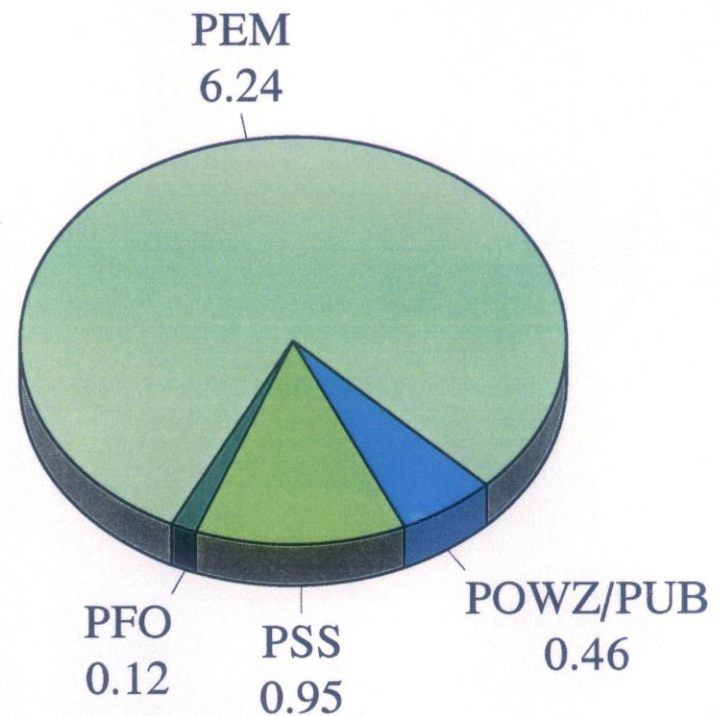
#### IRA

Hectares Impacted: 4.88



#### Line A

Hectares Impacted: 7.77



**Figure 3**

**Impacted Wetlands in the North Branch Potomac River Watershed**

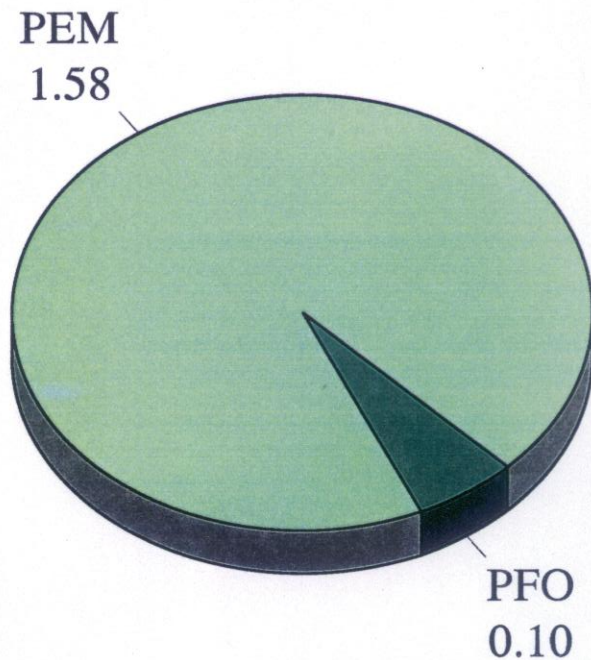
Wetland Hectares: 1927.27

Percent Impacted - IRA: 0.087%

Line A: 0.175%

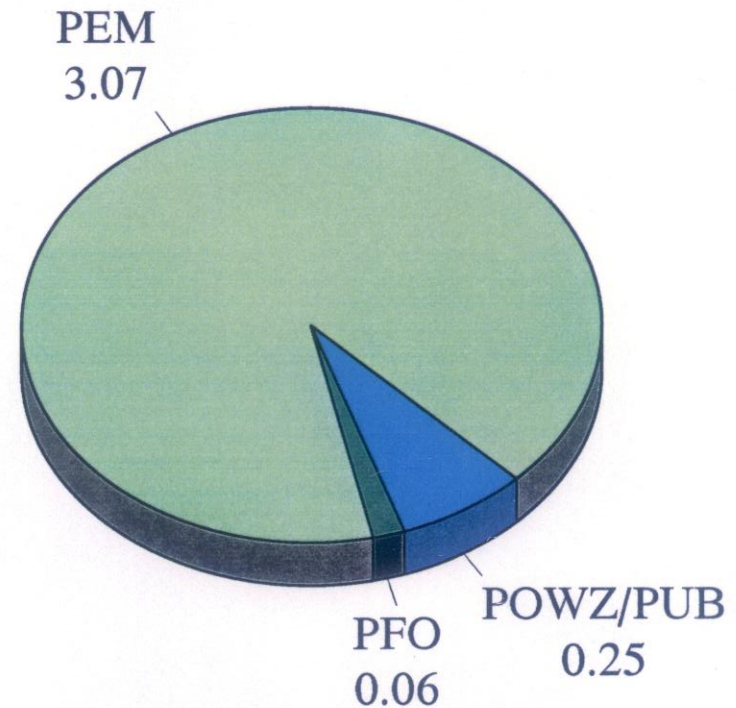
**IRA**

Hectares Impacted: 1.68



**Line A**

Hectares Impacted: 3.38





**Figure 4**

**Impacted Wetlands in the South Branch Potomac River Watershed**

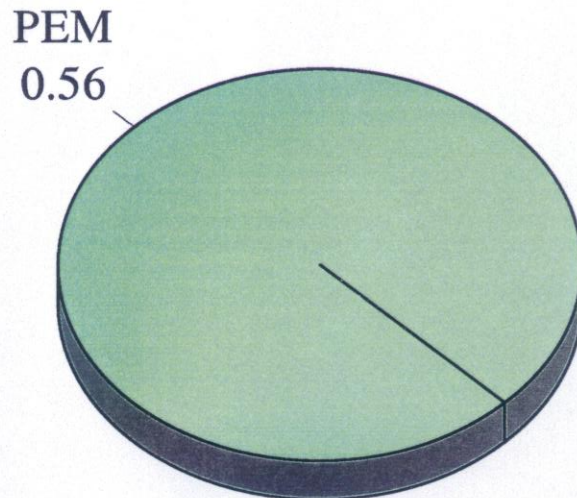
Wetland Hectares: 338.44

Percent Impacted - IRA: 0.165%

Line A: 0.239%

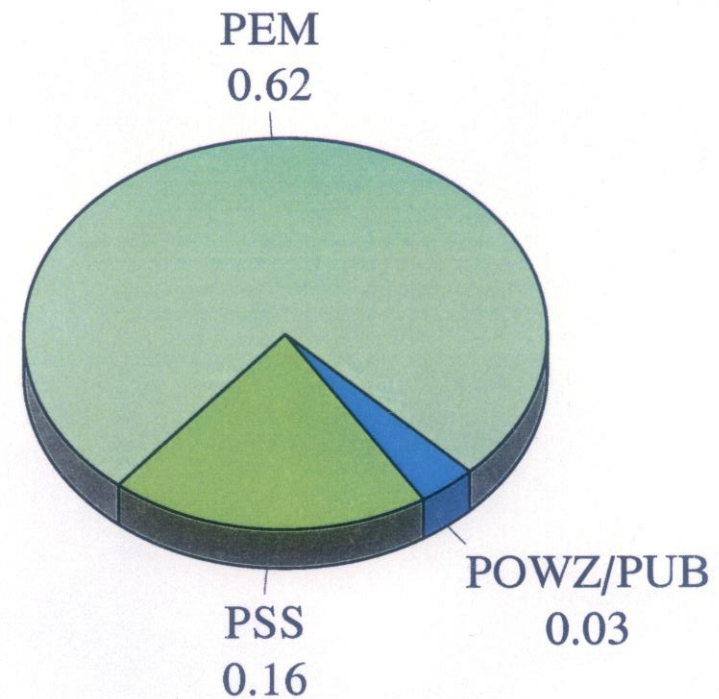
**IRA**

Hectares Impacted: 0.56



**Line A**

Hectares Impacted: 0.81





# Figure 5

## Impacted Wetlands in the Cacapon River Watershed

Wetland Hectares: 349.39

Percent Impacted - IRA: 0.023%

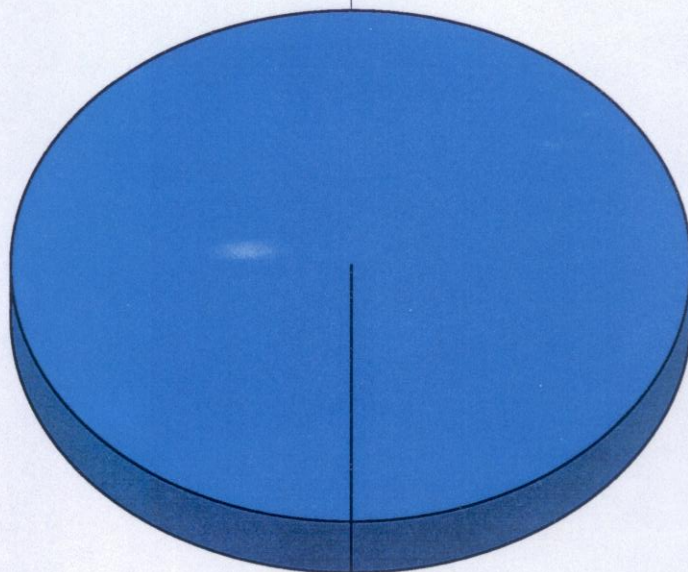
Line A: 0.275%

### IRA

Hectares Impacted: 0.08

POWZ/PUB

0.08



### Line A

Hectares Impacted: 0.98

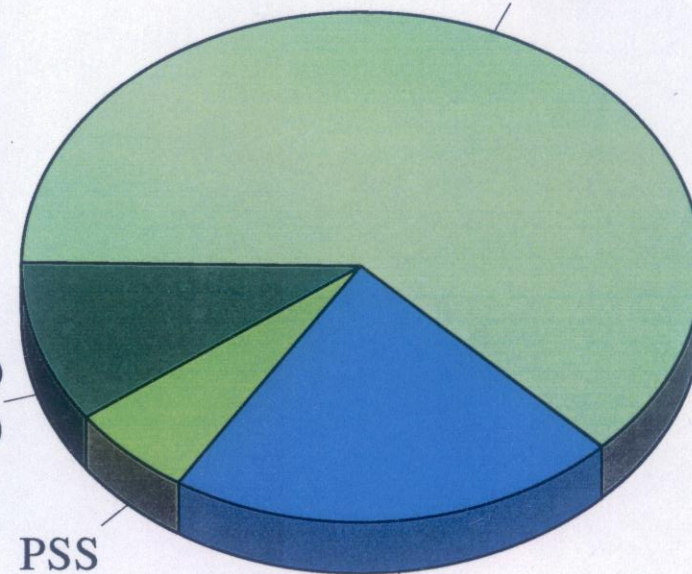
PEM

0.61

PFO  
0.10

PSS  
0.06

POWZ/PUB  
0.21





# Figure 6

## Impacted Wetlands in the Shenandoah River Watershed

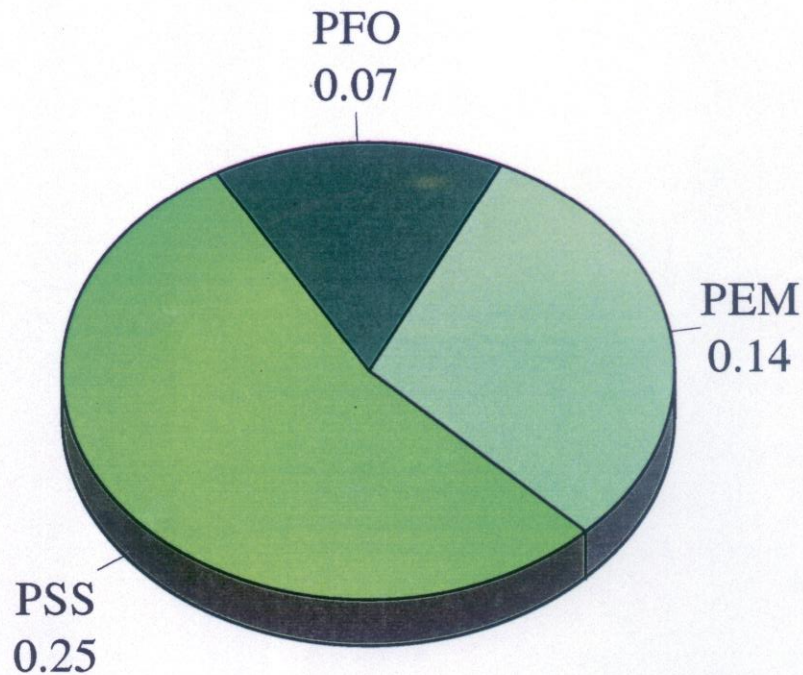
Wetland Hectares: 260.62

Percent Impacted - IRA: 0.177%

Line A: 0.127%

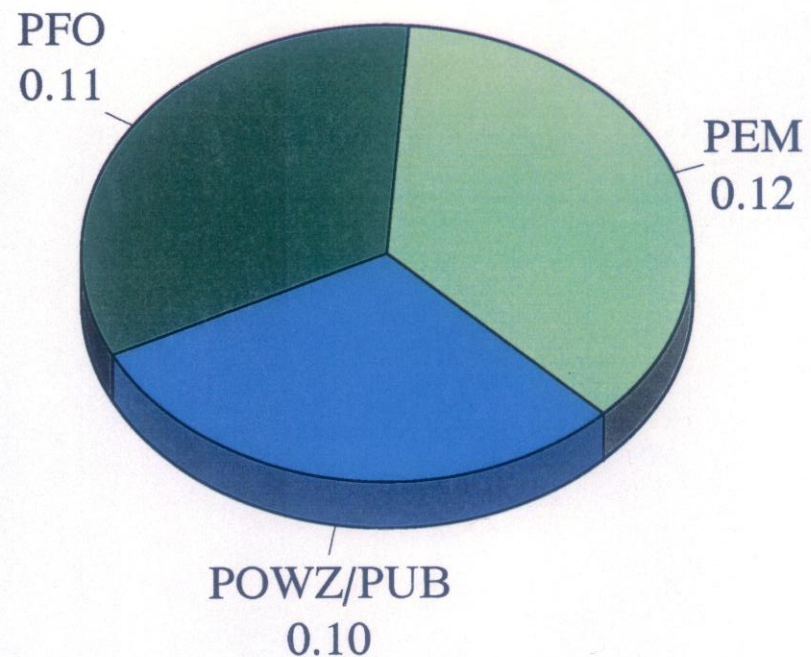
### IRA

Hectares Impacted: 0.46



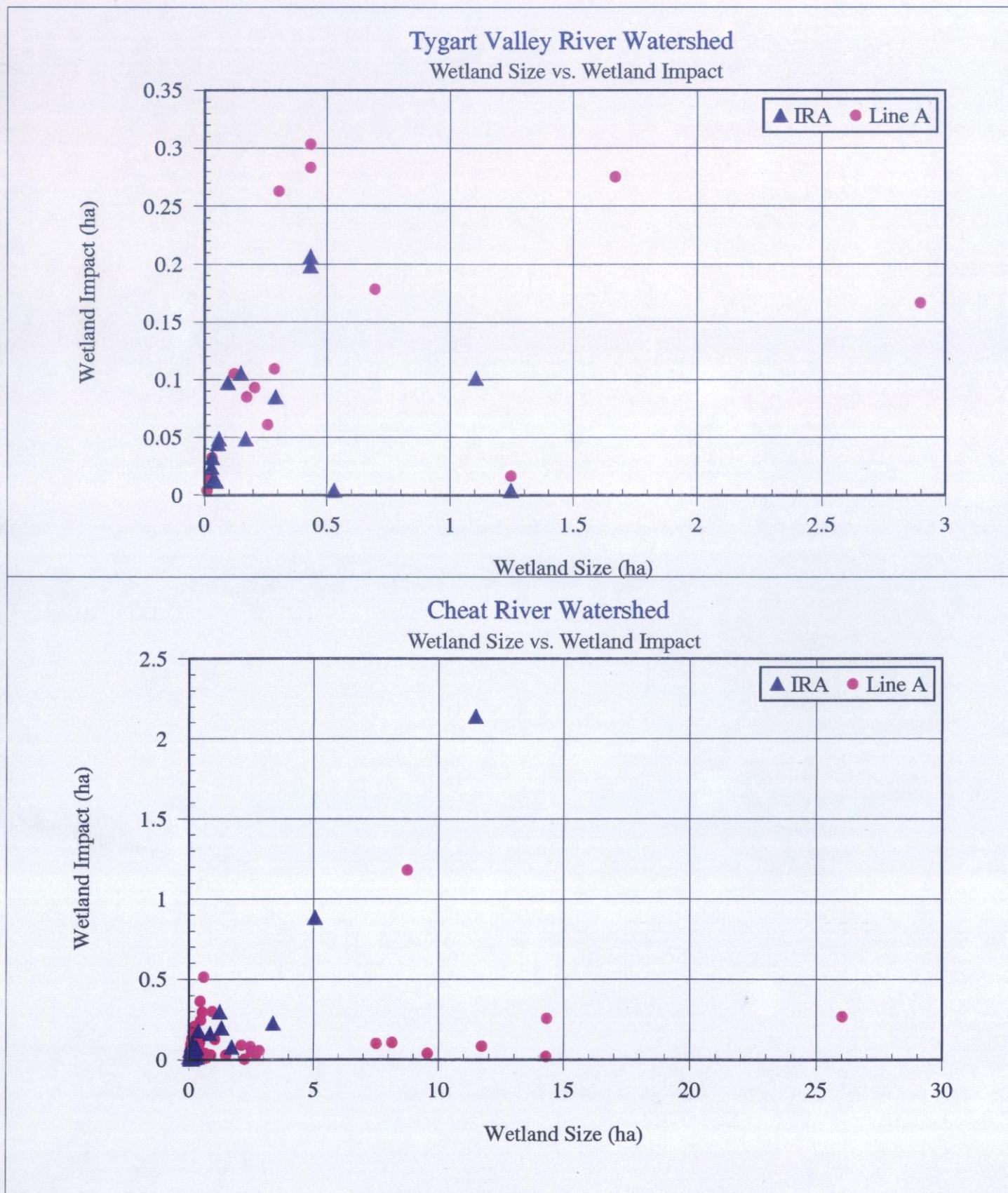
### Line A

Hectares Impacted: 0.33



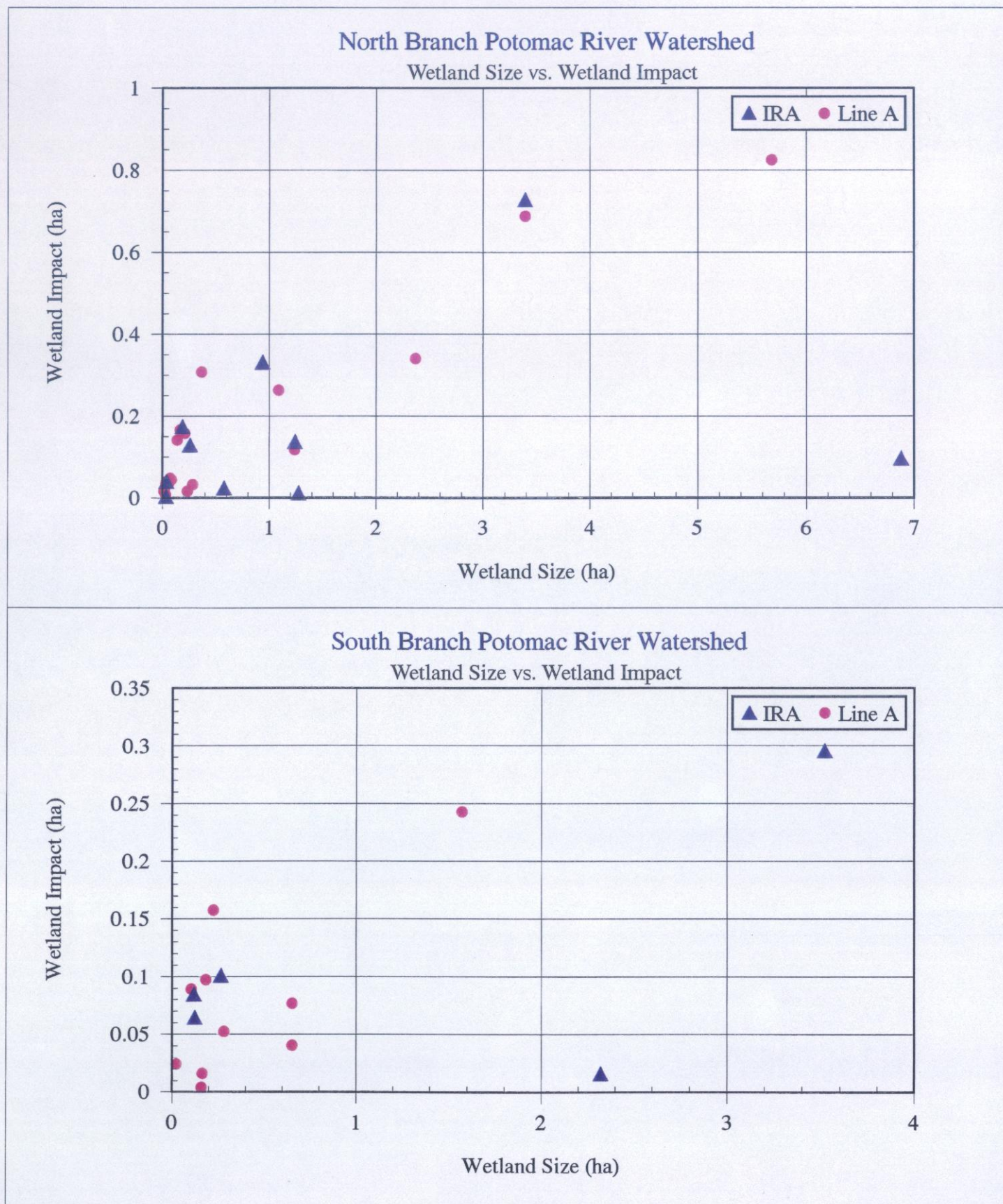


**Figure 7**  
**Sizes of impacted Wetlands in Tygart Valley River and Cheat River Watersheds**



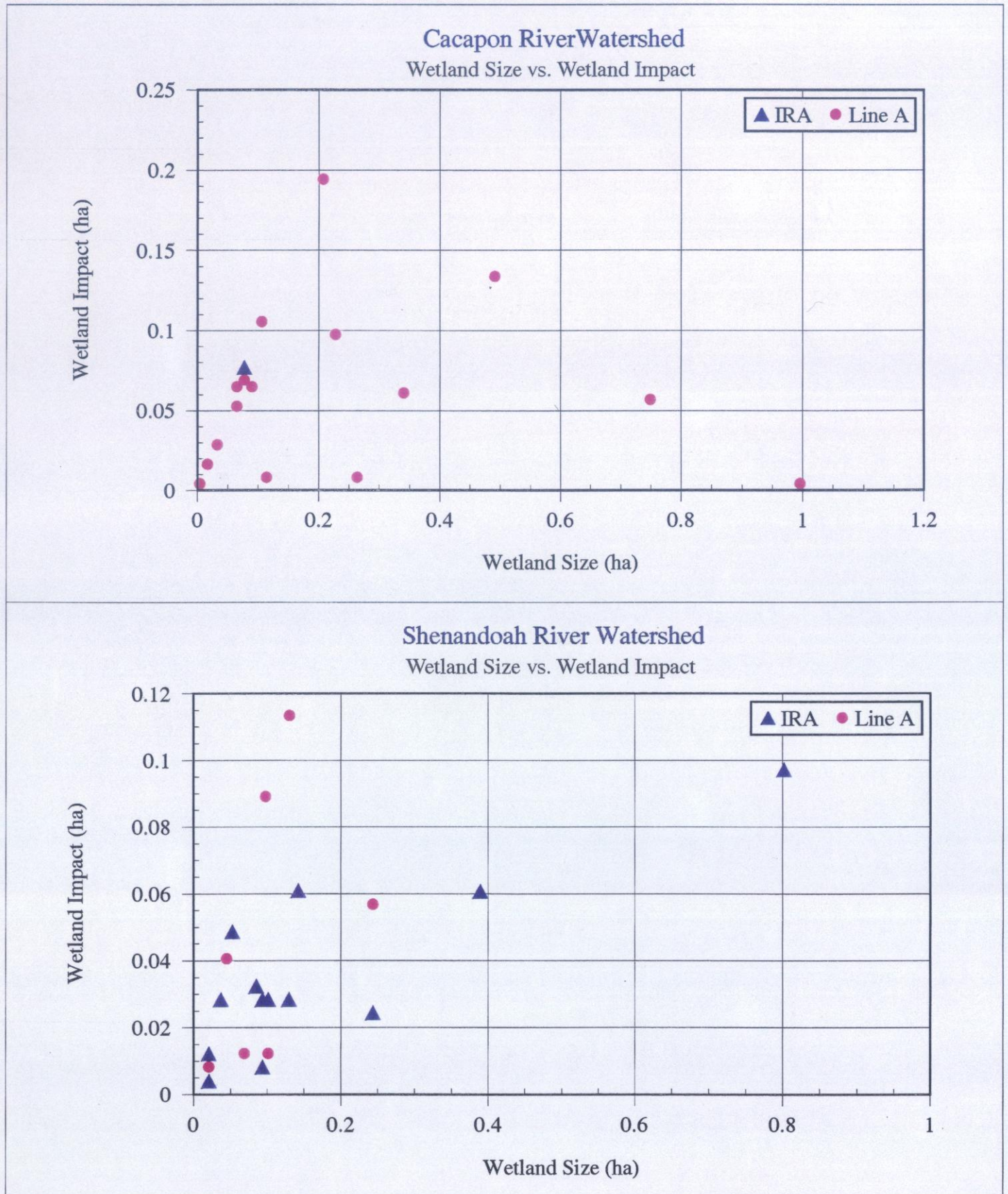


**Figure 8**  
**Sizes of Wetlands Impacted in the North and South Branch Potomac River Watersheds**



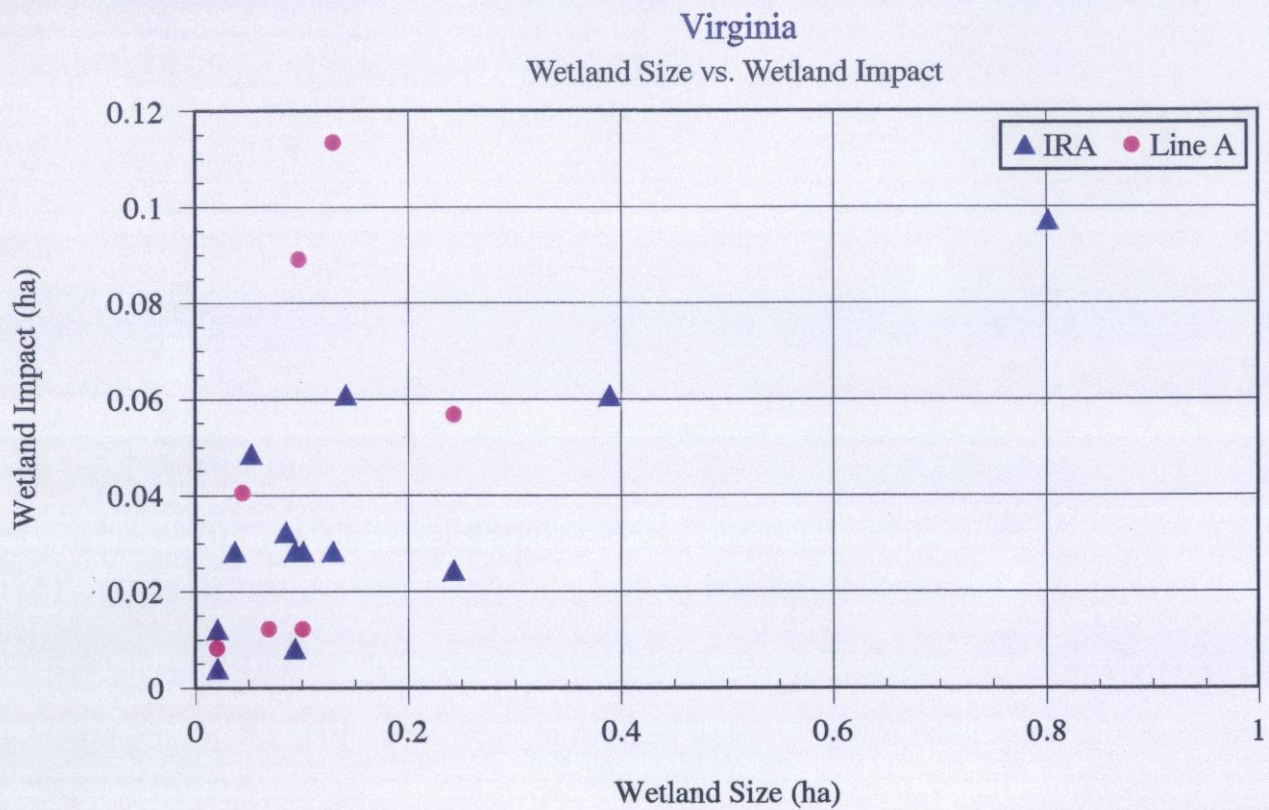
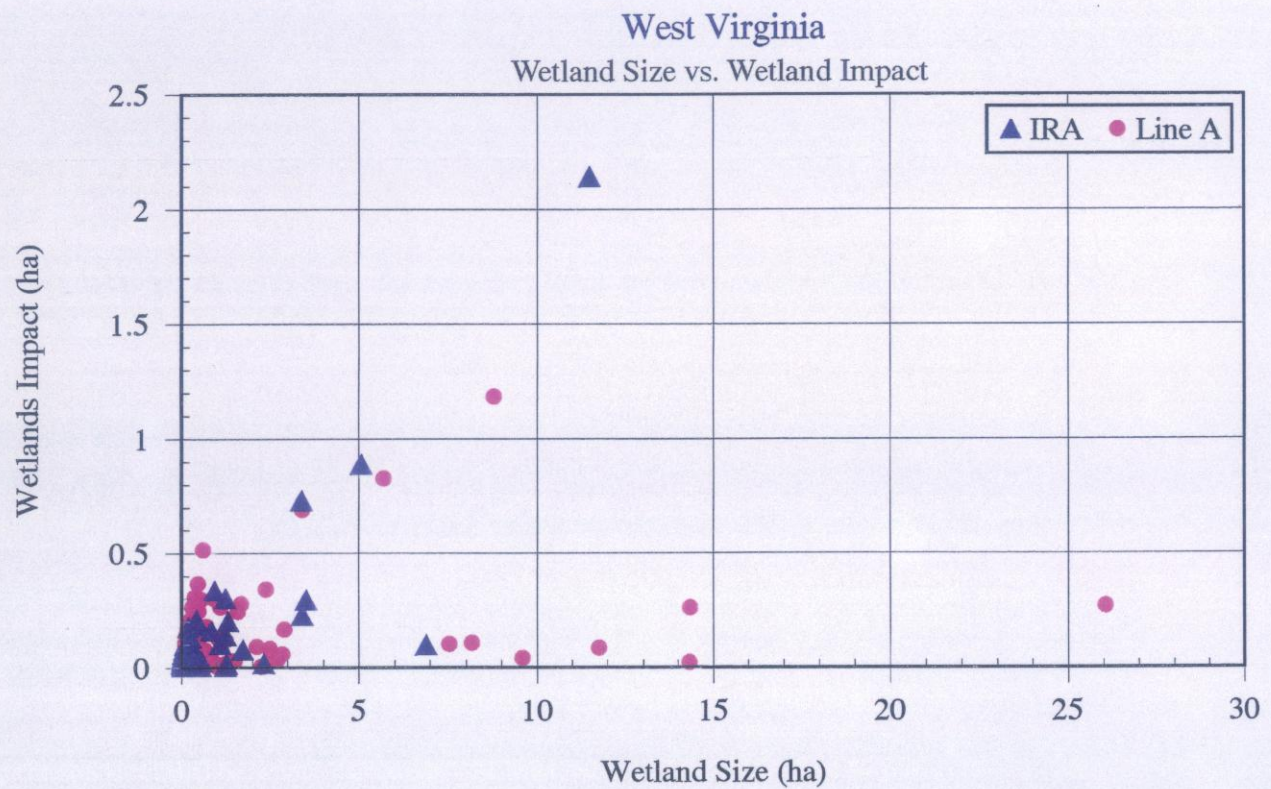


**Figure 9**  
**Sizes of Impacted Wetlands in the Cacapon River and Shenandoah River Watersheds**





**Figure 10**  
**Sizes of Impacted Wetlands**



**TABLE 5**  
**DIRECT WETLAND IMPACTS AS PERCENT TOTAL IN WATERSHED**

Watershed		Total Area Impacted		Total Predicted Wetlands in Watershed		Wetland Impacts as % Total in Watershed
		Hectares	Acres	Hectares	Acres	
Tygart Valley River	Line A	2.00	4.95	155	384	1.29%
	IRA	1.03	2.53			0.66%
Cheat River	Line A	7.77	19.19	9,096	22,477	0.09%
	IRA	4.88	12.06			0.05%
North Branch Potomac River	Line A	3.38	8.35	1,926	4,759	0.18%
	IRA	1.68	4.15			0.09%
South Branch Potomac River	Line A	0.81	1.98	338	836	0.24%
	IRA	0.56	1.39			0.17%
Cacapon River	Line A	0.98	2.39	349	863	0.28%
	IRA	0.08	0.19			0.02%
West Virginia Total	Line A	14.94	36.86	11,526	28,482	0.13%
	IRA	8.23	20.32			0.07%
VA- Shenandoah River	Line A	0.33	0.82	260	644	0.13%
	IRA	0.47	1.14			0.18%
Combined Watershed Total	Line A	15.27	37.68	12,125	29,961	0.13%
	IRA	8.70	21.46			0.07%

Source: Michael Baker Jr., Inc.





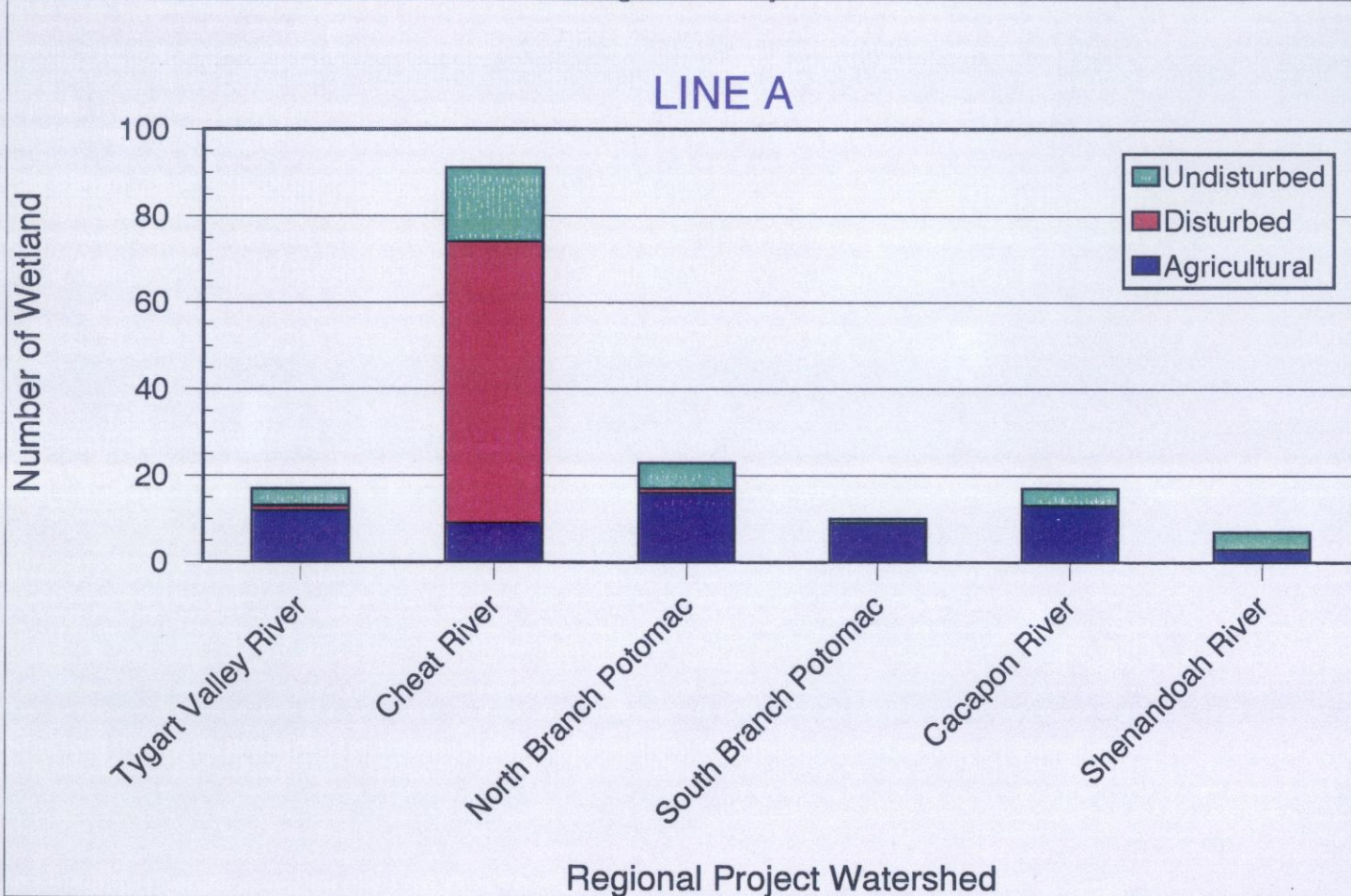
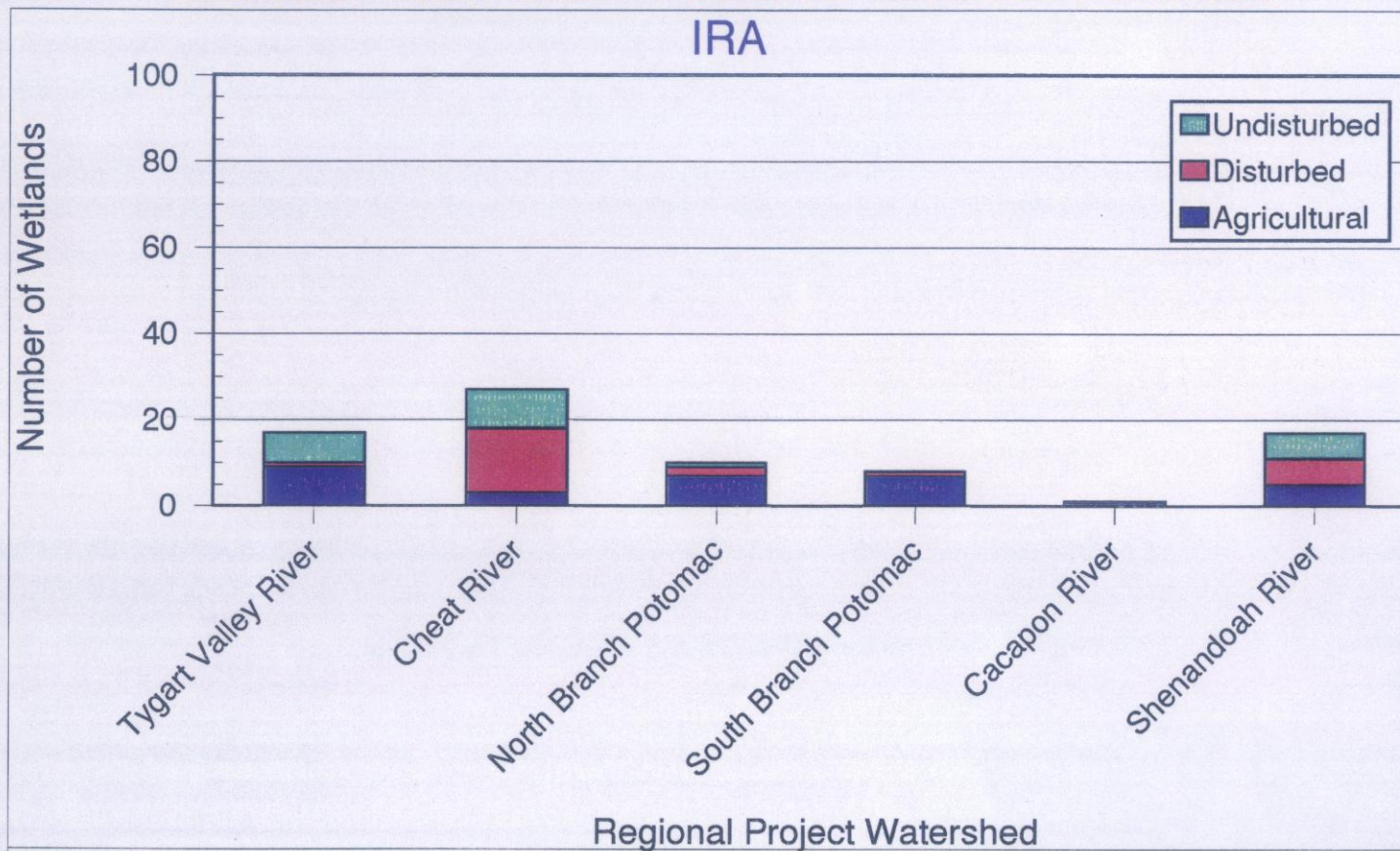
**TABLE 6**  
**CHARACTERISTICS OF IMPACTED WETLANDS BY WATERSHED**

NUMBER OF WETLANDS WITH CHARACTERISTIC	Tygart Valley River		Cheat River		North Branch Potomac		South Branch Potomac		Cacapon River		West Virginia Total		Shenandoah River		Combined Total	
	Line A	IRA	Line A	IRA	Line A	IRA	Line A	IRA	Line A	IRA	Line A	IRA	Line A	IRA	Line A	IRA
Adjacent Land Cover																
Agricultural	12	9	9	3	16	7	9	7	13	1	59	27	3	5	62	32
Disturbed	1	1	65	15	1	2	0	1	0	0	67	19	0	6	67	25
Undisturbed	4	7	17	9	6	1	1	0	4	0	32	17	4	6	36	23
Landscape Position																
Isolated	1	0	24	4	1	2	0	3	0	0	26	9	0	1	26	10
Headwater	13	15	61	12	22	8	10	5	13	1	119	41	6	14	125	55
Other	3	2	6	11	0	0	0	0	4	0	13	13	1	2	14	15
Wetland Size																
Less Than 0.4 ha	13	14	31	15	16	4	8	4	13	1	81	38	7	15	88	53
Greater Than 0.4 ha	4	3	60	12	7	6	2	4	4	0	77	25	0	2	77	27
Functional Change																
No Change	4	4	24	11	2	3	3	5	5	0	38	23	1	8	39	31
Slight Decrease	2	4	19	8	7	3	2	1	1	0	31	16	2	3	33	19
Decrease	7	5	22	6	6	2	3	2	3	0	41	15	2	5	43	20
Lost	4	4	26	2	8	2	2	0	8	1	48	9	2	1	50	10

Source: Michael Baker Jr., Inc.

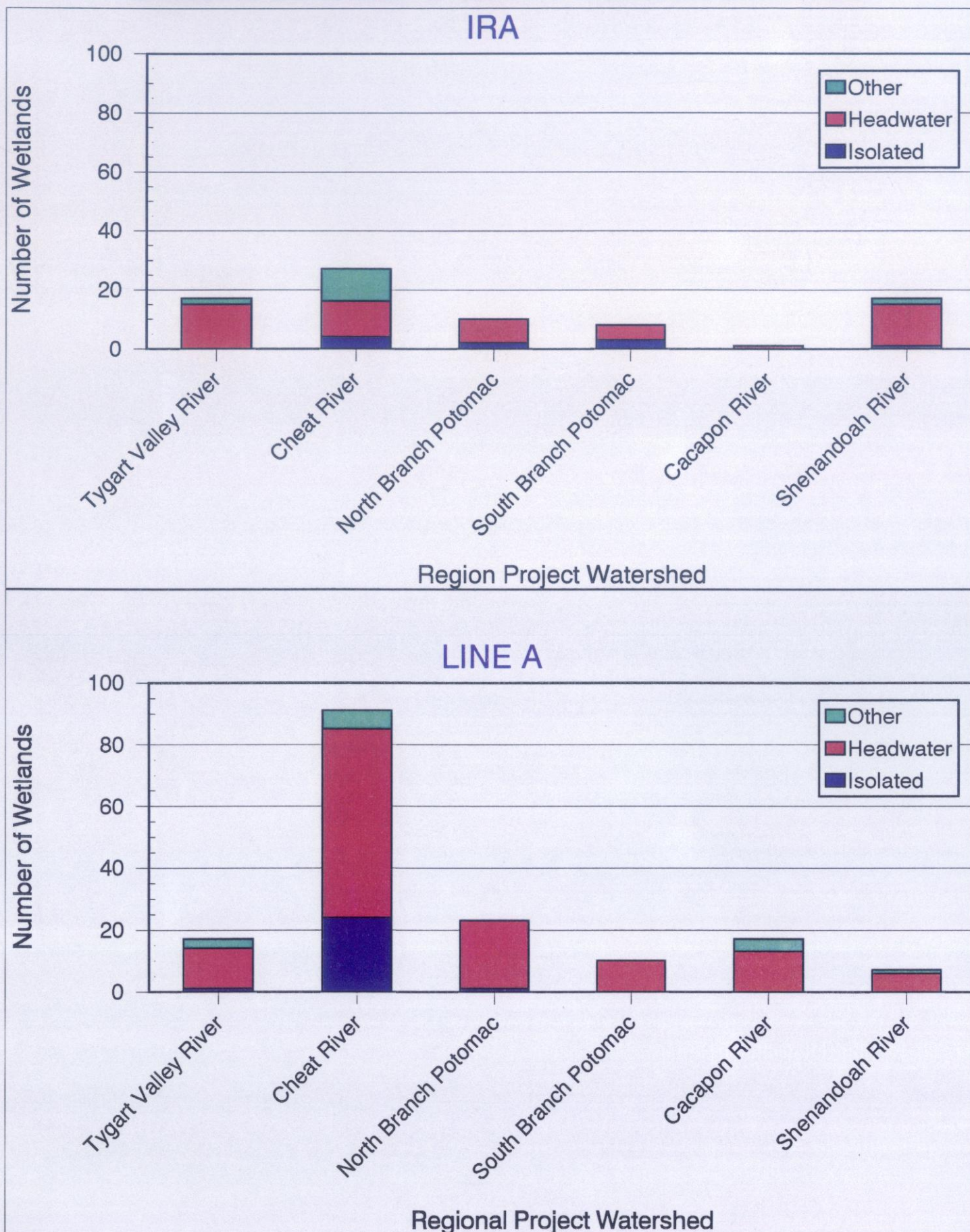


**FIGURE 11**  
**ADJACENT LAND COVER OF DIRECTLY IMPACTED WETLANDS**





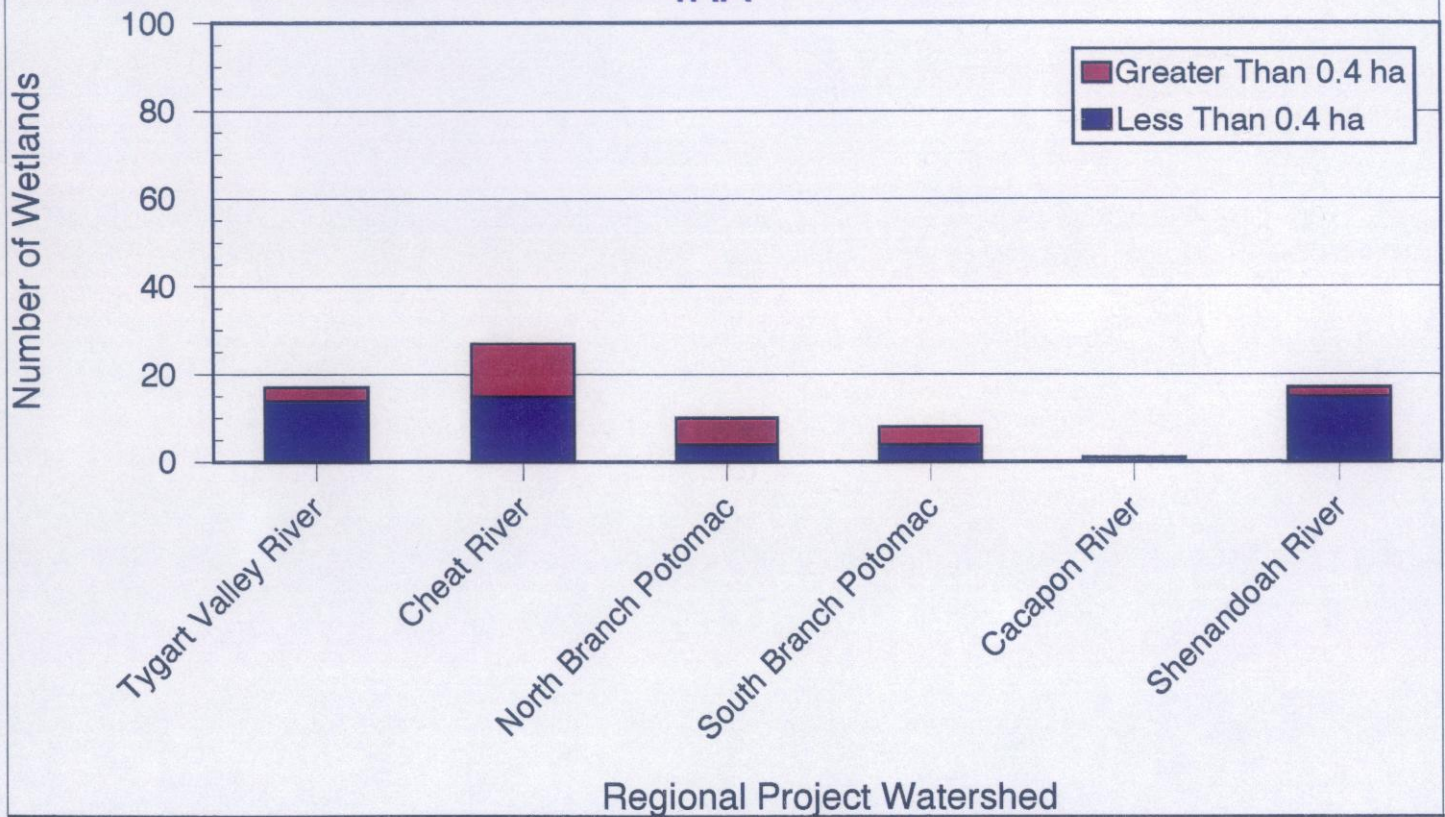
**FIGURE 12**  
**LANDSCAPE POSITION OF DIRECTLY IMPACTED WETLANDS**



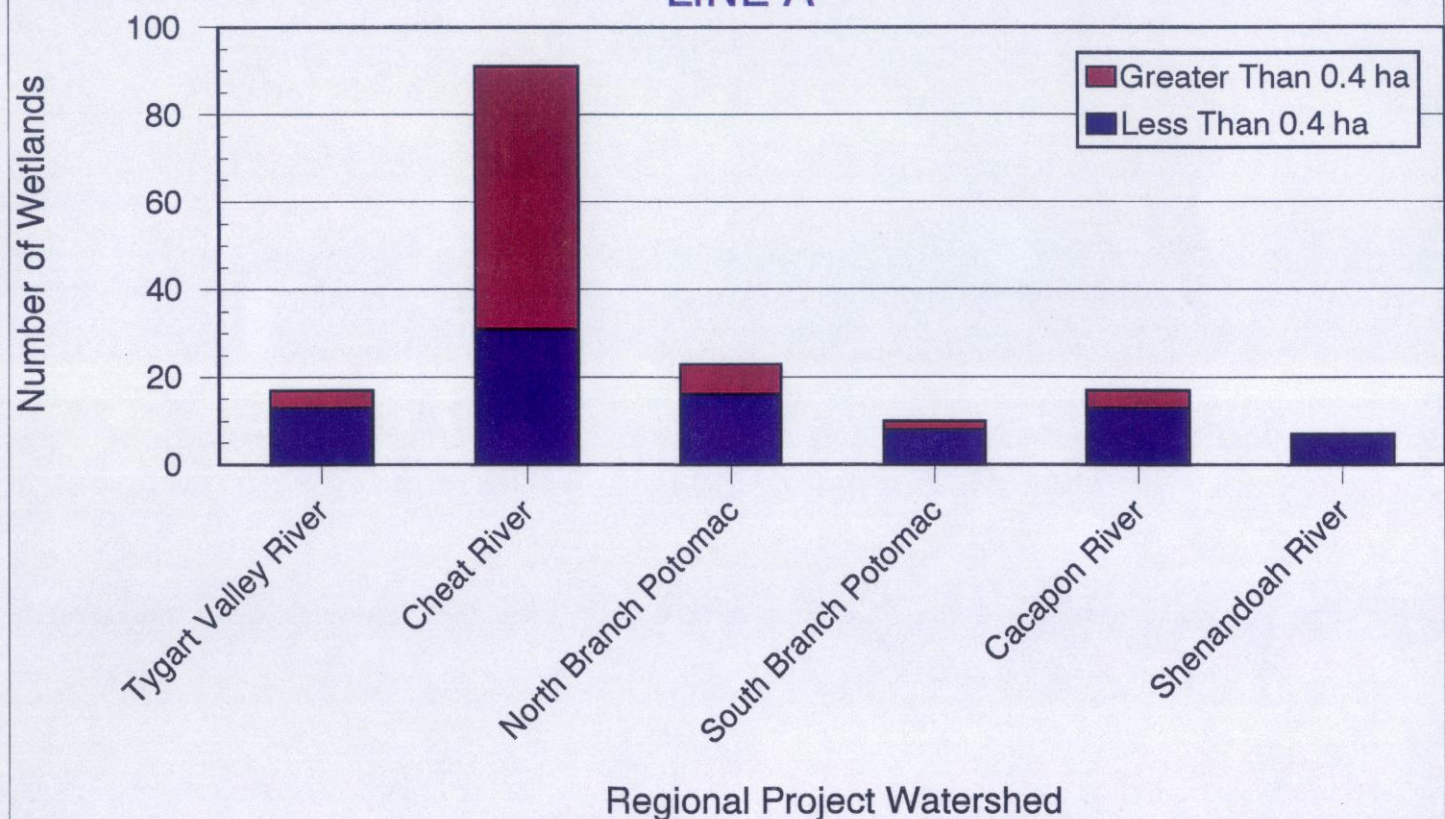


**FIGURE 13**  
**SIZE OF DIRECTLY IMPACTED WETLANDS**

**IRA**



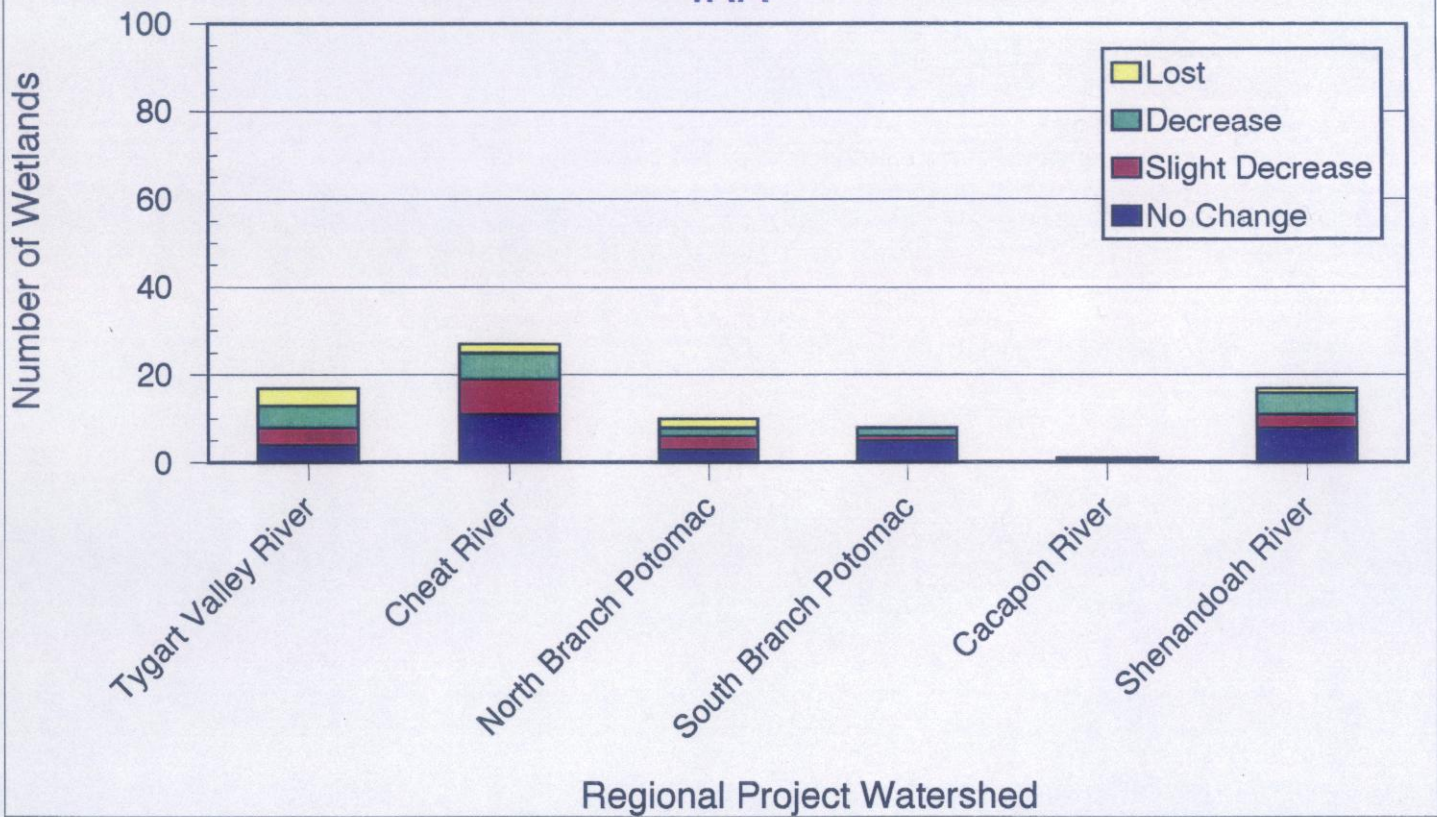
**LINE A**



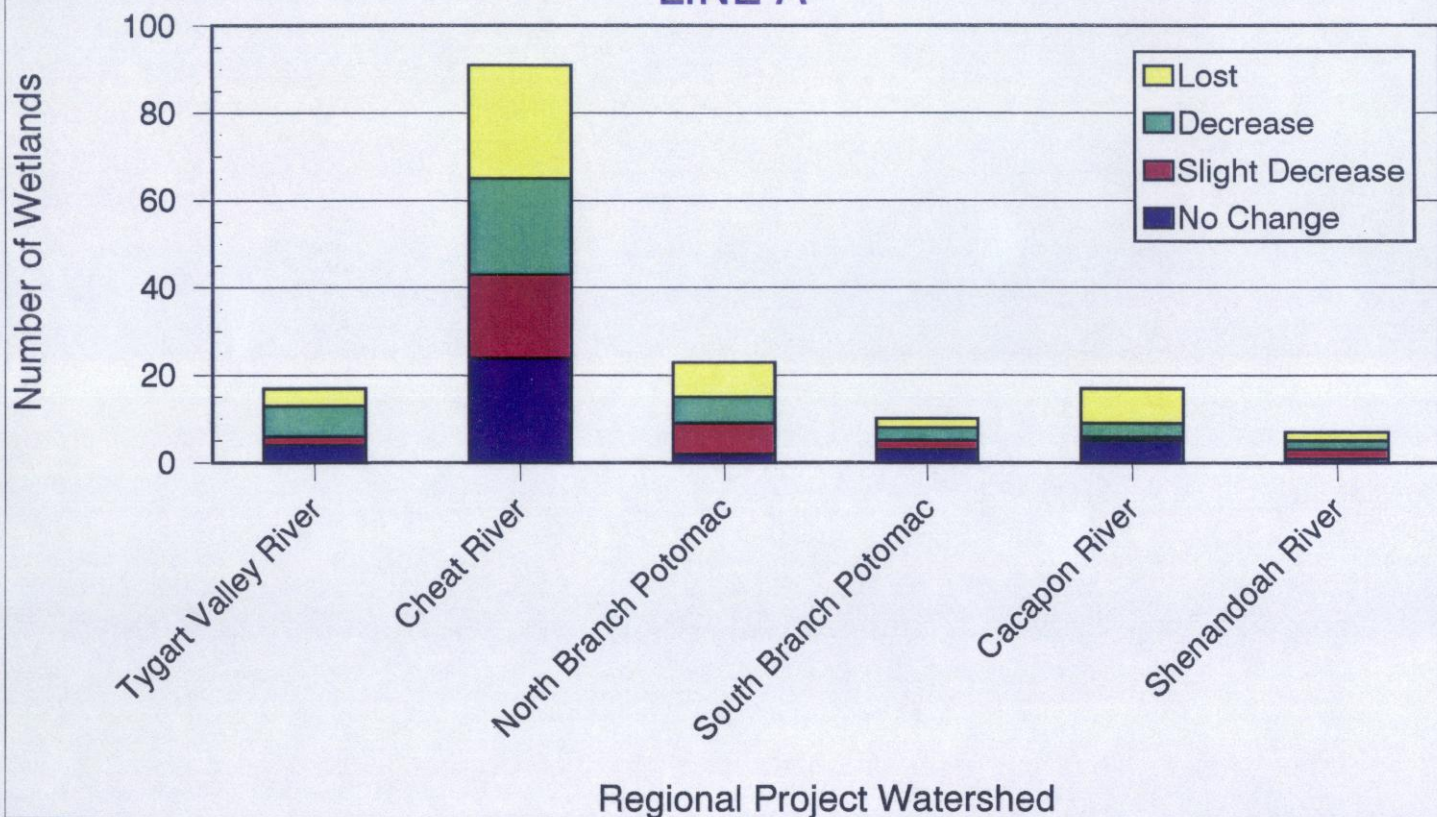


**FIGURE 14**  
**FUNCTIONAL CHANGE OF DIRECTLY IMPACTED WETLANDS**

**IRA**



**LINE A**



**TABLE 7**  
**OPTION AREA WETLAND IMPACTS BY WATERSHED**

Watershed			Forested			Scrub/Shrub			Emergent			Open Water			Total		
			#	Hectares	Acres	#	Hectares	Acres	#	Hectares	Acres	#	Hectares	Acres	#	Hectares	Acres
Tygart Valley River	Interchange	Line I							4	0.05	0.13				4	0.05	0.13
		Line A							4	0.11	0.27				4	0.11	0.27
Cheat River	Shavers Fork	Line S							1	0.02	0.04				1	0.02	0.04
		Line A							1	0.03	0.08				1	0.03	0.08
North Branch Potomac River	Patterson Creek	Line P							4	0.99	2.45	2	0.04	0.11	6	1.03	2.56
		Line A							2	0.65	1.60	1	0.01	0.02	3	0.66	1.62
	Forman	Line F	1	0.02	0.06				8	1.42	3.52	2	0.02	0.04	11	1.46	3.62
		Line A	1	0.02	0.06				5	1.28	3.17	2	0.06	0.14	8	1.36	3.37
South Branch Potomac River (No option areas)																	
Cacapon River	Hanging Rock	Line R															
		Line A															
	Baker	Line B							2	0.12	0.30	2	0.08	0.21	4	0.20	0.51
		Line A										1	0.03	0.07	1	0.03	0.07
Shenandoah River	Lebanon Church	Line L							3	0.33	0.81	2	0.02	0.06	5	0.35	0.87
		Line A							3	0.11	0.27				3	0.11	0.27
	Duck Run	Line D1				1	0.05	0.12				2	0.10	0.24	3	0.15	0.36
		Line D2	1	0.11	0.28										1	0.11	0.28
		Line A	1	0.11	0.28							2	0.10	0.24	3	0.21	0.52

Source: Michael Baker Jr., Inc.





**TABLE 8**  
**CHARACTERISTICS OF IMPACTED OPTION AREA WETLANDS**

NUMBER OF WETLANDS WITH CHARACTERISTIC	Tygart Valley River		Cheat River		North Branch Potomac				Cacapon River				Shenandoah River				
	Interchange Option Area		Shavers Fork Option Area		Patterson Creek Option Area		Forman Option Area		Hanging Rock Option Area		Baker Option Area		Lebanon Church Option Area		Duck Run Option Area		
	Line I	Line A	Line S	Line A	Line P	Line A	Line F	Line A	Line R	Line A	Line B	Line A	Line L	Line A	Line D1	Line D2	Line A
Adjacent Land Cover																	
Agricultural	4	4	1	1	6	3	10	5	0	0	2	0	5	3	3	0	2
Disturbed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Undisturbed	0	0	0	0	0	0	1	3	0	0	2	1	0	0	0	1	1
Landscape Position																	
Isolated	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Headwater	2	2	1	1	5	3	11	8	0	0	3	1	5	3	3	1	3
Other	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Wetland Size																	
Less Than 0.4 ha	2	2	1	1	3	1	8	2	0	0	3	1	5	3	2	1	3
Greater Than 0.4 ha	2	2	0	0	3	2	3	6	0	0	1	0	0	0	1	0	0
Functional Change																	
No Change	3	2	0	0	1	0	3	0	0	0	2	0	0	0	1	0	0
Slight Decrease	0	1	0	0	3	2	0	2	0	0	0	0	1	2	0	0	0
Decrease	0	0	1	1	0	0	3	1	0	0	1	0	3	0	1	0	1
Lost	1	1	0	0	2	1	5	5	0	0	1	1	1	1	1	1	2

Source: Michael Baker Jr., Inc.

## **B. TYGART VALLEY RIVER REGIONAL PROJECT WATERSHED**

### **1. EXISTING ENVIRONMENT**

The Tygart Valley River rises near Spruce, West Virginia in Pocahontas County and flows northward toward the Monongahela River. It drains 3,564 square kilometers (1,376 square miles) including portions of Randolph, Upshur, Barbour, and Taylor Counties. This regional project watershed is predicted to contain 155 ha (384 acres) of wetlands based on the GIS analysis and the predictive model.

The western portion of the proposed project lies within the Leading Creek local project watershed, which is characterized by wide valleys and meandering stream channels. Wetland types found in the local project watershed include floodplain areas of emergent, scrub-shrub, and forested vegetation and agriculture related ponds and pasture wetlands. The forested and shrub wetlands generally have high functional probability ratings for effectiveness of groundwater discharge, floodflow alteration, sediment stabilization, sediment and toxicant retention, and nutrient removal/transformation. They also typically have high functional probability ratings for opportunity for floodflow alteration and sediment and toxicant retention. All other characteristics for forested and shrub wetlands generally have functional probability ratings of low to moderate. The emergent wetlands typically have low to moderate functional probability ratings for all characteristics rated.

### **2. DIRECT IMPACTS**

In the Leading Creek local project watershed, the IRA would directly impact 16 vegetated wetlands and one pond, comprising 1.02 ha (2.53 acres). All encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 0.66 percent of the predicted wetland area of the regional project watershed. The majority (76 percent) of impacted wetlands are palustrine emergent vegetation communities and most (69 percent) of the wetlands impacted are less than 0.4 ha (1 acre) in total size. The landscape position of the wetlands effected by the IRA in the Leading Creek local project watershed is predominantly headwater (88 percent). Most (94 percent) of the adjacent land cover for wetlands within the proposed construction limits is agricultural or undisturbed types. This alignment would cause the following changes in WET probability ratings for function and values of impacted wetlands as a result of construction of the roadway: no change, 4 sites; slight decrease, 4 sites; decrease, 5 sites; and lost, 4 sites.

In the Leading Creek local project watershed, Line A would directly impact 16 vegetated wetlands and one pond, comprising 2.00 ha (4.95 acres). All encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 1.29 percent of the predicted wetland area of the regional project watershed. The majority (82 percent) of impacted wetlands are palustrine emergent vegetation communities and most (76 percent) of the wetlands impacted are less than 0.4 ha (1 acre) in total size. The landscape position of the wetlands effected by Line A in the Leading Creek local project watershed is

predominantly headwater (76 percent). Most (94 percent) of the adjacent land cover for wetlands within the proposed construction limits is agricultural and disturbed types. This alignment would cause the following changes in WET probability ratings for function and values of impacted wetlands as a result of construction of the roadway: no change, 4 sites; slight decrease, 2 sites; decrease, 7 sites; and lost, 4 sites.

Within the proposed Interchange Option Area, Line I and Line A would both impact four palustrine emergent wetlands. However, Line A would impact more wetland area than Line I (0.11 ha, 0.27 acres; versus 0.05 ha, 0.13 acres, respectively). Within both alignments, three of four wetlands impacted would be less than 0.4 ha (1 acre) in total size. Both Line I and Line A would cause similar impacts with regards to landscape position and adjacent land cover. A comparison of Line I to Line A for the WET probability ratings for function and values of impacted wetlands would show an increased number of wetlands experiencing no change as a result of construction of the roadway, a decreased number of wetlands experiencing slight decrease, and the same number of wetlands experiencing decrease or lost.

### **C. CHEAT RIVER REGIONAL PROJECT WATERSHED**

The Cheat River is formed near Parsons, West Virginia, at the confluence of the Black Fork and Shavers Fork. The Cheat River flows north to its confluence with the Monongahela River at Point Marion, Pennsylvania. The Cheat River drains approximately 3,678 square kilometers (1,420 square miles) in West Virginia. This regional project watershed is predicted to contain 9,096 ha (22,477 acres) of wetlands based on the GIS analysis and the predictive model.

#### **1. EXISTING ENVIRONMENT**

Within the project area, the Cheat River regional project watershed is composed of the local project watersheds of Shavers Fork and Black Fork. Shavers Fork local project watershed drains the eastern slopes of Cheat Mountain and the western slopes of Shavers Mountain. This local project watershed includes Pleasant Run and Haddix Run. The Black Fork local project watershed drains areas along Backbone Mountain, Canaan Mountain, Canaan Valley, and Beaver Creek. Streams in this local project watershed include the North Fork, Long Run, Big Run, Pendleton Creek, Blackwater River, and Beaver Creek. Wetland types found in the local project watersheds of Shavers Fork and Black Fork River are primarily floodplain areas which are either used for agricultural purposes or are undisturbed.

Wetland types found in the Black Fork local project watershed are primarily high elevation bogs and fens which are dominated by mosses, sedges, and ericacious shrubs such as blueberries. There are two wetlands with special status in this local project watershed. Big Run Bog, in the western part of this local project watershed, is a Monongahela National Forest Research Natural Area. Elder Swamp, along Beaver Creek in the eastern part of this local project watershed, is designated in the Regional Wetland Concept Plan

(USFWS, 1990) as an area worthy of protection. Many of the wetlands in this area are influenced by beaver activity. A large portion of the local project watershed has been subjected to surface mining activities, and numerous wetlands are affected by acid mine drainage. Several restoration and reclamation projects are underway. Areas around Middle Run, Long Run and the North Fork were recently modified as part of the Albert Highwall and Douglas Highwall Reclamation projects.

In the Shavers Fork local project watershed, the forested and shrub wetlands generally have high functional probability ratings for effectiveness of groundwater discharge, floodflow alteration, sediment stabilization, sediment and toxicant retention, and nutrient removal/transformation. They also have generally high functional probability ratings for opportunity for floodflow alteration and sediment and toxicant retention. All other characteristics for forested and shrub wetlands generally have functional probability ratings of low to moderate. The emergent wetlands generally have low to moderate functional probability ratings for all characteristics rated. In the Black Fork local project watershed, the forested and shrub wetlands generally have high functional probability ratings for effectiveness of sediment and toxicant retention and nutrient removal/transformation. They also have generally high functional probability ratings for opportunity for floodflow alteration and sediment and toxicant retention. All other characteristics for forested and shrub wetlands generally have functional probability ratings of low to moderate. Those emergent wetlands that contain acid mine drainage exhibit generally high functional probability ratings for social significance of sediment/toxicant retention and nutrient removal/transformation, for opportunity for floodflow alteration, sediment stabilization, sediment/toxicant retention, and nutrient removal/transformation. They also have generally high functional probability ratings for opportunity for floodflow alteration and sediment/toxicant retention.

## **2. DIRECT IMPACTS**

In the local project watersheds of the Cheat River regional project watershed, the IRA would directly impact 24 vegetated wetlands and three ponds, comprising 4.88 ha (12.06 acres). Ninety three percent of the encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 0.05 percent of the predicted wetland area of the regional project watershed. The majority (59 percent) of impacted wetlands are palustrine emergent vegetation communities and most (70 percent) of the wetlands impacted are less than 0.4 ha (1 acre) in total size. Landscape position of the wetlands affected by the IRA is predominantly headwater and "other" wetlands (those adjacent to streams with a drainage area greater than 13 square km (5 square miles)) (44 percent and 41 percent, respectively). Adjacent land cover for wetlands within the proposed construction limits is mainly disturbed types (56 percent). The following changes in WET probability ratings for function and values of impacted wetlands would likely occur as a result of construction of the roadway: no change, 11 sites; slight decrease, 8 sites; decrease, 6 sites; and lost, 2 sites.

In the local project watersheds of the Cheat River regional project watershed, Line A would directly impact 81 vegetated wetlands and ten ponds, comprising 7.77 ha (19.19 acres). Ninety eight percent of the encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 0.09 percent of the predicted wetland area of the regional project watershed. The majority (66 percent) of impacted wetlands are palustrine emergent vegetation communities and most (69 percent) of the wetlands impacted are less than 0.4 ha (1 acre) in total size. The landscape position of the wetlands affected by Line A is predominantly headwater (67 percent). Most (71 percent) of the adjacent land cover for wetlands within the proposed construction limits is dominated by disturbed types. This alignment would cause the following changes in WET probability ratings for function and values of impacted wetlands as a result of construction of the roadway: no change, 24 sites; slight decrease, 19 sites; decrease, 22 sites; and lost, 26 sites.

Within the proposed Shavers Fork Option Area, Line S and Line A would both impact one palustrine emergent wetland. However, Line A would impact slightly more wetland area than Line S (0.03 ha, 0.08 acres; versus 0.02 ha, 0.04 acres, respectively). Because the same wetland area would be affected by both proposed alignments, there would be no difference in impacts to wetland's landscape position or adjacent land cover. Because the wetland in question is under 0.4 ha (1 acre) in size, the change in WET probability ratings as a result of construction of the roadway could not be assessed. However, based on professional judgment, Line S would cause less decrease in the wetland's functions and values than would Line A.

#### **D. NORTH BRANCH OF THE POTOMAC RIVER REGIONAL PROJECT WATERSHED**

The North Branch of the Potomac River regional project watershed is 1,204 square kilometers (465 square miles), covering portions of Grant and Hampshire Counties and all of Mineral County West Virginia. The river runs generally northeastward along a basin between the Allegheny Front and Backbone Mountain. This regional project watershed is predicted to contain 1,926 ha (4,759 acres) of wetlands based on the GIS analysis and the predictive model.

##### **1. EXISTING ENVIRONMENT**

Within the project area, the North Branch of the Potomac River regional project watershed is composed of the local project watersheds of Stony River and Patterson Creek. The Stony River local project watershed drains the valley west of the Allegheny Front surrounding Mount Storm Lake. Streams contained in this local project watershed include Stony River, Abrams Creek, Mill Run, and the Mount Storm Lake Reservoir. The Patterson Creek local project watershed drains the headwaters of Patterson Creek between Patterson Creek Mountain on the east and the Allegheny Front to the west. Streams contained in this local project watershed include Ellick Run, the North Fork of Patterson Creek, the Middle Fork of Patterson Creek, Thorn Run, and the main stem of Patterson Creek.

Wetlands typically found in the Stony River local project watershed are either forested floodplain areas or wetlands in pastures. Wetlands found in the Patterson Creek local project watershed are typically pasture wetlands. The forested and shrub wetlands generally have moderate functional probability ratings for effectiveness of floodflow alteration, sediment stabilization, sediment and toxicant retention, and nutrient removal/transformation, and high probability ratings for social significance of sediment/toxicant reduction and effectiveness of wildlife diversity/abundance. They also have generally high functional probability ratings for opportunity for sediment and toxicant retention. All other characteristics for forested and shrub wetlands generally have functional probability ratings of low to moderate. The emergent wetlands generally have low to moderate functional probability ratings for all characteristics rated.

## **2. DIRECT IMPACTS**

In the local project watersheds of the North Branch of the Potomac River regional project watershed, the IRA would directly impact 10 vegetated wetlands, comprising 1.68 ha (4.15 acres). Ninety percent of the encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 0.09 percent of the predicted wetland area of the regional project watershed. The majority (90 percent) of impacted wetlands are palustrine emergent vegetation communities and most (60 percent) of the wetlands impacted are greater than 0.4 ha (1 acre) in total size. The landscape position of the wetlands affected by the IRA is predominantly headwater (80 percent). Adjacent land cover for wetlands within the proposed construction limits is dominated by agricultural types (70 percent). This alignment would cause the following changes in WET probability ratings for function and values of impacted wetlands as a result of construction of the roadway: no change, 3 sites; slight decrease, 3 sites; decrease, 2 sites; and lost, 2 sites.

In the local project watersheds of the North Branch of the Potomac River regional project watershed, Line A would directly impact 18 vegetated wetlands and five ponds, comprising 3.38 ha (8.35 acres). Ninety one percent of the encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 0.18 percent of the predicted wetland area of the regional project watershed. The majority (70 percent) of impacted wetlands are palustrine emergent vegetation communities and most (74 percent) of the wetlands impacted are less than 0.4 ha (1 acre) in total size. The landscape position of the wetlands affected by Line A is predominantly headwater (96 percent). Adjacent land cover for wetlands within the proposed construction limits is dominated by agricultural and undisturbed types (96 percent). This alignment would cause the following changes in WET probability ratings for function and values of impacted wetlands as a result of construction of the roadway: no change, 2 sites; slight decrease, 7 sites; decrease, 6 sites; and lost, 8 sites.

Within the proposed Patterson Creek Option Area, Line P would directly impact four palustrine emergent wetlands and two ponds, comprising 1.04 ha (2.56 acres), while Line A would impact two palustrine emergent wetlands and one pond, comprising 0.66 ha (1.62 acres). All encroachment areas are less than 0.4 ha (1 acre). Four (4) of the wetlands impacted by Line P are over 0.4 ha (1 acre) in total size, while two of the wetlands impacted by Line A are less than 0.4 ha (1 acre) in total size. Line P would cause more impacts to headwater wetlands and more impacts to "other" wetlands (those adjacent to streams with a drainage area greater than 13 square km (5 square miles)). Line P would cause more impacts to wetlands with adjacent agricultural land and neither alignment impacts wetlands with adjacent disturbed and undisturbed land covers. A comparison of Line P to Line A for the WET probability ratings for function and values of impacted wetlands would show an increased number of wetlands experiencing no change as a result of construction of the roadway, an increased number of wetlands experiencing slight decrease, no difference in the number of wetlands experiencing a decrease, and an increase in the number of wetland functions lost.

Within the proposed Forman Option Area, Line F would directly impact nine vegetated wetlands (8 palustrine emergent, 1 palustrine forested) and two ponds, comprising 1.46 ha (3.62 acres), while Line A would impact six vegetated wetlands (5 palustrine emergent, 1 palustrine forested) and two ponds, comprising 1.36 ha (3.37 acres). Line F would create two (2) encroachment areas greater than 0.4 ha (1 acre), while Line A would create one. Line F impacts would occur in more wetlands greater than 0.4 ha (1 acre) (3 versus 2). Line F would cause a larger number of impacts to headwater wetlands than would Line A. Line F would increase the number of impacts to wetlands with adjacent agricultural land cover and would cause fewer impacts to wetlands with adjacent undisturbed land covers. A comparison of Line F to Line A for the WET probability ratings for function and values of impacted wetlands would show an increased number of wetlands experiencing no change as a result of construction of the roadway, a decreased number of wetlands experiencing slight decrease, an increased number of wetlands experiencing decrease, and no change in the number of wetland functions lost.

#### **E. SOUTH BRANCH OF THE POTOMAC RIVER REGIONAL PROJECT WATERSHED**

The South Branch of the Potomac River rises in Highland County, Virginia, and flows in a northeasterly direction into West Virginia to its confluence with the North Branch. Within West Virginia, the South Branch of the Potomac River drains 3,756 square kilometers (1,450 square miles) within Pendleton, Grant, Hardy, and Hampshire Counties. This regional project watershed is predicted to contain 338 ha (836 acres) of wetlands based on the GIS analysis and the predictive model.



## 1. EXISTING ENVIRONMENT

Within the project area, the South Branch of the Potomac River regional project watershed is composed of the local project watersheds of Anderson Run, Main Channel, and Clifford Hollow. The Anderson Run local project watershed is located west of the community of Old Fields, and drains the eastern flank of Patterson Creek Mountain. This local project watershed includes Anderson Run and Walnut Bottom Run. The Main Channel local project watershed constitutes the central portion of the regional project watershed, and includes Williams Hollow, Fort Run, Dumpling Run, and several small tributaries. The Clifford Hollow local project watershed is located at the eastern side of the regional project watershed and drains the western slope of South Branch Mountain.

Wetland types found in the regional project watershed are dominated by agriculture-related ponds and areas of emergent vegetation in pastures. Functional probability ratings are not available for forested and shrub wetlands because none were delineated along the alignment in this regional project watershed. The emergent wetlands generally have moderate to low functional probability ratings for all characteristics.

## 2. DIRECT IMPACTS

In the local project watersheds of the South Branch of the Potomac River regional project watershed, the IRA would directly impact six vegetated wetlands and two ponds, comprising 0.56 ha (1.39 acres). All of the encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 0.17 percent of the predicted wetland area of the regional project watershed. All of the impacted vegetated wetlands are palustrine emergent vegetation communities and 62 percent of the wetlands impacted are less than 0.4 ha (1 acre) in total size. The landscape position of the wetlands affected by the IRA is predominantly headwater (63 percent). Adjacent land cover for wetlands within the proposed construction limits is dominated by agricultural types (88 percent). This alignment would cause the following changes in WET probability ratings for function and values of impacted wetlands as a result of construction of the roadway: no change, 5 sites; slight decrease, 1 site; decrease, 2 sites; and lost, no sites.

In the local project watersheds of the South Branch of the Potomac River regional project watershed, Line A would directly impact eight vegetated wetlands and two ponds, comprising 0.80 ha (1.98 acres). All of the encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 0.24 percent of the predicted wetland area of the regional project watershed. The majority (80 percent) of impacted wetlands are palustrine emergent vegetation communities and most (70 percent) of the wetlands impacted are less than 0.4 ha (1 acre) in total size. All wetlands affected by Line A have a headwater landscape position. Adjacent land cover for wetlands within the proposed construction limits is dominated by agricultural types (90 percent). This alignment would cause the following changes in WET

probability ratings for function and values of impacted wetlands as a result of construction of the roadway: no change, 3 sites; slight decrease, 2 sites; decrease, 3 sites; and lost, 2 sites.

## **E. CACAPON RIVER REGIONAL PROJECT WATERSHED**

The Cacapon River originates in the southeastern portion of Hardy County on West Mountain, and encompasses 1,792 square kilometers (692 square miles) in Hardy, Hampshire, and Morgan Counties. This regional project watershed extends north and south across the project area. This regional project watershed is predicted to contain 349 ha (863 acres) of wetlands based on the GIS analysis and the predictive model.

### **1. EXISTING ENVIRONMENT**

Within the project area, the Cacapon River regional project watershed is composed of the local project watersheds of Skaggs Run, Baker Run, Central Cacapon River, Waites Run, and Slate Rock Run. Skaggs Run and Baker Run are located to the west of the Cacapon River, and Waites Run and Slate Rock Run are located to the east.

Wetland types found in the Skaggs Run, Baker Run and Central Cacapon River portions of the regional project watershed typically include floodplain areas of emergent, scrub-shrub, and forested vegetation and agriculture related ponds and areas of emergent vegetation in pastures. The eastern portion of the regional project watershed, which is largely within the George Washington National Forest, contains few wetlands. The forested and shrub wetlands generally have high functional probability ratings for effectiveness of floodflow alteration, sediment stabilization, and sediment and toxicant retention. All other characteristics for forested and shrub wetlands generally have functional probability ratings of low to moderate. The emergent wetlands generally have low to moderate functional probability ratings for all characteristics rated.

### **2. DIRECT IMPACTS**

In the local project watersheds of the Cacapon River regional project watershed, the IRA would directly impact one pond, comprising 0.08 ha (0.19 acres). This is approximately 0.02 percent of the predicted wetland area of the regional project watershed. This wetland is less than 0.4 ha (1 acre) in size. The landscape position of the wetland is headwater. Adjacent land cover for this wetland is agricultural. The IRA would cause a loss of the wetland's functions and values.

In the local project watersheds of the Cacapon River regional project watershed, Line A would directly impact 13 vegetated wetlands and four ponds, comprising 0.97 ha (2.39 acres). All of the encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 0.28 percent of the predicted wetland area of the regional project watershed. The majority (59 percent) of

impacted wetlands are palustrine emergent vegetation communities and most (82 percent) of the wetlands impacted are less than 0.4 ha (1 acre) in total size. The landscape position of the wetlands affected by Line A is predominantly headwater (76 percent). Adjacent land cover for wetlands within the proposed construction limits is dominated by agriculture (76 percent). This alignment would cause the following changes in WET probability ratings for function and values of impacted wetlands as a result of construction of the roadway: no change, 5 sites; slight decrease, 1 site; decrease, 3 sites; and lost, 8 sites.

Within the Hanging Rock Option Area, neither Line R nor Line A would directly impact wetlands.

Within the Baker Option Area, Line B would directly impact two palustrine emergent wetlands and two ponds, comprising 0.21 ha (0.51 acres), while Line A would impact one pond comprising 0.03 ha (0.07 acres). Line B would impact one palustrine emergent wetland greater than 0.4 ha (1 acre) in total size. Line B would cause a larger number of impacts to isolated and headwater wetlands than would Line A. Line B would also increase the number of impacts to wetlands with adjacent agricultural and undisturbed land covers. A comparison of Line B to Line A for the WET probability ratings for function and values of impacted wetlands would show an increased number of wetlands experiencing no change, the same number of wetlands experiencing slight decrease, an increased number of wetlands experiencing decrease, and no change in the number of wetland functions lost.

## **G. SHENANDOAH RIVER REGIONAL PROJECT WATERSHED**

The Shenandoah River regional project watershed drains approximately 7,770 square kilometers (3,000 square miles) in Augusta, Rockingham, Page, Frederick, Shenandoah, Warren, and Clarke Counties in Virginia, and Jefferson and Hardy Counties in West Virginia. The Hardy/Frederick County line and the axis of Great North Mountain marks the division between the Shenandoah River regional project watershed and the Cacapon River regional project watershed to the west. This regional project watershed is predicted to contain 260 ha (644 acres) of wetlands based on the GIS analysis and the predictive model.

### **1. EXISTING ENVIRONMENT**

Within the project area, the Shenandoah River regional project watershed is composed of Cedar Creek local project watershed. Streams included in this local project watershed are Duck Run, Eishelman Run, Zanes Run and Mulberry Run.

Wetland types found in the local project watershed typically include floodplain areas of emergent, scrub-shrub, and forested vegetation and agriculture related ponds and areas of emergent vegetation in pastures. The forested and shrub wetlands generally have high functional probability ratings for social significance of sediment and toxicant retention. All other characteristics for the forested and shrub wetlands

in this local project watershed generally have functional probability ratings of low to moderate. The emergent wetlands generally have low to moderate functional probability ratings for all characteristics rated.

## 2. DIRECT IMPACTS

In Cedar Creek local project watershed, the IRA would directly impact 17 vegetated wetlands, comprising 0.46 ha (1.14 acres) of wetlands. All of the encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 0.18 percent of the predicted wetland area of the regional project watersheds. Six (6) wetland impacts occur in both palustrine scrub-shrub and palustrine forested vegetation communities. The majority (94 percent) of impacts occur in wetlands that are less than 0.4 ha (1 acre) in total size. Landscape position of the wetlands affected by the IRA is predominantly headwater (82 percent). Adjacent land cover for wetlands within the proposed construction limits is an even mix of agricultural, disturbed and undisturbed types. The following changes in WET probability ratings for function and values of impacted wetlands would likely occur as a result of construction of the roadway: no change, 8 sites; slight decrease, 3 sites; decrease, 5 sites; and lost, 1 site.

In Cedar Creek local project watershed, Line A would directly impact five vegetated wetlands and two ponds, comprising 0.33 ha (0.82 acres). All of the encroachment areas are less than 0.4 ha (1 acre). This encroachment area accounts for approximately 0.13 percent of the predicted wetland area of the Virginia regional project watershed. Most (57 percent) wetland impacts occur in palustrine emergent vegetation communities and all of the wetlands impacted are less than 0.4 ha (1 acre) in total size. No scrub-shrub wetlands are affected. The landscape position of most (86 percent) of the wetlands affected by Line A is headwater. Adjacent land cover for wetlands within the proposed construction limits is a mix of agricultural and undisturbed classes. This alignment would cause the following changes in WET probability ratings for function and values of impacted wetlands as a result of construction of the roadway: no change, 1 site; slight decrease, 2 sites; decrease, 2 sites; and lost, 2 sites.

Within the Duck Run Option Area, Line D1 would directly impact one palustrine scrub-shrub wetland and two ponds, comprising 0.15 ha (0.36 acres), while Line A would impact one palustrine forested wetland and two ponds, comprising 0.21 ha (0.52 acres). All of the wetlands impacted are less than 0.4 ha (1 acre) in total size. Both Line D1 and Line A would cause similar impacts to headwater wetlands. Line D1 would cause a larger number of impacts to wetlands with adjacent agricultural land cover and would cause fewer impacts to wetlands with adjacent undisturbed land cover. A comparison of Line D1 to Line A for the WET probability ratings for function and values of impacted wetlands would show an increased number of wetlands experiencing no change as a result of construction of the roadway, no change in the number of wetlands experiencing slight decrease and decrease, and a decreased number of wetland functions lost.

Within the Duck Run Option Area, Line D2 would directly impact one palustrine forested wetland, comprising 0.11 ha (0.28 acres), while Line A would impact one palustrine forested wetland and two ponds, comprising 0.21 ha (0.52 acres). Line D2 would cause fewer impacts to headwater wetlands. This alignment would also cause fewer impacts to wetlands with adjacent agricultural land cover and would cause the same number of impacts to wetlands with adjacent undisturbed land cover. A comparison of Line D2 to Line A for the WET probability ratings for function and values of impacted wetlands would show no change in the proportion of wetlands experiencing no change and slight decrease as a result of construction of the roadway, a decreased number of wetlands experiencing decrease, and a decreased number of wetland functions lost.

Within the Lebanon Church Option Area, Line L would directly impact three palustrine emergent wetlands and two ponds, comprising 0.35 ha (0.87 acres), while Line A would impact three palustrine emergent wetlands, comprising 0.11 ha (0.27 acres). Only one (1) of the wetlands impacted (Line L) is greater than 0.4 ha (1 acre) in total size. Line L would cause more impacts to headwater wetlands than would Line A and would cause a greater number of impacts to wetlands with adjacent agricultural land cover. A comparison of Line L to Line A for the WET probability ratings for function and values of impacted wetlands would show the same number of wetlands experiencing no change, a decreased number of wetlands experiencing slight decrease, an increased number of wetlands experiencing decrease, and no difference in the number of wetland functions lost.

## **H. ALIGNMENT COMPARISONS**

The IRA and the Build Alternative are compared in this section. Table 9 Summarizes and Figures 15 present the number and area of wetlands that are directly affected by the alignments within West Virginia, Virginia, and combined. Table 10 provides characteristics of the impacted wetlands by alternative.

### **1. WEST VIRGINIA**

Wetland impacts for Line A in West Virginia would: impact more individual wetlands; impact more wetland area; impact a greater proportion of wetlands within the West Virginia regional project watersheds; and impact a greater proportion of wetlands that are greater than 0.4 ha (1 acre) in total size.

Wetland impacts for the IRA in West Virginia would: impact more area of forested wetland; and impact a greater proportion of wetlands with adjacent agricultural and undisturbed land covers.

Post-construction WET probability ratings for functions and values of impacted wetlands would show no change or slight decrease in a greater proportion of IRA wetlands; no difference in wetlands that would show a decrease; and a greater proportion of functional loss for Line A wetlands.

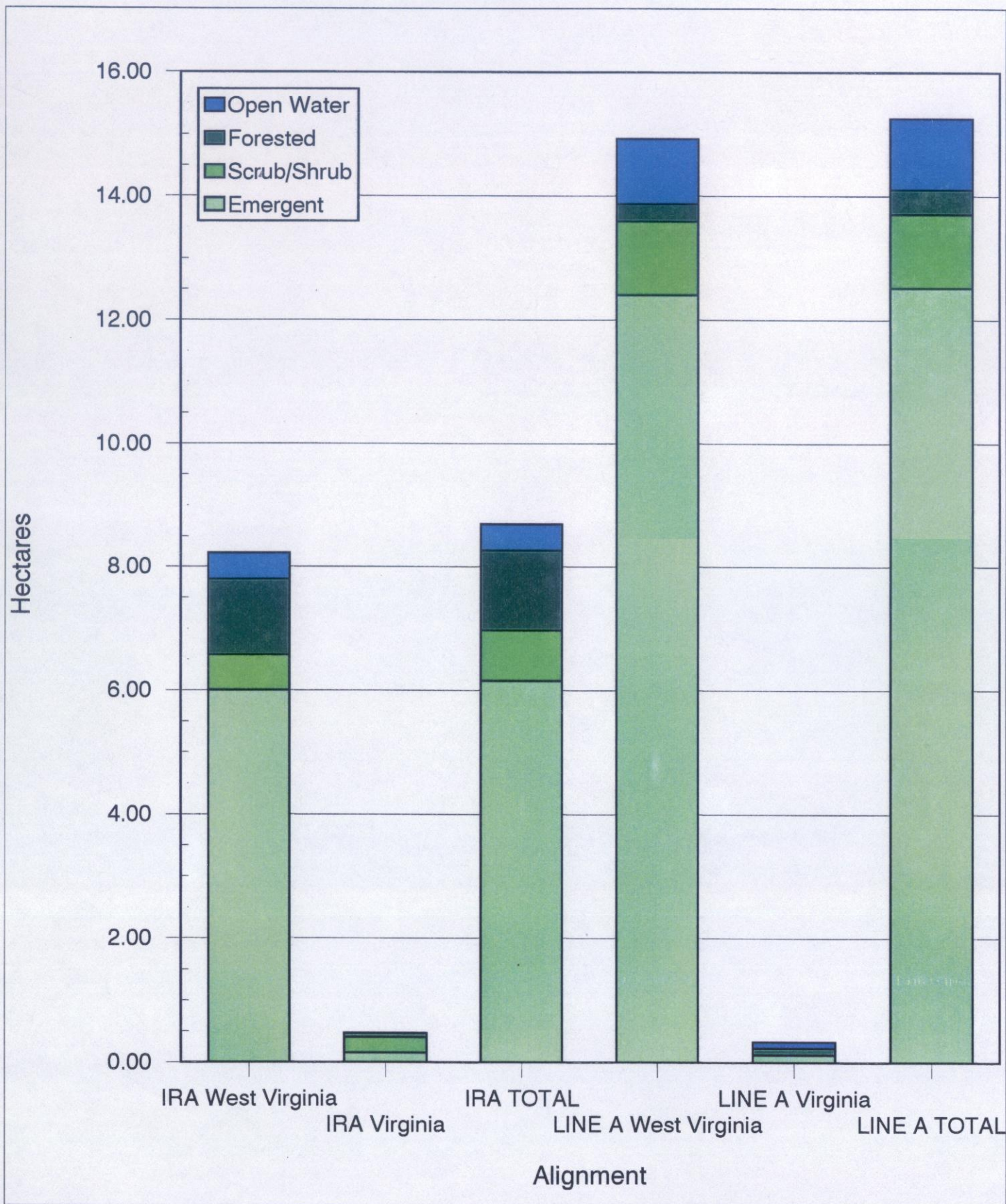
**TABLE 9**  
**DIRECT WETLAND IMPACTS BY ALTERNATIVE**

VEGETATION TYPE	IMPROVED ROADWAY (IRA)									BUILD ALTERNATIVE - LINE A								
	WV			VA			TOTAL			WV			VA			TOTAL		
	#	Hectares	Acres	#	Hectares	Acres	#	Hectares	Acres	#	Hectares	Acres	#	Hectares	Acres	#	Hectares	Acres
Emergent	44	6.00	14.83	6	0.15	0.36	50	6.15	15.19	107	12.40	30.64	4	0.12	0.30	111	12.52	30.94
Scrub/Shrub	7	0.57	1.41	6	0.25	0.61	13	0.82	2.02	23	1.19	2.94	0	0.00	0.00	23	1.19	2.94
Forested	5	1.22	3.01	5	0.07	0.17	10	1.29	3.18	6	0.28	0.68	1	0.11	0.28	7	0.39	0.96
Open Water	7	0.43	1.07	0	0.00	0.00	7	0.43	1.07	17	1.05	2.60	7	0.10	0.24	24	1.15	2.84
TOTAL	63	8.22	20.32	17	0.47	1.14	80	8.69	21.46	153	14.92	36.86	12	0.33	0.82	165	15.25	37.68





**FIGURE 15**  
**VEGETATION TYPES OF DIRECTLY IMPACTED WETLANDS**  
**ALL ALIGNMENTS**



**TABLE 10**  
**DIRECT WETLAND IMPACT CHARACTERISTICS BY ALTERNATIVE**

NUMBER OF WETLANDS WITH CHARACTERISTIC	ALTERNATIVES						
	NO-BUILD	IMPROVED ROADWAY (IRA)			BUILD ALTERNATIVE - LINE A		
		WV	VA	TOTAL	WV	VA	TOTAL
Adjacent Land Cover							
Agricultural	0	27	5	32	59	3	62
Disturbed	0	19	6	25	67	0	67
Undisturbed	0	17	6	23	32	4	36
Landscape Position							
Isolated	0	9	1	10	26	0	26
Headwater	0	41	14	55	119	6	125
Other	0	13	2	15	13	1	14
Wetland Size							
Less Than 0.4 ha	0	38	15	53	81	7	88
Greater Than 0.4 ha	0	25	2	27	77	0	77
Functional Change							
No Change	0	23	8	31	38	1	39
Slight Decrease	0	16	3	19	31	2	33
Decrease	0	15	5	20	41	2	43
Lost	0	9	1	10	48	2	50

Source: Michael Baker Jr., Inc.

## **2. VIRGINIA**

Wetland impacts for Line A in Virginia would: impact more forested and open water wetlands (ponds); impact a greater proportion of wetlands with adjacent agricultural and undisturbed land covers; and would cause a greater proportion of impacts to wetlands smaller than 0.4 ha (1 acre).

Wetland impacts for the IRA in Virginia would: impact more individual wetlands; impact more wetland area; impact a greater proportion of wetlands present in the Virginia regional project watershed; and impact a greater proportion of wetlands with adjacent disturbed land cover.

Post-construction WET probability ratings for functions and values of impacted wetlands would show no change in a smaller proportion of wetlands as a result of construction of the roadway in Line A; a slight decrease or loss in a greater proportion of wetlands in Line A; and no difference in wetlands that show a decrease.

## **3. COMBINED WEST VIRGINIA AND VIRGINIA ALIGNMENTS**

Line A would: impact more individual wetlands; impact more wetland area; impact a greater proportion of wetlands present in the regional project watersheds; impact a slightly greater proportion of wetlands that are smaller than 0.4 ha (1 acre) in total size; and impact a greater proportion of wetlands with isolated and headwater landscape positions.

The IRA would: impact more area of forested wetland; and impact a greater proportion of wetlands with adjacent agricultural and undisturbed land cover.

Post-construction WET probability ratings for functions and values of impacted wetlands would show no change or slight decrease in a smaller proportion of wetlands in Line A; no difference in wetlands that show a decrease as a result of construction of the roadway; and a functional loss in a larger proportion of Line A wetlands.

## **I. SECONDARY IMPACTS**

### **1. HIGHWAY-RELATED IMPACTS**

#### **a. Background**

Secondary impacts discussed here are those that occur as the result of the construction and operation of the proposed project. These effects may be the immediate consequences of road construction, or they may be a result of the road's long-term operation. The effects of highway construction may be more likely to occur in wetlands than in uplands because wetlands are the landscape units that receive, retain, and

discharge surface water and groundwater (Southerland, 1993). Secondary impacts can affect wetlands through changing the vegetation communities, erosion and sediment deposition, or altering water regimes and water quality. The majority of these impacts are temporary in nature and their severity can be mitigated through use best of management practices.

#### **b. Erosion and Sedimentation**

Wetland water quality could be affected by temporary erosion and sedimentation caused by earth moving activities. Shuldiner, *et al.* (1979) report that highway construction is a major source of sediment loads in surface waters, and sediment loads from highway construction during an average storm can be 10 times greater than that from cultivated land and 200 times greater than that of grassed and forest land. Construction activities within the wetland itself can cause large amounts of organic and mineral matter to be suspended in the surrounding water. Runoff from cleared lands or highway fill is also a source of inorganic matter that could enter wetlands. This could decrease overall wetland productivity by increasing water turbidity, thereby lowering the amount of light available for photosynthesis. Deposition of sediment within wetlands could raise the surface elevation of the wetland, leading to eventual drop in the water table and loss of the wetland. Excess sediment also could smother certain plant species.

Analysis of the vegetation data identified on the Wetland Delineation Forms (Appendix C) determined that 3% of the impacted wetlands for the Build Alternatives contained submerged aquatic vegetation that could be susceptible to the above impacts. Further analysis revealed that within these wetlands, the submerged vegetation was a small component of the overall wetland vegetative community. The dominant existing emergent plants that surround these submerged species, would likely act as a vegetative buffer to reduce runoff and "trap" suspended solids impacts. The employment of proper erosion and sedimentation control practices should reduce and/or minimize these impacts.

#### **c. Hydrological**

Changes in water levels and water flow regimes are another potential effect of highway construction and operation. Movement of groundwater could be reduced by constructing low permeable barriers with impervious fills or compressed substrate. This effect could cause ponding of water on the upstream side of the road and drying of the downstream side of the road. Channelization of water flows in a wetland due to placement of culverts also could cause lowering of the water table. The reverse could also occur - greater water levels could occur if water is directed into a wetland from an outside source. Many wetland plant species are sensitive to the amount and level of water that occurs in the wetland. In some cases changes in water levels could cause minor alterations in the vegetation community composition, and in other cases, the changes could be dramatic.

Data analysis for the Build and Improved Roadway Alternatives determined that proposed highway construction restricted the placement of culverts to existing streams, and as such, would not impact wetland vegetation.

Alteration of flooding patterns (timing and flow volume) can impact wetland productivity and vegetative community structure. Flooding provides periodic inputs of needed nutrients into wetlands. Drier conditions accelerate decomposition of dead plant material, and these added nutrients encourage rapid growth. Thus, loss of flooding could cause reduced wetland productivity and changes in wetland community structure and composition.

During wetland field investigations, an assessment was made of potential sources of wetland hydrology. Twelve percent of the delineated wetlands were solely dependent on seasonal flooding for their hydrology. Of these, eight were within 30 m (100') of the construction limits. These wetlands could be susceptible to alterations in flood patterns due to construction activity.

Potentially harmful and toxic materials can be associated with stormwater runoff (Dupuis and Kobriger, 1985). These materials may include nitrogen, phosphorus, metals, salts, petroleum products, and pathogenic bacteria. However, it has been found that stormwater runoff from rural highways with traffic volumes less than 30,000 vehicles per day causes minimal to no impact on the aquatic environment. Projected traffic volumes for the year 2013 for the proposed Build Alternative ranged from 1,000 to 23,000 vehicles per day with an average volume of 9,000 with the IRA traffic volumes being less. At these traffic volumes, the above effects would be minimal.

## **2. DEVELOPMENT-RELATED IMPACTS**

As discussed in the *Secondary and Cumulative Impacts Technical Report*, all industrial parks except one have already been constructed or are under construction. The one proposed industrial park location north of WV 93 adjacent to Four Mile Run contains a 2.3 hectare (5.5 acre) palustrine scrub-shrub wetland. Development of this site could encroach upon that wetland as well as impact Four Mile Run.

Commercial development analysis revealed that such development could occur without encroaching upon any wetland resources.

Because the definition of raw land excludes wetlands and because sufficient raw land is available to support all predicted residential and residentially related service oriented development, it is possible that the projected development could occur without wetland impacts.



## **J. CUMULATIVE IMPACTS**

Cumulative impacts were evaluated in this study in three categories: the additive effects of direct impacts; the additive effects of direct and secondary impacts; and the additive effects of the proposed projects and other reasonably foreseeable future actions.

### **1. ADDITIVE DIRECT IMPACTS**

Additive direct impact to wetlands by regional project watershed are summarized in Table 4 for both the Improved Roadway and Build Alternatives. The IRA in West Virginia would cumulatively impact 63 individual wetlands, comprising 8.22 ha (20.32 ac), an encroachment area representing 0.07% of the predicted wetland area for the West Virginia regional project watersheds. The IRA in Virginia would cumulatively impact 17 individual wetlands, comprising 0.47 ha (1.14 ac), an encroachment area representing 0.18% of the predicted wetland area for the Virginia regional project watershed. Line A in West Virginia would cumulatively impact 158 individual wetlands, comprising 14.92 ha (36.86 ac), an encroachment area representing 0.12% of the predicted wetland area of the West Virginia regional project watersheds. Line A in Virginia would cumulatively impact 7 individual wetlands, comprising 0.33 ha (0.82 ac), an encroachment area representing 0.13% of the predicted wetland area of the Virginia regional project watershed.

Leibowitz et al. (1992) presented three general categories of wetland functions that should be considered when evaluating cumulative impacts: habitat functions that provide support for wetland dependent species, including food, shelter, and breeding sites; water quality functions including water quality improvement, nutrient cycling and supply; and hydrologic functions such as flood attenuation and moderation of hydrologic flow. These functions are considered below.

Wildlife wetland habitat was assessed using the USFWS Habitat Evaluation Procedure (HEP). This procedure is discussed in detail in the *Vegetation and Wildlife Habitat Technical Report*. Overall, wetland habitat contributed less than 1% to the calculated Habitat Units (HU) total. The wetlands impacted appear to be of seasonal importance, providing limited breeding and feeding habitat during the spring and early summer. The majority of wetlands impacted for both Alternatives were relatively small palustrine emergent communities. As such, they did not provide vegetative habitat components in the quantities necessary to yield appreciable HU's for the chosen evaluation species. While small wetlands can play an important role in the population dynamics of many wetland associated small mammal, bird, amphibian, and insect species, the removal of this wetland area would not have a measurable cumulative effect on these wildlife populations within the regional project watersheds.

In addition, wetland mosaic patterns are an important feature for wetland associated species. Researchers have found that the approximate maximum migration distance for aquatic breeding amphibians, small birds, and small mammals is 1,000 m (Gibbs, 1993). Gibbs also found that small wetlands (less than 4 ha, 10 acres) play an important role in the population dynamics of many wetland associated species by reducing interwetland distances, thereby increasing the probability of successful dispersal, and increasing the number of individuals dispersing among patches within the wetland mosaic. Over 90 % of the delineated wetlands met this size criteria. Alteration of the existing wetland mosaic pattern could result in wetlands becoming "isolated" (greater than 1,000 m, 3,280 ft, from the nearest wetland) which could impact the population dynamics of wetland associated species. GIS analysis examined the existing wetland mosaic pattern of the field investigated wetlands. Twenty of the existing delineated wetlands (4%) were determined to be isolated based on the above definition. The average minimum distance between existing wetlands was 240 m (790 ft).

Construction of the Build Alternative (Line A) could isolate one (1) additional wetland by creating an inter-wetland distance greater than 1,000 m. Overall, the average minimum distance between wetlands would increase by 20 m to 260 m (850 ft). This increase in average minimum distance is not considered an impediment to those species present. Construction of the IRA similarly would isolate one small (< 0.5 hectare) wetland. Construction of either alternative would therefore not alter the current wetland mosaic pattern present.

A functions and values evaluation for each delineated wetland was conducted using the WET 2.1 computer program. In summary, the WET 2.1 program assigns qualitative probability ratings to wetland functions and values including; groundwater recharge, floodflow alteration, sediment stabilization, sediment/toxicant retention, and nutrient removal/transformation. All regional project watershed wetlands generally had high to moderate functional probability values for the above functions. Of the wetlands impacted, 25% were predicted to lose their ability to perform the above functions. These wetlands averaged approximately 0.08 ha (0.2 ac) in total size and would likely have had limited functional capabilities. The cumulative impact of this wetland loss on regional project watershed wetland functional values would be minimal considering the relatively small size of the impacted wetlands, and the relatively small percentage of total regional project watershed wetlands they comprise (less than 1%).

## **2. ADDITIVE DIRECT AND SECONDARY IMPACTS**

The combination of direct and secondary impacts yielded a slight increase in wetland impact area due to secondary industrial park development. A 2.3 ha (5.5 ac) palustrine scrub/shrub community could be impacted by the development of a new Grant County industrial park located in the North Branch of the Potomac River regional project watershed. This would represent an increase of 26% for wetland impacts

associated with the IRA and a 15% increase of wetland impacts associated with Line A. However, for both Alternatives, this increased wetland impact area is less than 1% of the total predicted wetland area within the North Branch of the Potomac River regional project watershed. The loss of this wetland could impact floodflow alteration, sediment stabilization, sediment/toxicant retention, and nutrient removal/transformation functions within the immediate area. However, any development that removed this wetland would be required to replace this acreage through compliance with Federal and state wetland regulatory guidelines. Proper design of the wetland replacement site should replace and possibly enhance lost function values.

### 3. DEVELOPMENT OF FORESEEABLE FUTURE ACTIONS

Cumulative impacts related to the development of foreseeable future Federal actions was limited to known Federal actions that are currently ongoing or are in the formulative stages of study. Because sufficient raw land is available within the regional project watersheds to support predicted development, encroachment on wetlands to support that development would not be necessary.

Five Federal actions and potential wetlands impacts associated with these actions were identified: 1.) Moorefield, WV, in cooperation with the USDA's Soil Conservation Service, is considering construction of a reservoir on Stony Run to provide sufficient raw water to accommodate future predicted demands (USDA-SCS, 1994); 2.) in addition, Moorefield, in cooperation with the Corps of Engineers, is considering construction of levees along the South Fork of the South Branch of the Potomac River to provide flood protection (COE, 1990); 3.) the effort to establish the Canaan Valley National Wildlife Refuge; 4.) the continued multiple resource use management of the George Washington National Forest (USDA, FEIS George Washington National Forest, 1993); and the continued multiple resource use management of the Monongahela National Forest (USDA, FEIS Monongahela National Forest, 1986).

Table 11 summarizes the wetland impacts due to the above five Federal actions. Only the Moorefield floodwall project would involve future wetland impacts within the South Branch of the Potomac River regional project watershed. Approximately .8 ha (2 ac) of forested wetlands would be removed by the construction of this project. Proposed mitigation measures include land acquisition and planting of .8 ha of bottomland hardwood species to replace wetland functions and values lost (COE, 1990). The proposed Canaan Valley National Wildlife Refuge would protect the largest wetland complex in both West Virginia and the central and southern Appalachians (wetland complex over 3,400 ha or 8,400 ac in size). Both National Forests have prepared Final Environmental Impact Statements that propose no wetland impacts for the immediate future. State and Federal regulatory agencies would be consulted if proposed changes to forest management plans or objectives would impact wetlands.

**TABLE 11**  
**CUMULATIVE WETLAND AND WILDLIFE IMPACT ASSESSMENT MATRIX**  
**FOR FORESEEABLE FUTURE FEDERAL ACTIONS**  
**WITHIN 30-MINUTE CONTOUR**

	<b>WILDLIFE HABITAT IMPACTS</b>	<b>WETLAND IMPACTS</b>	<b>BIODIVERSITY IMPACTS</b>	<b>MITIGATION/ MANAGEMENT PLANS</b>
<b>FLOODWALL - MOOREFIELD, WV</b>	Over 90% of impacts to cropland or urban land (21 ac)	1.9 acres forested wetlands	No involvement of threatened or endangered species.	Wetland and upland revegetation plan
<b>STONY RUN WATER SUPPLY DAM - HARDY COUNTY, WV</b>	Approx. loss of 70 acres forested habitat	None, no wetlands identified in feasibility study	No involvement of threatened or endangered species. Creation of open water habitat.	None proposed.
<b>CANAAN VALLEY NATIONAL WILDLIFE REFUGE</b>	Preservation of 28,000 acres	Preservation of largest wetland complex in West Virginia and the central and southern Appalachians.	Preservation of diverse plant and animal populations, including 1 threatened and 1 endangered species	Comprehensive management plan developed
<b>GEORGE WASHINGTON NATIONAL FOREST</b>	Multiple use management of over 100,000 forested acres	None proposed	Management plan to conserve specific elements of biodiversity and restore others where needed.	Comprehensive land and resource management plan
<b>MONOGAHELA NATIONAL FOREST</b>	Multiple use management of over 500,000 forested acres	None proposed	Plan to promote populations of management indicator species, including threatened and endangered species.	Comprehensive land and resource management plan



## ***IV. AVOIDANCE, MINIMIZATION AND MITIGATION***

The Council on Environmental Quality, in Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (CEQ, 40 CFR Parts 1500-1508), defines mitigation as:

- ♦ Avoiding impacts altogether by not taking a certain action or parts of an action;
- ♦ Minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- ♦ Restoring impacted areas by repairing or rehabilitating the affected environment;
- ♦ Reducing or eliminating impacts over time by preservation and maintenance operations during the life of the action;
- ♦ Compensating for impacts by enhancing existing environments or replacing or providing substitute resources or environments.

These five elements of mitigation are considered hierarchical, beginning with avoidance. Once all measures have been taken to avoid impacts, then minimizing impacts is the second step. After avoidance and minimization measures are considered, then compensation methods, including restoration and enhancement are considered. All of the five elements were incorporated into the Wetlands Assessment, as described below.

### **A. GENERAL AVOIDANCE AND MINIMIZATION MEASURES**

Avoiding and minimizing wetland impacts were components of the preliminary engineering design for proposed alignments. Although other resource and engineering constraints were also considered, wetland avoidance was one of the prime factors in initial alignment design. The land use/land cover mapping described in *Methodology*, which contained the preliminarily identified wetlands, was used during initial layout of proposed alignments. Environmental scientists worked directly with roadway engineers to assure that all practical steps were taken to avoid wetlands during the initial design stage.

Field delineation of wetlands followed the preliminary engineering design of proposed alignments. Once delineated wetlands were digitized into the GIS, preliminary alignments were rerouted, with consideration given to the avoidance and minimization of wetland impacts. Field review of the alternative alignments by the various Federal and state resource agencies then occurred. Additional reroutes of alignments occurred as a result of the field reviews, along with further field delineation of wetlands along the rerouted alignments. Numerous wetlands were avoided through rerouting of preliminary alignments.

## **B. SPECIFIC AVOIDANCE AND MINIMIZATION MEASURES**

Three types of changes were made during the later stages of the design process to avoid and minimize impacts to wetlands, after the alignment changes mentioned above were made. These measures were undertaken, in part, at the suggestion of Federal and state regulatory agencies during field reviews of the proposed project. The measures were: designing alignment shifts; narrowing fill slopes or using retaining walls; and using bridges rather than box culverts or pipes.

Where practical, the alignment was shifted from one location to another (horizontal alignment) so as to completely avoid wetlands or to minimize the area of wetland that would be filled by the proposed alignment. In some cases, changes were made in the "footprint" dimensions of the road. To do this, the grade of the proposed road was increased or decreased, the fill slopes were steepened from 2:1 to 1.5:1, or retaining walls added to the design (vertical alignment). One other way to alter the "footprint" of the roadway is to use a bridge rather than solid fill. Bridges avoid most of the environmental impacts associated with wetland crossings placed on fill (e.g., changes to hydrology, interference with movements of aquatic organisms), but the use of bridges for all wetland crossings is not practical because of cost. Bridges cost approximately eight times more money to construct than the same length of roadway.

Horizontal alignment changes were made at six locations, reducing wetland impacts by 2.69 ha (6.64 acres). Vertical alignment changes were made at six locations, reducing wetland impacts by 0.32 ha (0.63 acres). Bridges were added at four locations, two of which reduced wetland impacts by 0.11 ha (0.28 acres) (Table 12). Additional details regarding measures taken to minimize impacts to wetlands are contained in the Alternatives Analysis prepared in accordance with Section 404 of the Clean Water Act (Appendix G of the SDEIS). Table 13 provides a summary of the Alternatives Analysis.

## **C. SECONDARY IMPACT AVOIDANCE AND MINIMIZATION**

For each section of highway designed, a comprehensive erosion and sedimentation control plan would be implemented to minimize secondary impacts. The WVDOT *Standard Specifications for Roads and Bridges* (1993) requires that temporary and permanent pollution control measures be provided to prevent contamination of adjacent streams or other watercourses. The measures to be used are described in more detail below. The WVDOT Division of Highways *Erosion and Sediment Control Manual* (1993) further describes the temporary methods that should be used. The VDOT uses similar measures as outlined in *Road and Bridge Specifications* (1987) and the *Virginia Erosion and Sediment Control Manual* (Virginia Department of Conservation and Recreation, 1993).

**TABLE 12**  
**MEASURES TAKEN TO MINIMIZE WETLAND IMPACTS**  
**FOLLOWING AGENCY FIELD REVIEW**

<b>Watershed</b>	<b>Stream Name Associated with Wetland</b>	<b>Measure Taken</b>	<b>Area of Wetland Avoided (ha)</b>	<b>Area of Wetland Avoided (acres)</b>	<b>Type of Wetland Avoided</b>
Tygart Valley River	Trib. to Pearcy Run	Increase Slopes	0.05	0.13	PEM
Tygar Valley River	Leading Creek	Increase Slopes	0.07	0.18	PEM
Cheat River	Big Run	Bridge	0.09	0.22	PFO
Cheat River	Big Run	Shift Horizontal Alignment	0.39	0.96	PEM/PFO
Cheat River	Middle Run	Change Vertical Alignment	0.02	0.05	PEM
Cheat River	Trib. to Beaver Creek	Shift Horizontal Alignment	1.78	4.40	PFO
Cheat River	Abrams Creek	Increase Slopes	0.07	0.17	PEM
Cheat River	Trib. to Ellick Run	Maintain Vertical Alignment	0.07	0.18	PEM
North Branch Potomac	MF Patterson Creek	Bridge	0.02	0.06	PEM
North Branch Potomac	MF Patterson Creek	Shift Horizontal Alignment	0.17	0.42	PEM
North Branch Potomac	Trib. to MF Patterson	Move Access Road	0.02	0.06	PEM
North Branch Potomac	Trib. to Thorn Run	Increase Slopes	0.04	0.09	PEM
Cacapon River	Trib. to Skaggs Run	Move Access Road	0.03	0.08	PEM
Cacapon River	Sauerkraut Run	Shift Horizontal Alignment & Increase Slopes	0.29	0.72	PSS
<b>Total Wetland Impact Reduction</b>			<b>3.12</b>	<b>7.55</b>	

Source: Michael Baker Jr., Inc.

**TABLE 13**  
**ALTERNATIVES ANALYSIS: SUMMARY OF WETLAND IMPACTS BY SECTION**

SECTION	LINE DESIGNATIONS ON PREVIOUS PLANS*	WETLAND IMPACT	
		hectares	acres
3	3-A.1, 3-C, 3-A.1	0.5	1.2
	Line A	0.5	1.3
4	4-A.1	0.1	0.2
	4-A.1, 4-D, 4-A.1	0.2	0.4
	5-E, 4-A.1, 4-E, 5-A.1	0.2	0.6
	Line A	0.1	0.2
5	5-A.1, 5-D, 5-A.1	0.4	0.9
	5-A.1, 5-E	0.4	1.1
	Line A	0.4	1.1
6	6-A.1, 6-C.1, 6-A.1	0.0	0.0
	Line A	0.0	0.0
7	7-A.1, 7-B, 7-A, 7-A.1	1.2	3.0
	7-A.1, 7-A, 7-A.1	2.4	6.0
	7-A.1	0.6	1.5
	Line A	0.7	1.7
8	8-A.1	1.9	4.8
	8-B, 8-A, 8-A.1, 8-D, 8-C	2.3	5.6
	8-A.1, 8-C	2.1	5.1
	Line A	2.1	5.1
9	9-A.1	0.2	0.4
	9-A.1, 9-B	0.2	0.4
	Line A	0.0	0.1
10	10-A.1, 10-A, 10-A.1	3.6	8.8
	Line A	1.3	3.2
11	11-A.1, 11-A, 11-A.1	4.0	9.9
	11-A.1	3.2	8.0
	11-A.1, 11-C, 11-B.1, 11-B, 11-B.1	3.4	8.5
	Line A	1.7	4.2
12	12-A.1, 12-A, 12-A.1, 12-A, 12-A.1	10.2	25.2
	12-A.1	10.8	26.8
	12-A.1, 12-B	5.5	13.5
	Line A	4.8	11.8
13	13-E, 13-A.1, 13-D, 13-A.1	0.6	1.5
	13-A.1, 13-A, 13-C	4.2	10.4
	13-A.1, 13-A, 13-B	3.2	8.0
	13-A.1	2.1	5.2
	Line A	0.7	1.6
14	14-A.1, 14-D, 14-A.1	0.6	1.4
	14-A.1, 14-B, 14-A.1	0.6	1.4
	Line A	0.6	1.4
15	15-A.1	0.2	0.6
	15-A.1, 15-C.1, 15-A.1	0.0	0.1
	Line A	0.0	0.1
16	16-A.1	2.8	6.8
	16-A.1, 16-B, 16-F	2.0	5.0
	Line A	2.0	5.0
TOTALS	Sum of Maximums - Old Lines	32.2	79.6
	Sum of Minimums - Old Lines	19.2	47.3
	Line A	14.9	36.8

\* Previous plans include agency field review plans and those available after public meetings.



## 1. EROSION AND SEDIMENTATION

A comprehensive erosion and sedimentation control plan would be designed and implemented to minimize impacts for each section of highway. To ensure that the erosion and sedimentation plan would be followed during construction, routine inspections in the field would be conducted. None of the erosion and sedimentation measures would be placed in wetlands unless they are necessary to protect the wetlands. Temporary erosion and sedimentation controls that could be used during construction include the following:

Vegetative Soil Stabilization: Seeding and mulching would be performed on a continual basis to reduce the potential for erosion from cut and fill slopes, haul roads, waste sites and borrow pits. Clearing and grading would be minimized, and would be staged in segments small enough to allow stabilization in a timely manner. Seeding would include fast growing annual plant species.

Water Conveyance and Energy Dissipation: Erosion would be reduced by utilizing structures that slow the flow of water and reduce its ability to create erosion. These structures could include temporary berms, slope drains, temporary pipes, contour ditches, check dams and ditch checks.

Clear Water Diversion: Relatively sediment-free stormwater runoff would be intercepted and diverted around construction areas. Use of clear water diversions could reduce the amount of stormwater flowing through construction areas, thereby reducing erosion and minimizing the amount of stormwater runoff requiring treatment.

Sediment Retention Structures: Sediment barriers and basins could be used to reduce the amount of sediment carried by stormwater runoff from construction areas. Sediment barriers such as straw bales and silt fencing could be used in areas where surface water sheet flows would be intercepted. Concentrated runoff could be routed to sediment traps and basins before being redirected to waterbodies downstream of the construction area. Channels used to transport sediment-laden stormwater runoff could be lined with erosion resistant materials and seeded to prevent additional erosion.

Permanent erosion control measures would be established after construction of the facility is completed. None of these measures would be established within wetlands, unless they are necessary to protect the wetlands. These measures could include stabilizing cut and fill slopes, shoulders, medians, and any other areas of exposed soils. Stabilization could be established using non-erosive materials such as rip rap or geotextiles and seeding or planting perennial vegetation. Establishing permanent vegetation capable of preventing erosion could require considerable site preparation. Location of permanent discharge points for stormwater should be designed to dissipate water velocity and prevent erosion of the receiving water body.

## **2. HIGHWAY STORMWATER RUNOFF**

The impact of stormwater runoff pollution to wetlands is expected to be minimal for this project due to the relatively low volumes of traffic that would use the roadway. Nevertheless, techniques exist that would effectively remove pollutants from highway runoff, and these techniques could be used on portions of the project. Techniques designed to control runoff from storms producing less than one inch of rainfall would control pollution from about 90 percent of the storms each year. The majority of pollutants from a storm are delivered by a relatively small percentage of the runoff, occurring during the initial stage of the storm. This runoff, called "first flush", contains the largest proportion of heavy metals and other pollutants, and is the portion of the runoff that should be controlled by stormwater management techniques.

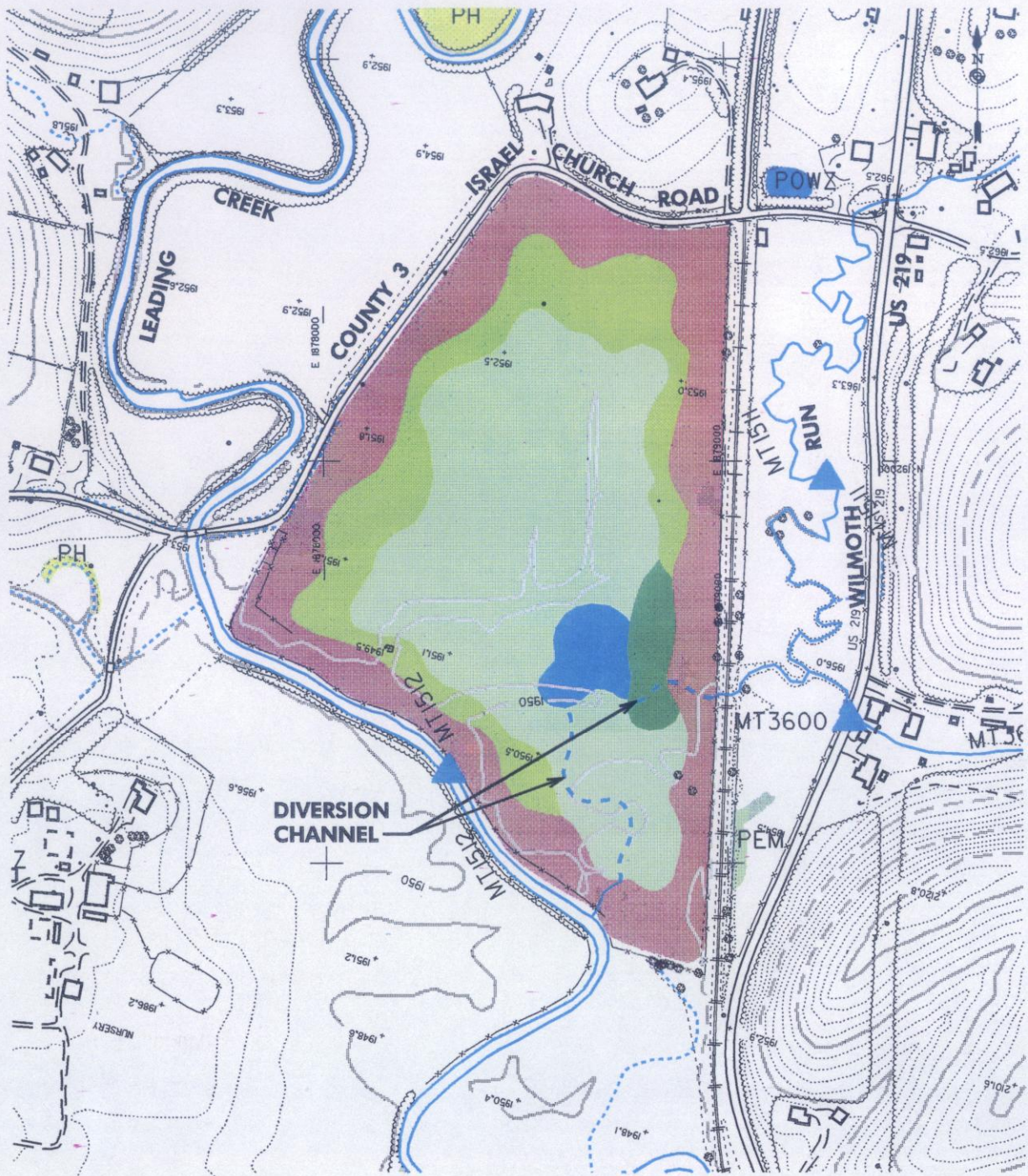
Two techniques have been shown to be highly effective in removing pollutants from runoff (Maestri et al. 1981). The first technique is using vegetated surfaces to capitalize on their natural ability to reduce runoff velocity, filter suspended solids, and increase infiltration. The second technique is using a wet detention basin to create a permanent pool of water capable of pollutant removal through sedimentation.

In Virginia, the proposed project would be subject to Virginia's Stormwater Management Regulations (Virginia Department of Conservation and Recreation, 1993). The goal of these regulations is to inhibit the deterioration of the aquatic environment by instituting a stormwater management program that maintains water quantity and quality equal to or better than prior to construction. The Virginia stormwater management regulations require the detention of runoff from the first 0.5 inch of rainfall, thus providing water quality treatment of the portion of runoff that would carry the greatest load of pollutants. In West Virginia, there are no requirements for permanent management of highway stormwater quantity or quality.

## **D. MITIGATION**

This project is being developed in accordance with the Integrated NEPA/404 Process set forth in the July 23, 1992 Interagency Consensus signed by the US Environmental Protection Agency, the Federal Highway Administration, the US Army Corps of Engineers, the US Fish and Wildlife Service, and the National Marine Fisheries Service. Accordingly, a Section 404 Permit Application, an Alternatives Analysis and a Mitigation Plan have been prepared for the preferred alternative in the West Virginia portion of this project. The mitigation plan and a detailed discussion of the coordination efforts which lead-up to the selection and preliminary design is included in Section III of the SDEIS. Exhibits 1 and 2 present conceptual plans for the two mitigation sites selected. The Wilmoth Run Site is located north of Elkins between US 219 and Israel Church Road. The Walnut Bottom Run Site is located north of Moorefield, approximately 3.2 km (2 mi) west of US 220, north of Fish Pond Road. Once a preferred alternative in Virginia is identified, mitigation for wetland impacts would be developed.





### LEGEND

#### WETLANDS

- PFO
- PSS
- PEM
- PHOTO INTERP.
- POWZ
- PUB

#### STREAMS

- PERENNIAL
- INTERMITTENT
- AS MAPPED

#### MISC.

- UPLAND FORESTED BUFFER

APPALACHIAN CORRIDOR H  
ELKINS TO INTERSTATE 81

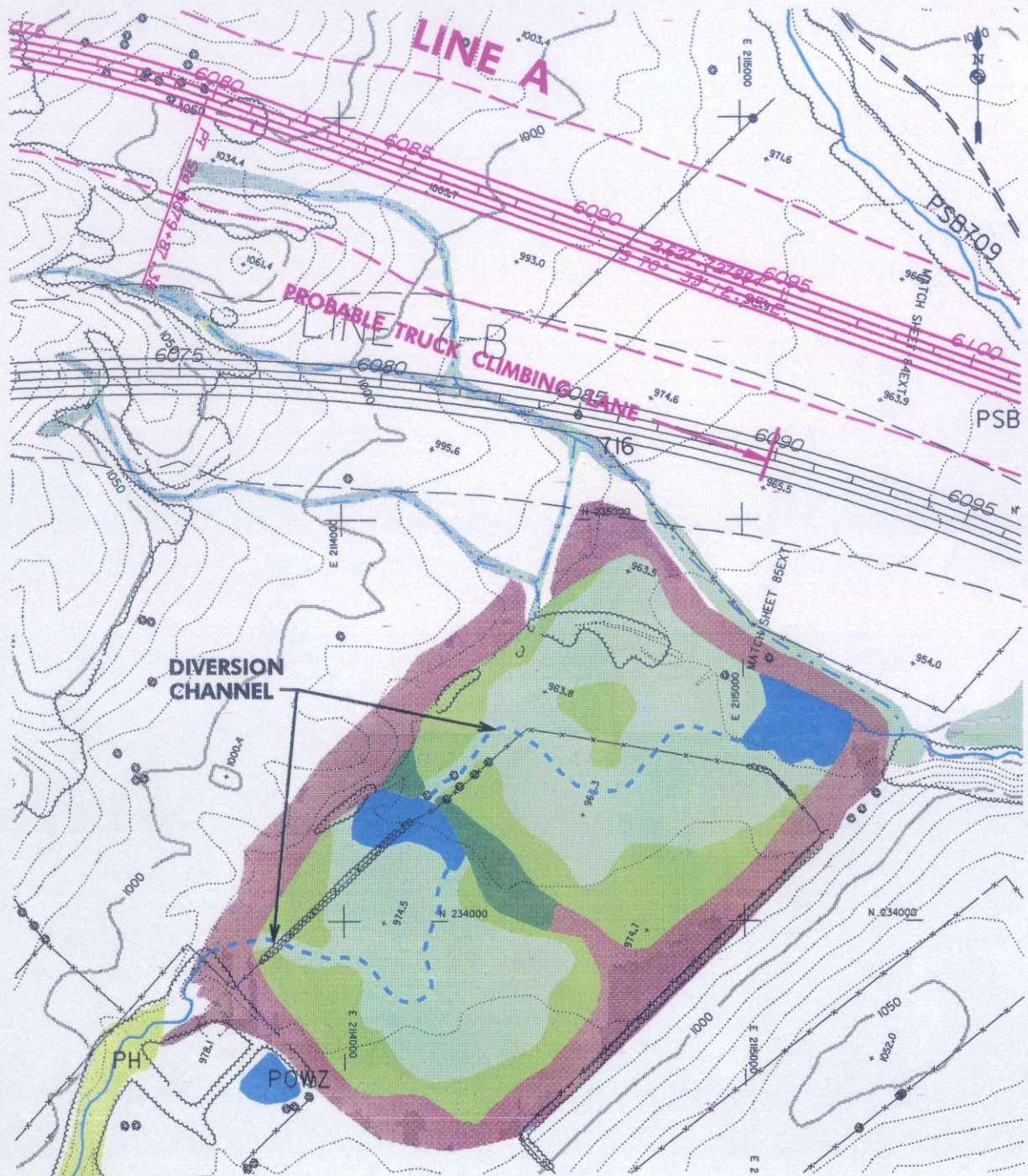
## Exhibit 1 WILMOTH RUN CONCEPTUAL MITIGATION PLAN

Baker

0 200 400  
SCALE IN FEET







## LEGEND

### WETLANDS

- PFO
- PSS
- PEM
- PHOTO INTERP.
- POWZ
- PUB

### STREAMS

- PERENNIAL
- INTERMITTENT
- AS MAPPED

### MISC.

- UPLAND FORESTED BUFFER

APPALACHIAN CORRIDOR H  
ELKINS TO INTERSTATE 81

## Exhibit 2 WALNUT BOTTOM RUN CONCEPTUAL MITIGATION PLAN

Baker  
Environmental Services, Inc.

0 200 400  
SCALE IN FEET





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***APPENDIX A***  
***DIRECTLY IMPACTED***  
***WETLAND DATA***

**TABLE A-1A**  
**DIRECT WETLAND IMPACTS**  
**TYGART VALLEY RIVER WATERSHED**  
**IMPROVED ROADWAY ALTERNATIVE**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1604	PEM	0.43	1.07	0.21	0.51	47.7%
1605	PEM	0.43	1.07	0.20	0.49	45.8%
1621	PEM	0.03	0.08	0.03	0.08	100.0%
1623	PEM	0.05	0.12	0.01	0.03	25.0%
1624	PEM	1.25	3.08	0.00	0.01	0.3%
1655	PSS	0.17	0.42	0.05	0.12	28.6%
3510	PSS	0.10	0.24	0.10	0.24	100.0%
3511	PFO	0.15	0.37	0.11	0.26	70.3%
3512	PEM	0.03	0.08	0.01	0.03	37.5%
3513	PEM	1.10	2.73	0.10	0.25	9.2%
3514	PEM	0.06	0.14	0.04	0.11	78.6%
3516	PEM	0.06	0.15	0.05	0.12	80.0%
3602	PEM	0.29	0.72	0.08	0.21	29.2%
3609	PEM	0.53	1.31	0.00	0.01	0.8%
3610A	PEM	0.18	0.45	0.00	0.00	0.0%
3610B	PEM	1.38	3.41	0.00	0.00	0.0%
	POWZ	0.03	0.07	0.02	0.06	85.7%



**TABLE A-1B**  
**DIRECT WETLAND IMPACTS**  
**CHEAT RIVER WATERSHED**  
**IMPROVED ROADWAY ALTERNATIVE**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1280	PFO	1.73	4.27	0.08	0.19	4.4%
3303	PSS	0.15	0.37	0.06	0.15	40.5%
3304	PEM	0.61	1.50	0.00	0.00	0.0%
3305	PSS	3.40	8.40	0.23	0.56	6.7%
3304A	PEM	0.06	0.15	0.00	0.01	6.7%
3306	PEM	0.38	0.95	0.18	0.45	47.4%
3307B	PEM	0.29	0.72	0.08	0.19	26.4%
3307C	PEM	0.10	0.25	0.02	0.04	16.0%
3308	PEM	0.85	2.10	0.16	0.40	19.0%
3309	PEM	11.48	28.37	2.14	5.29	18.6%
3311	PFO	5.07	12.52	0.89	2.19	17.5%
3407	PEM	0.03	0.08	0.02	0.04	50.0%
3408	PEM	0.13	0.32	0.08	0.20	62.5%
3409	PSS	0.27	0.66	0.04	0.11	16.7%
3411	PSS	0.06	0.14	0.06	0.14	100.0%
3501	PEM	0.28	0.70	0.07	0.18	25.7%
3502	PFO	0.14	0.35	0.05	0.13	37.1%
3504	PEM	0.22	0.54	0.01	0.03	5.6%
3505A	PEM	0.27	0.67	0.02	0.04	6.0%
3505B	PSS	0.22	0.54	0.04	0.09	16.7%
3506	PEM	1.32	3.26	0.20	0.49	15.0%
3507	PEM	0.13	0.33	0.00	0.01	3.0%
3508	PEM	0.13	0.33	0.03	0.07	21.2%
3509	PEM	0.13	0.32	0.10	0.24	75.0%
	POWZ	0.02	0.04	0.02	0.04	100.0%
	POWZ	0.33	0.81	0.02	0.04	4.9%
	PUB	1.24	3.06	0.30	0.74	24.2%

**TABLE A-1C**  
**DIRECT WETLAND IMPACTS**  
**NORTH BRANCH POTOMAC RIVER WATERSHED**  
**IMPROVED ROADWAY ALTERNATIVE**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1006	PEM	1.24	3.07	0.14	0.34	11.1%
1101D	PFO	6.88	17.00	0.10	0.24	1.4%
2801	PEM	0.58	1.43	0.02	0.06	4.2%
2802	PEM	0.94	2.32	0.33	0.82	35.3%
2803	PEM	1.28	3.16	0.01	0.03	0.9%
2804	PEM	0.19	0.46	0.17	0.43	93.5%
2901	PEM	0.04	0.10	0.04	0.10	100.0%
3001	PEM	3.39	8.38	0.73	1.80	21.5%
3003	PEM	0.04	0.09	0.00	0.01	11.1%
3004	PEM	0.26	0.64	0.13	0.32	50.0%

**TABLE A-1D**  
**DIRECT WETLAND IMPACTS**  
**SOUTH BRANCH POTOMAC RIVER WATERSHED**  
**IMPROVED ROADWAY ALTERNATIVE**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
2602	PEM	0.13	0.31	0.06	0.16	51.6%
2604	PEM	0.52	1.29	0.00	0.00	0.0%
2605	PEM	0.27	0.66	0.10	0.25	37.9%
2701A	PEM	2.32	5.74	0.02	0.04	0.7%
2702A	PEM	0.12	0.30	0.08	0.21	70.0%
2702B	PEM	3.52	8.70	0.30	0.73	8.4%
	POWZ	0.00	0.01	0.00	0.00	0.0%
	POWZ	0.19	0.47	0.00	0.00	0.0%

**TABLE A-1E**  
**DIRECT WETLAND IMPACTS**  
**CACAPON RIVER WATERSHED**  
**IMPROVED ROADWAY ALTERNATIVE**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
	POWZ	0.08	0.19	0.08	0.19	100.0%



**TABLE A-1F**  
**DIRECT WETLAND IMPACTS**  
**SHENANDOAH RIVER WATERSHED**  
**IMPROVED ROADWAY ALTERNATIVE**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
103	PEM	0.24	0.60	0.02	0.06	10.0%
104	PEM	0.04	0.11	0.00	0.00	0.0%
203A	PEM	0.39	0.96	0.06	0.15	15.6%
207	PEM	0.10	0.25	0.03	0.07	28.0%
211	PFO	0.20	0.50	0.00	0.00	0.0%
212	PFO	0.11	0.27	0.00	0.00	0.0%
215	PFO	0.02	0.05	0.01	0.03	60.0%
216	PSS	0.04	0.09	0.03	0.07	77.8%
218	PSS	0.05	0.13	0.05	0.12	92.3%
219	PSS	0.09	0.23	0.01	0.02	8.7%
220B	PSS	0.80	1.98	0.10	0.24	12.1%
2101A	PFO	0.13	0.32	0.03	0.07	21.9%
2101B	PFO	0.09	0.23	0.03	0.07	30.4%
2102	PEM	0.08	0.21	0.03	0.08	38.1%
2103	PEM	0.06	0.16	0.00	0.00	0.0%
2250A	PSS	0.02	0.05	0.00	0.01	20.0%
2250B	PSS	0.14	0.35	0.06	0.15	42.9%

**TABLE A-2A**  
**DIRECT WETLAND IMPACTS**  
**TYGART VALLEY RIVER WATERSHED**  
**LINE A**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1602	PEM	0.30	0.75	0.26	0.65	86.7%
1603	PEM	1.67	4.13	0.28	0.68	16.5%
1604	PEM	0.43	1.07	0.30	0.75	70.1%
1605	PEM	0.43	1.07	0.28	0.70	65.4%
1609	PEM	0.29	0.71	0.11	0.27	38.0%
1621	PEM	0.03	0.08	0.03	0.08	100.0%
1624	PEM	1.25	3.08	0.02	0.04	1.3%
1627C	PEM	2.90	7.17	0.17	0.41	5.7%
1628	PEM	0.70	1.72	0.18	0.44	25.6%
1652A	PEM	0.21	0.51	0.09	0.23	45.1%
1652B	PSS	0.02	0.05	0.02	0.04	80.0%
1652C	PSS	0.02	0.06	0.01	0.03	50.0%
1656	PEM	0.17	0.43	0.08	0.21	48.8%
1660	PEM	0.01	0.03	0.00	0.01	33.3%
3608	PEM	0.26	0.64	0.06	0.15	23.4%
3610A	PEM	0.18	0.45	0.00	0.00	0.0%
	POWZ	0.12	0.30	0.11	0.26	86.7%

**TABLE A-2B**  
**DIRECT WETLAND IMPACTS**  
**CHEAT RIVER WATERSHED**  
**LINE A**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1110	PEM	26.04	64.34	0.27	0.66	1.0%
1110A	PEM	0.23	0.56	0.00	0.01	1.8%
1112	PEM	0.46	1.13	0.36	0.90	79.6%
1113	PSS	0.04	0.10	0.01	0.02	20.0%
1114A	PSS	0.03	0.08	0.01	0.03	37.5%
1124	PSS	0.10	0.25	0.10	0.25	100.0%
1128	PEM	0.43	1.06	0.06	0.16	15.1%
1130	PEM	0.02	0.04	0.02	0.04	100.0%
1131	PEM	0.19	0.47	0.07	0.17	36.2%
1132	PEM	0.23	0.57	0.21	0.51	89.5%
1141	PEM	0.22	0.55	0.20	0.50	90.9%
1151	PEM	0.13	0.33	0.13	0.33	100.0%
1153	PEM	0.02	0.04	0.02	0.04	100.0%
1154	PSS	2.13	5.26	0.09	0.22	4.2%
1202	PEM	0.07	0.18	0.07	0.18	100.0%
1204	PFO	0.16	0.40	0.04	0.10	25.0%
1205	PEM	0.08	0.19	0.01	0.03	15.8%
1206	PFO	0.03	0.08	0.03	0.08	100.0%
1207	PEM	0.04	0.11	0.04	0.11	100.0%
1208	PEM	0.02	0.06	0.02	0.06	100.0%
1212	PEM	0.02	0.06	0.02	0.04	66.7%
1211B	PEM	0.66	1.63	0.04	0.10	6.1%
1214	PEM	0.12	0.29	0.04	0.09	31.0%
1215A	PSS	0.25	0.63	0.12	0.29	46.0%
1216	PEM	0.22	0.54	0.02	0.06	11.1%
1217	PEM	0.11	0.26	0.09	0.23	88.5%
1218	PSS	0.05	0.12	0.01	0.03	25.0%
1220A	PFO	0.13	0.33	0.05	0.12	36.4%
1220B	PEM	0.25	0.62	0.05	0.12	19.4%
1223	PSS	0.06	0.14	0.02	0.05	35.7%
1229B	PEM	0.04	0.09	0.04	0.09	100.0%
1231C	PSS	2.84	7.03	0.06	0.14	2.0%
1233	PEM	1.04	2.58	0.13	0.31	12.0%
1243A	PSS	9.57	23.66	0.04	0.10	0.4%
1247	PEM	14.30	35.34	0.02	0.05	0.1%
1248A	PEM	8.15	20.15	0.11	0.26	1.3%

**TABLE A-2B**  
**DIRECT WETLAND IMPACTS**  
**CHEAT RIVER WATERSHED**  
**LINE A**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1249A	PEM	14.33	35.41	0.26	0.64	1.8%
1251A	PEM	0.88	2.17	0.03	0.07	3.2%
1251B	PEM	0.93	2.31	0.30	0.74	32.0%
1253A	PSS	0.71	1.76	0.01	0.03	1.7%
1254	PSS	7.52	18.58	0.10	0.25	1.3%
1255	PSS	0.05	0.12	0.04	0.10	83.3%
1258A	PSS	0.08	0.19	0.04	0.09	47.4%
1258B	PEM	2.70	6.66	0.03	0.08	1.2%
1259A	PEM	0.15	0.36	0.00	0.00	0.0%
1260	PEM	0.04	0.10	0.00	0.01	10.0%
1261	PSS	1.49	3.69	0.03	0.07	1.9%
1262	PEM	0.60	1.48	0.51	1.27	85.8%
1263	PEM	0.29	0.71	0.17	0.43	60.6%
1264	PEM	0.47	1.17	0.25	0.61	52.1%
1265B	PEM	0.03	0.07	0.03	0.07	100.0%
1266	PEM	8.77	21.66	1.18	2.92	13.5%
1268	PEM	11.74	29.00	0.08	0.21	0.7%
1271	PEM	0.08	0.20	0.05	0.13	65.0%
1273	PEM	0.08	0.21	0.07	0.17	81.0%
1287A	PEM	2.24	5.54	0.00	0.01	0.2%
1292	PEM	0.19	0.46	0.15	0.38	82.6%
1299	PSS	0.06	0.16	0.01	0.03	18.8%
1306	PEM	0.37	0.91	0.08	0.20	22.0%
1343	PEM	0.01	0.03	0.01	0.03	100.0%
1349	PEM	0.01	0.02	0.01	0.02	100.0%
1353	PEM	0.02	0.05	0.02	0.05	100.0%
1410	PEM	0.05	0.12	0.03	0.08	66.7%
1411	PEM	0.04	0.09	0.02	0.06	66.7%
1412	PEM	0.02	0.05	0.02	0.05	100.0%
1502	PEM	0.15	0.38	0.10	0.24	63.2%
1511	PEM	0.06	0.15	0.06	0.14	93.3%
1301A	PEM	2.54	6.27	0.05	0.12	1.9%
1301B	PEM	0.01	0.02	0.01	0.02	100.0%
1301C	PEM	0.01	0.02	0.00	0.01	50.0%
1333B	PEM	0.44	1.08	0.11	0.26	24.1%
1333C	PEM	0.50	1.23	0.02	0.04	3.3%



**TABLE A-2B**  
**DIRECT WETLAND IMPACTS**  
**CHEAT RIVER WATERSHED**  
**LINE A**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1339D	PEM	0.20	0.49	0.05	0.13	26.5%
1339F	PSS	0.23	0.56	0.15	0.37	66.1%
1362A	PSS	0.02	0.05	0.02	0.05	100.0%
1362B	PSS	0.11	0.26	0.09	0.22	84.6%
1363A	PEM	0.02	0.04	0.02	0.04	100.0%
1363B	PEM	0.05	0.13	0.05	0.13	100.0%
1501A	PEM	0.55	1.36	0.30	0.73	53.7%
1501B	PEM	2.47	6.11	0.08	0.20	3.3%
3301	PEM	0.10	0.24	0.03	0.07	29.2%
	POWZ	0.00	0.01	0.00	0.01	100.0%
	POWZ	0.02	0.04	0.02	0.04	100.0%
	POWZ	0.02	0.05	0.01	0.03	60.0%
	POWZ	0.03	0.07	0.02	0.06	85.7%
	POWZ	0.04	0.10	0.04	0.10	100.0%
	POWZ	0.05	0.12	0.02	0.06	50.0%
	POWZ	0.06	0.16	0.03	0.07	43.8%
	POWZ	0.17	0.43	0.17	0.43	100.0%
	POWZ	0.23	0.56	0.06	0.16	28.6%
	POWZ	0.40	1.00	0.07	0.18	18.0%

**TABLE A-2C**  
**DIRECT WETLAND IMPACTS**  
**NORTH BRANCH POTOMAC RIVER WATERSHED**  
**LINE A**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
801A	PFO	0.02	0.06	0.02	0.06	100.0%
801B	PEM	0.02	0.05	0.02	0.05	100.0%
805	PEM	0.07	0.18	0.05	0.12	66.7%
806	PEM	0.21	0.52	0.16	0.39	75.0%
807	PEM	2.37	5.86	0.34	0.84	14.3%
808B	PEM	0.37	0.91	0.31	0.76	83.5%
810	PEM	1.09	2.70	0.26	0.65	24.1%
815	PEM	5.69	14.05	0.83	2.04	14.5%
818	PEM	0.02	0.04	0.02	0.04	100.0%
906A	PEM	0.29	0.71	0.03	0.08	11.3%
1002	PEM	0.23	0.58	0.02	0.04	6.9%
1006	PEM	1.24	3.07	0.12	0.29	9.4%
1021	PFO	0.04	0.09	0.03	0.08	88.9%
1022A	PEM	0.06	0.15	0.04	0.09	60.0%
1022B	PEM	0.17	0.42	0.17	0.41	97.6%
1102A	PEM	0.66	1.62	0.00	0.00	0.0%
3001	PEM	3.39	8.38	0.69	1.70	20.3%
3003	PEM	0.04	0.09	0.04	0.09	100.0%
	POWZ	0.02	0.04	0.02	0.04	100.0%
	POWZ	0.03	0.07	0.01	0.02	28.6%
	POWZ	0.04	0.10	0.04	0.10	100.0%
	POWZ	0.08	0.21	0.04	0.11	52.4%
	POWZ	0.14	0.35	0.14	0.35	100.0%

**TABLE A-2D**  
**DIRECT WETLAND IMPACTS**  
**SOUTH BRANCH POTOMAC RIVER WATERSHED**  
**LINE A**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
506	PEM	0.11	0.26	0.09	0.22	84.6%
507	PEM	0.17	0.41	0.02	0.04	9.8%
702	PEM	0.66	1.62	0.04	0.10	6.2%
716	PEM	1.57	3.88	0.24	0.60	15.5%
717	PSS	0.23	0.56	0.16	0.39	69.6%
720	PEM	0.28	0.70	0.05	0.13	18.6%
721	PEM	0.19	0.46	0.10	0.24	52.2%
722	PEM	0.66	1.62	0.08	0.19	11.7%
	POWZ	0.02	0.06	0.02	0.06	100.0%
	POWZ	0.16	0.40	0.00	0.01	2.5%

**TABLE A-2E**  
**DIRECT WETLAND IMPACTS**  
**CACAPON RIVER WATERSHED**  
**LINE A**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area
		Hectares	Acres	Hectares	Acres	Impacted
301	PFO	0.23	0.56	0.10	0.24	42.9%
303	PEM	0.75	1.85	0.06	0.14	7.6%
304	PEM	0.34	0.84	0.06	0.15	17.9%
305	PEM	0.49	1.21	0.13	0.33	27.3%
311	PEM	0.21	0.51	0.19	0.48	94.1%
401	PSS	1.00	2.46	0.00	0.01	0.4%
502	PEM	0.06	0.16	0.06	0.16	100.0%
505	PEM	0.11	0.28	0.01	0.02	7.1%
508	PEM	0.26	0.65	0.01	0.02	3.1%
509	PEM	0.09	0.22	0.06	0.16	72.7%
520A	PEM	0.02	0.04	0.00	0.00	0.0%
520B	PSS	0.06	0.16	0.05	0.13	81.3%
520C	PEM	0.02	0.04	0.02	0.04	100.0%
	POWZ	0.00	0.01	0.00	0.01	100.0%
	POWZ	0.03	0.08	0.03	0.07	87.5%
	POWZ	0.08	0.19	0.07	0.17	89.5%
	POWZ	0.11	0.26	0.11	0.26	100.0%



**TABLE A-2F**  
**DIRECT WETLAND IMPACTS**  
**SHENANDOAH RIVER WATERSHED**  
**LINE A**

Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
101	PEM	0.07	0.17	0.01	0.03	17.6%
103	PEM	0.24	0.60	0.06	0.14	23.3%
104	PEM	0.04	0.11	0.04	0.10	90.9%
107B	PEM	0.10	0.25	0.01	0.03	12.0%
205	PFO	0.13	0.32	0.11	0.28	87.5%
	POWZ	0.02	0.05	0.01	0.02	40.0%
	POWZ	0.10	0.24	0.09	0.22	91.7%

**TABLE A-3A**  
**DIRECT WETLAND IMPACTS**  
**TYGART VALLEY RIVER WATERSHED**  
**OPTION AREA INTERCHANGE COMPARISONS**

Line I						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1621	PEM	0.03	0.08 ✓	0.03	0.08	100.0%
1624	PEM	1.25	3.08	0.02	0.04	1.3%
3608	PEM	0.26	0.64 ✓	0.00	0.01	1.6%
3610A	PEM	0.18	0.45 ✓	0.00	0.00	0.0%

Line A						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1621	PEM	0.03	0.08	0.03	0.08	100.0%
1624	PEM	1.25	3.08	0.02	0.04	1.3%
3608	PEM	0.26	0.64	0.06	0.15	23.4%
3610A	PEM	0.18	0.45	0.00	0.00	0.0%

**TABLE A-3B**  
**DIRECT WETLAND IMPACTS**  
**CHEAT RIVER WATERSHED**  
**OPTION AREA SHAVERS FORK COMPARISONS**

Line S						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1410	PEM	0.05	0.12	0.02	0.04	33.3%

Line A						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
1410	PEM	0.05	0.12	0.03	0.08	66.7%

**TABLE A-3C**  
**DIRECT WETLAND IMPACTS**  
**NORTH BRANCH POTOMAC RIVER WATERSHED**  
**OPTION AREA PATTERSON CREEK COMPARISONS**

Line P						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
807	PEM	2.37	5.86	0.32	0.78	13.3%
808	PEM	0.53	1.31	0.40	0.99	75.6%
809	PEM	0.78	1.92	0.05	0.13	6.8%
816	PEM	1.67	4.13	0.22	0.55	13.3%
	POWZ	0.02	0.04	0.02	0.04	100.0%
	POWZ	0.03	0.07	0.03	0.07	100.0%

Line A						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
807	PEM	2.37	5.86	0.34	0.84	14.3%
808B	PEM	0.37	0.91	0.31	0.76	83.5%
	POWZ	0.03	0.07	0.01	0.02	28.6%

**TABLE A-3D**  
**DIRECT WETLAND IMPACTS**  
**NORTH BRANCH POTOMAC RIVER WATERSHED**  
**OPTION AREA FORMAN COMPARISONS**

Line F						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
801A	PFO	0.02	0.06	0.02	0.06	100.0%
801B	PEM	0.02	0.05	0.02	0.05	100.0%
806	PEM	0.21	0.52	0.16	0.39	75.0%
812A	PEM	0.07	0.18	0.01	0.03	16.7%
812B	PEM	1.96	4.84	0.51	1.26	26.0%
813	PEM	0.59	1.45	0.22	0.54	37.2%
814	PEM	0.02	0.04	0.02	0.04	100.0%
815	PEM	5.69	14.05	0.47	1.17	8.3%
818	PEM	0.02	0.04	0.02	0.04	100.0%
	POWZ	0.00	0.01	0.00	0.00	0.0%
	POWZ	0.02	0.04	0.02	0.04	100.0%

Line A						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
801A	PFO	0.02	0.06	0.02	0.06	100.0%
801B	PEM	0.02	0.05	0.02	0.05	100.0%
806	PEM	0.21	0.52	0.16	0.39	75.0%
810	PEM	1.09	2.70	0.26	0.65	24.1%
815	PEM	5.69	14.05	0.83	2.04	14.5%
818	PEM	0.02	0.04	0.02	0.04	100.0%
	POWZ	0.02	0.04	0.02	0.04	100.0%
	POWZ	0.04	0.10	0.04	0.10	100.0%



**TABLE A-3E**  
**DIRECT WETLAND IMPACTS**  
**CACAPON RIVER WATERSHED**  
**OPTION AREA BAKER COMPARISONS**

Line B						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
501	PEM	0.00	0.01	0.00	0.00	0.0%
530	PEM	0.55	1.37	0.12	0.30	21.9%
	POWZ	0.03	0.08	0.03	0.07	87.5%
	POWZ	0.08	0.20	0.06	0.14	70.0%

Line A						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
	POWZ	0.03	0.08	0.03	0.07	87.5%

**TABLE A-3F**  
**DIRECT WETLAND IMPACTS**  
**SHENANDOAH RIVER WATERSHED**  
**OPTION AREA DUCK RUN COMPARISONS**

Line D1						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
203B	PSS	0.07	0.17	0.05	0.12	70.6%
	POWZ	0.02	0.05	0.01	0.02	40.0%
	POWZ	0.10	0.24	0.09	0.22	91.7%

Line D2						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
205	PFO	0.13	0.32	0.11	0.28	87.5%

Line A						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
205	PFO	0.13	0.32	0.11	0.28	87.5%
	POWZ	0.02	0.05	0.01	0.02	40.0%
	POWZ	0.10	0.24	0.09	0.22	91.7%

**TABLE A-3G**  
**DIRECT WETLAND IMPACTS**  
**SHENANDOAH RIVER WATERSHED**  
**OPTION AREA LEBANON CHURCH COMPARISONS**

Line L						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
I-66-1	PEM	0.27	0.66	0.18	0.45	68.2%
I-66-3B	PEM	0.03	0.07	0.00	0.01	14.3%
I-66-4	PEM	0.46	1.14	0.14	0.35	30.7%
	POWZ	0.01	0.03	0.01	0.03	100.0%
	POWZ	0.02	0.04	0.01	0.03	75.0%

Line A						
Wetland Site Number	Class	Total Size		Impact Area		Percent of Wetland Area Impacted
		Hectares	Acres	Hectares	Acres	
101	PEM	0.07	0.17	0.01	0.03	17.6%
103	PEM	0.24	0.60	0.06	0.14	23.3%
104	PEM	0.04	0.11	0.04	0.10	90.9%

**TABLE A-4**  
**WATERSHED WETLAND ESTIMATION TABLE**  
**ALL PALUSTRINE WETLANDS**  
**LINE A**

Watershed	NWI Wetlands		Delineated Wetlands		Correction Factor	Total NWI Wetlands within Watershed		Predicted Area of Wetlands in Watershed	
	Hectares	Acres	Hectares	Acres		Hectares	Acres	Hectares	Acres
Shenandoah River	0.50	1.24	1.58	3.89	3.14	82.94	204.78	260.62	643.51
Cacapon River	0.60	1.48	3.57	8.82	5.96	58.65	144.82	349.39	862.68
South Branch Potomac River	0.49	1.21	2.19	5.41	4.46	75.95	187.54	338.44	835.65
North Branch Potomac River	3.05	7.54	11.85	29.25	3.88	496.92	1226.96	1927.27	4758.68
Cheat River	13.57	33.52	35.26	87.06	2.60	3504.23	8652.43	9102.99	22476.53
Tygart Valley River	7.53	18.58	9.17	22.64	1.22	127.60	315.06	155.44	383.81
<b>TOTAL</b>	<b>25.75</b>	<b>63.58</b>	<b>63.62</b>	<b>157.08</b>		<b>4346.29</b>	<b>10731.59</b>	<b>12134.15</b>	<b>29960.86</b>

**TABLE A-5**  
**WETLAND IMPACTS AS PERCENT TOTAL IN WATERSHED**  
**ALL PALUSTRINE WETLANDS**

Watershed			Total Area Impacted		Total Predicted Wetlands in Watershed		Wetland Impacts as % Total in Watershed	
			Hectares	Acres	Hectares	Acres		
Shenandoah River	Option Area Comparisons	Line A	0.33	0.82	260.62	643.51	0.13%	
		Line IRA	0.46	1.14			0.18%	
		Lebanon Church  Duck Run	L	0.35			0.87	0.14%
			A	0.11			0.27	0.04%
			D1	0.15			0.36	0.06%
			D2	0.11			0.28	0.04%
			A	0.21			0.52	0.08%
Cacapon River	Option Area Comparisons	Line A	0.97	2.39	349.39	862.68	0.28%	
		Line IRA	0.08	0.19			0.02%	
		Hanging Rock  Baker	R	0.00			0.00	0.00%
			A	0.00			0.00	0.00%
			B	0.21			0.51	0.06%
			A	0.03			0.07	0.01%
South Branch Potomac River		Line A	0.80	1.98	338.44	835.65	0.24%	
		Line IRA	0.56	1.39			0.17%	
North Branch Potomac River	Option Area Comparisons	Line A	3.38	8.35	1,927.27	4758.68	0.18%	
		Line IRA	1.68	4.15			0.09%	
		Forman  Patterson Creek	F	1.47			3.62	0.08%
			A	1.36			3.37	0.07%
			P	1.04			2.56	0.05%
			A	0.66			1.62	0.03%
Cheat River	Option Area Comparisons	Line A	7.77	19.19	9,102.99	22476.53	0.09%	
		Line IRA	4.88	12.06			0.05%	
		Shavers Fork	S	0.02			0.04	0.00%
			A	0.03			0.08	0.00%
Tygart Valley River	Option Area Comparisons	Line A	2.00	4.95	155.44	383.81	1.29%	
		Line IRA	1.02	2.53			0.66%	
		Interchange	I	0.05			0.13	0.03%
			A	0.11			0.27	0.07%
TOTAL			LINE A	15.26	37.68	12,134.15	29960.86	0.13%
			LINE IRA	8.69	21.46	12,134.15	29960.86	0.07%



**TABLE A-6**  
**INDIRECT WETLAND IMPACTS**  
**WETLANDS WITHIN 30.5 METERS (100 FEET) OF CONSTRUCTION LIMITS**

Watershed			PFO			PSS			PEM			POWZ/PUB			TOTAL			
			#	ha.	ac.	#	ha.	ac.	#	ha.	ac.	#	ha.	ac.	#	ha.	ac.	
Shenandoah River			Line A	3	0.09	0.23	2	0.03	0.07	4	0.18	0.45	4	0.13	0.31	13	0.43	1.06
			Line IRA	8	0.30	0.74	7	0.62	1.52	12	0.67	1.66	8	0.09	0.22	35	1.68	4.14
Option Area Comparisons	Lebanon Church	L							4	0.25	0.61	3	0.03	0.07	7	0.28	0.68	
		A							3	0.10	0.25	2	0.11	0.26	5	0.21	0.51	
	Duck Run	D1	1	0.01	0.02	5	0.19	0.48	2	0.03	0.07	3	0.05	0.12	11	0.28	0.69	
		D2	2	0.05	0.13	2	0.04	0.11							4	0.10	0.24	
		A	2	0.05	0.13	2	0.03	0.07				2	0.02	0.05	6	0.10	0.25	
Cacapon River			Line A	1	0.09	0.23	2	0.19	0.46	14	0.73	1.81	6	0.11	0.26	23	1.12	2.76
			Line IRA							8	0.33	0.82	4	0.27	0.66	12	0.60	1.48
Option Area Comparisons	Hanging Rock	R							2	0.09	0.23	1			3	0.09	0.23	
		A							2	0.11	0.26	1			3	0.11	0.26	
	Baker	B							2	0.10	0.25	2	0.02	0.06	4	0.13	0.31	
		A							1	0.00	0.01	1			2	0.00	0.01	
South Branch Potomac River			Line A				1	0.07	0.18	10	0.51	1.25	7	0.19	0.47	18	0.77	1.90
			Line IRA							9	0.95	2.35	4	0.19	0.46	13	1.14	2.81
North Branch Potomac River			Line A	4	0.26	0.65	1	0.09	0.22	24	2.51	6.19	6	0.25	0.61	35	3.11	7.67
			Line IRA	2	0.73	1.81				12	2.15	5.32	4	0.11	0.27	18	3.00	7.40
Option Area Comparisons	Forman	F							5	1.12	2.76	2	0.01	0.02	7	1.13	2.78	
		A	1	0.02	0.05				3	1.00	2.48	1	0.01	0.02	5	1.03	2.55	
	Patterson Creek	P							6	0.76	1.87	1	0.04	0.10	7	0.80	1.97	
		A							6	0.62	1.53	2	0.02	0.05	8	0.64	1.58	
Cheat River			Line A	10	0.65	1.61	25	2.81	6.95	69	6.56	16.19	22	0.84	2.07	126	10.86	26.82
			Line IRA	3	1.88	4.64	7	1.24	3.05	25	5.51	13.60	3	0.51	1.25	38	9.13	22.54
Option Area Comparisons	Shavers Fork	S							1	0.03	0.08				1	0.03	0.08	
		A				1			1	0.02	0.05				2	0.02	0.05	
Tygart Valley River			Line A	1	0.12	0.29	3	0.04	0.10	19	2.33	5.76	1	0.02	0.04	24	2.51	6.19
			Line IRA	2	0.26	0.64	2	0.15	0.36	20	2.54	6.28	4	0.10	0.24	28	3.05	7.52
Option Area Comparisons	Interchange	I							5	0.56	1.39				5	0.56	1.39	
		A							6	0.68	1.69				6	0.68	1.69	
TOTAL			Line A	19	1.22	3.01	34	3.23	7.98	140	12.82	31.65	46	1.52	3.76	239	18.79	46.40
			Line IRA	15	3.17	7.83	16	2.00	4.93	86	12.16	30.03	27	1.26	3.10	144	18.59	45.89

**TABLE A-7**  
**INDIRECT WETLAND IMPACTS**  
**WETLAND IMPACTS GREATER THAN 80% COUNTED AS 100%**

WATERSHED	Line A			Line IRA		
	#	Hectares	Acres	#	Hectares	Acres
Tygart Valley River	17	2.00	4.95	17	1.02	2.53
Cheat River	91	7.77	19.19	27	4.88	12.06
North Branch Potomac River	23	3.38	8.35	10	1.68	4.15
South Branch Potomac River	10	0.80	1.98	8	0.56	1.39
Cacapon River	17	0.97	2.39	1	0.08	0.19
Shenandoah River	7	0.33	0.82	17	0.46	1.14
<b>TOTAL</b>	<b>165</b>	<b>15.26</b>	<b>37.68</b>	<b>80</b>	<b>8.69</b>	<b>21.46</b>

***APPENDIX B***  
***WET SUMMARY***  
***PROBABILITY RATING FORMS***



*Improved Roadway Alternative  
WET Summary Probability Rating Forms  
Original and Modified*

# Summary of Evaluation Results for "103"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "104"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "203"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	M
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "203MODI"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	M
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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# Summary of Evaluation Results for "207"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*/s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "211"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "212"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "215"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "216"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "218"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "219"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



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# Summary of Evaluation Results for "220"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	H	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "220MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	H	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1006"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1006MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1101"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	H	M
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1101MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	M
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1280"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	H	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	L	H	L
Nutrient Removal/Transformation	L	H	L
Production Export	*	L	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1280MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	H	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	L	H	L
Nutrient Removal/Transformation	L	H	L
Production Export	*	L	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1604"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1605"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1621"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1623"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1624"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1624MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1655"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2101"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	H	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "2102"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "2103"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*/s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2250"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2602"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2604"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2605"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "2701"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	M	M	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2701MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	M	M	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2702"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2702MODI"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2801"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	H	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2801MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	H	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "2802"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2803"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	H	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2803MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	H	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2804"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "2901"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	H	M	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3001"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	H	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	M	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "3001MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	H	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	M	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3003"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3004"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3303"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3304"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	H	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3304MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	H	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3305"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "3305MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3306"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	H	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3307"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	H	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3307MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	H	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3308"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	M
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3308MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	M
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3309"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	M	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	H	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "3309MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	M	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	H	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3311"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	M	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3311MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	M	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3407"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3408"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3409"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3411"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



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Summary of Evaluation Results for "3501"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3502"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3504"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3505"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3505MODI"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3506"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	H	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	M	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3506MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	H	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	M	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "3507"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3508"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3509"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3510"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3511"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3512"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "3513"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	M
Nutrient Removal/Transformation	M	H	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3513MODI"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	M
Nutrient Removal/Transformation	M	H	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "3514"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3516"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3602"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3609"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	M	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	H	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "3609MODI"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	M	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	H	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3610"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

*Line A*  
*WET Summary Probability Rating Forms*  
*Original and Modified*

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Summary of Evaluation Results for "101"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*"s identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "103"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "104"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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# Summary of Evaluation Results for "107"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "203"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	M
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "203MODP"

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	Social		
	Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	M
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*"s identify conditions where functions and values are not evaluated.

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# Summary of Evaluation Results for "205"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "301"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	H	L
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "303"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.



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Summary of Evaluation Results for "303MOD"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "304"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "304MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "305"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "305MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "311"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "401"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	L
Nutrient Removal/Transformation	L	M	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "401MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "501"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "502"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "505"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "508"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "509"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "520"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "506"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "507"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



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# Summary of Evaluation Results for "530"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "530MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "530MODP"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "701"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "716"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	M	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "716MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	M	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "717"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "720"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "702MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	L	H
Nutrient Removal/Transformation	L	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "721"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "722"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "722MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "801"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "805"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "806"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "807"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	H	H	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	M
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



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# Summary of Evaluation Results for "807MOD"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	H	H	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "807MODP"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	H	H	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	M
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "808"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	H	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	L
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "808MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	H	L
Nutrient Removal/Transformation	M	H	L
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "808MODP"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	H	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	L
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "809"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "810"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*" 's identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "812"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*"s identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "812MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "813"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	M
Nutrient Removal/Transformation	M	H	M
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "813MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	M
Nutrient Removal/Transformation	L	H	M
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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# Summary of Evaluation Results for "815"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	M	M	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "815MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	M	M	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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# Summary of Evaluation Results for "816"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	L
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "816MODP"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	L
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "906A"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1002"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1006"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1006MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1021"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1022"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1102"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	M
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "1102MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	M
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1110"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1110MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1112"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1113"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1114A"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1124"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1128"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	H	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1130"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1131"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1132"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1141"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1151"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1153"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1154"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1202"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1204"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1205"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1206"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1207"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1208"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1211"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

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# Summary of Evaluation Results for "1211MOD"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1212"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1214"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1215"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1215MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1216"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1217"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1218"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1220"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	L	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1220MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	L	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1223"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1229"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1231"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	H	*
Floodflow Alteration	L	H	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	L	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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# Summary of Evaluation Results for "1231MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1233"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	H	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	L
Nutrient Removal/Transformation	L	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1233MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	H	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	L
Nutrient Removal/Transformation	L	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1243"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	L	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1243MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1247"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1247MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1248"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1248MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	M	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1249"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1249MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1251"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	L	M	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1251MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	L	M	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1253"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	H	H
Nutrient Removal/Transformation	L	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1253MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	L	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1254"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	H	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	L	M	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1254MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	M	M	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1255"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1258"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	H	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	L	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1258MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	H	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	L	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1259"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1260"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1261"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1261MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	H	L	H
Nutrient Removal/Transformation	H	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1262"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1262MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	H	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1263"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1264"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1265"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1266"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1266MOD"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1268"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1268MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1271"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1273"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1287"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	H	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	L
Nutrient Removal/Transformation	L	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1292"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1299"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1301"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	M
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



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Summary of Evaluation Results for "1301MOD"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	M
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1306"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1333B"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	L
Production Export	*	L	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1333BMOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	L
Production Export	*	L	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1333C"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	L
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1333CMOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	H	H	H
Nutrient Removal/Transformation	H	H	L
Production Export	*	L	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1339"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	U	*
Ground Water Discharge	L	M	*
Floodflow Alteration	L	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	H	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1339MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	H	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1343"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1349"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1353"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	H	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1362"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1363"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	H	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1363MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1410"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1411"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



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Summary of Evaluation Results for "1412"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*/s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1501"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	H	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1501MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	M
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	H	H
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "1502"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*" 's identify conditions where functions and values are not evaluated.

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# Summary of Evaluation Results for "1511"

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	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1602"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1603"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	M	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1603MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	L	M	H
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	M	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1604"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1605"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1609"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1621"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1624"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1624MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	L	H
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1627"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1627MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	H	*
Floodflow Alteration	M	M	H
Sediment Stabilization	L	L	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "1628"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1628MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	M	*
Floodflow Alteration	M	H	H
Sediment Stabilization	L	H	*
Sediment/Toxicant Retention	M	H	H
Nutrient Removal/Transformation	M	H	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	L	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1652"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "1656"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3001"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	H	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	M	H
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	M	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3001MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	H	*
Floodflow Alteration	L	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	M	H
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	M	*
Wildlife D/A Migration	*	H	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	L	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*"/'s identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3003"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3301"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.



# Summary of Evaluation Results for "3608"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	L	L	*
Ground Water Discharge	L	L	*
Floodflow Alteration	L	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	L	L	L
Nutrient Removal/Transformation	L	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3610"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	M	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	M
Nutrient Removal/Transformation	M	L	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "3610MOD"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	U	*
Ground Water Discharge	M	L	*
Floodflow Alteration	H	H	M
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	H	M
Nutrient Removal/Transformation	M	H	M
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	L	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

\*\*\*\*\*

# Summary of Evaluation Results for "I661"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

# Summary of Evaluation Results for "I663"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
 "\*" 's identify conditions where functions and values are not evaluated.

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Summary of Evaluation Results for "I664"

\*\*\*\*\*

	Social Significance	Effectiveness	Opportunity
Ground Water Recharge	M	L	*
Ground Water Discharge	M	L	*
Floodflow Alteration	M	M	L
Sediment Stabilization	L	M	*
Sediment/Toxicant Retention	M	L	L
Nutrient Removal/Transformation	M	L	L
Production Export	*	M	*
Wildlife Diversity/Abundance	L	*	*
Wildlife D/A Breeding	*	L	*
Wildlife D/A Migration	*	M	*
Wildlife D/A Wintering	*	M	*
Aquatic Diversity/Abundance	L	M	*
Uniqueness/Heritage	L	*	*
Recreation	L	*	*

Note: "H" = High, "M" = Moderate, "L" = Low, "U" = Uncertain, and  
"\*/s identify conditions where functions and values are not evaluated.

## **WETLAND TECHNICAL REPORT**

### **Alignment Selection SDEIS**

# **APPALACHIAN CORRIDOR H**

Elkins to Interstate 81

## **APPENDIX C**

### **WETLAND DELINEATION FORMS**

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West Virginia Department  
of Transportation

**Baker**

Michael Baker Jr., Inc.

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 102A DATE: 07/27/1993 INVESTIGATOR: CMH, DMB  
 COUNTY: Shenandoah STATE: VA STREAM: unnamed WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: meadow/pasture-heavily used by cattle making ID of veg. difficult

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 67.00  
 Code Scientific Name Stratum Status % Areal Cover

132	Carex sp.	Herb	FACW
198	Juncus sp.	Herb	NI
281	Polygonum punctatum	Herb	OBL
285	Carex tribuloides	Herb	FACW
286	Agrostis perennans	Herb	FACW
287	Festuca arundinacea	Herb	FACU

SOIL PROFILE: (Minimum 18 inches ) Series Name: 42A Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-1 organic  
 1-6 silty clay 10 YR 4/2 10 YR 6/8 (2%)  
 6-12 silty clay 10 YR 4/2 10 YR 6/8 (5%)

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 12.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: heavy previous nite

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: best prof.judgement exercised on the veg. parameter which was heavily grazed



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 102B DATE: 07/27/1993 INVESTIGATOR: CMH, DMB  
 COUNTY: Frederick STATE: VA STREAM: unnamed WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: forested wetland along small drainageway-heavily trampled

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					54.00
Code	Scientific Name	Stratum	Status		% Areal Cover
					5.00
					10.00
					20.00
194	Juncus dichotomus	Herb	FACW		70.00
224	Polygonum cuspidatum	Herb	FACU-		5.00
313	Agrostis perennans	Herb	FACU		70.00
320	Vernonia novæboracensis	Herb	FACW		15.00
371	Dulichium arundinaceum	Herb	OBL		15.00
446	Fraxinus pennsylvanica	Shrub	FACW		60.00
507	Rosa multiflora	Shrub	FACU		20.00
630	Fraxinus pennsylvanica	Tree	FACW		40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Mauretown					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-1	organic			barelyrmn	
1-2	silty clay	2.5 Y 4/2	10 YR 6/8 (50%)	"	"
2-6	silty clay	2.5 Y 4/2	10 YR 6/8 (50%)	"	"
6-12		10 YR 4/2	none	"	"

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 12.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: heavy

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: deep hoof imprints, all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 103 DATE: 07/27/1993 INVESTIGATOR: CMH, DMB  
 COUNTY: Shenandoah STATE: VA STREAM: Eishelman Run WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture/fallow field wetland in along drainageway/ditch

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00  
 Code Scientific Name Stratum Status % Areal Cover

100	Acorus calamus	Herb	OBL	30.00
189	Impatiens capensis	Herb	FACW	70.00
281	Polygonum punctatum	Herb	OBL	10.00
287	Festuca arundinacea	Herb	FACU	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: 55A Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-1	organic			
1-6	silty clay	10 YR 4/2	10 YR 6/8	barely moist
6-12	silty clay	10 YR 5/2	10 YR 6/8	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 12.0 (in.)  
 Depth to Saturated Soil: 12.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ Other (Explain in Remarks)

Recent Weather: drought

Recent Rainfall: T-storm last nite

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 104                      DATE: 07/28/1993                      INVESTIGATOR: CMH, DMB  
 COUNTY: Shenandoah STATE: VA STREAM: unnamed                      WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: PEM along pasture drainageway

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				89.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
100	Acorus calamus	Herb	OBL	2.00
129	Carex lurida	Herb	OBL	20.00
187	Hypericum mutilum	Herb	FACW	5.00
189	Impatiens capensis	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	20.00
228	Polygonum sp.	Herb	NI	2.00
243	Scirpus atrovirens	Herb	OBL	20.00
268	Typha latifolia	Herb	OBL	15.00
282	Leersia virginica	Herb	FACW	10.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: 4B				Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-1				
1-6	silty clay	10 YR 5/2	7.5 YR 5/6 (10%)	fe conc.
6-9	silty clay	10 YR 4/1		moist conc.fe
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: T-storm 2 days prior
-----	

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 105                      DATE: 07/28/1993                      INVESTIGATOR: CMH, DMB  
 COUNTY: Shenandoah STATE: VA STREAM: unnamed                      WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: wetland in shallows surrounding pond

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				83.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
179	Galium asprellum	Herb	OBL	10.00
244	Scirpus cyperinus	Herb	FACW+	6.00
252	Sparganium americanum	Herb	OBL	60.00
282	Leersia virginica	Herb	FACW	25.00
284	Ageratina altissima	Herb	FACU	5.00
522	Salix nigra	Shrub	FACW+	15.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: 68D				Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-8	organic silt	2.5 Y 4/2	none	sat., >50% org.
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	12.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
		<input type="checkbox"/> Water Marks	
Source/Site Characterization:		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Sediment Deposit	
<input type="checkbox"/> Spring/Seep		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input checked="" type="checkbox"/> Floodplain		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Backwater		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Water-Stained Leaves	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> FAC-Neutral Test	
<input checked="" type="checkbox"/> Aerial Photographs		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Other		Recent Weather: drought	
		Recent Rainfall: T-storm 2 day prior	
-----			

WETLAND DETERMINATION: Hydric soils present? yes	Hydrophytic Vegetation? yes
Wetland Hydrology? yes	Wetland? yes
Remarks: all 3 criteria met	

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 106 DATE: 07/28/1993 INVESTIGATOR: CMH, DMB  
 COUNTY: Shenandoah STATE: VA STREAM: unnamed WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PFO1/PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? yes  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	10.00
179	Galium asprellum	Herb	OBL	70.00
282	Leersia virginica	Herb	FACW	10.00
284	Ageratina altissima	Herb	FACU	40.00
473	Nyssa sylvatica	Shrub	FAC	20.00
511	Rubus allegheniensis	Shrub	FACU-	10.00
602	Acer rubrum	Tree	FAC	25.00
662	Robinia pseudoacacia	Tree	FACU-	10.00
810	Toxicodendron spp.	Vine	FAC	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: 68D Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0 refusal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: T-storms 2 day prior

WETLAND DETERMINATION: Hydric soils present? Hydrophytic Vegetation? yes  
 Wetland Hydrology? Wetland? yes  
 Remarks: this area is tentatively considered wetland but a subsequent survey should be c

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 107B      DATE: 07/29/1993      INVESTIGATOR: CMH, DMB  
 COUNTY: Shenandoah STATE: VA STREAM: Cedar Creek WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: floodplain of Cedar Creek @ small stream confluence

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      82.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

114	Bochmeria cylindrica	Herb	FACW	25.00
153	Dichanthelium clandestinum	Herb	FAC+	30.00
176	Eupatoriadelphus maculatus	Herb	FACW	5.00
189	Impatiens capensis	Herb	FACW	5.00
227	Polygonum sagittatum	Herb	OBL	5.00
280	Alisma subcordatum	Herb	OBL	5.00
289	Ludwigia palustris	Herb	OBL	40.00
291	Echinochloa crusgalli	Herb	FACU	40.00
292	Polygonum hydropiperoides	Herb	OBL	5.00
293	Leersia oryzoides	Herb	OBL	40.00
294	Commelina communis	Herb	FAC-	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Weikert-Berks Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic silt	10 YR 4/2	none	fe.conc,satura.
2-6	org.silt murk	10 YR 4/1	none	undecomposed org
6-12	organic silt	10 YR 4/1	none	undecomposed org

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: 2 thdst last 4 days

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 107C      DATE: 07/29/1993      INVESTIGATOR: CMH, DMB  
 COUNTY: Shenandoah STATE: VA STREAM: Cedar Creek WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: shallow bank/bar along Cedar Creek

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status		% Areal Cover
114	Bochmeria cylindrica	Herb	FACW		15.00
129	Carex lurida	Herb	OBL		20.00
153	Dichanthelium clandestinum	Herb	FAC+		10.00
176	Eupatoriadelphus maculatus	Herb	FACW		10.00
293	Leersia oryzoides	Herb	OBL		40.00
294	Commelina communis	Herb	FAC-		30.00
295	Scirpus microcarpus	Herb	OBL		10.00
296	Saponaria officinalis	Herb	FACU		5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Glodehill fsl Hydric Soil? nl				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	fine sand	2.5 Y 6/2	none	saturated
2-6	fine sand/silt	10 YR 5/1	none	ox.roots
6-12	fine sand/grave	2.5 Y 5/2	none	saturated

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: 2 thsts past 4 days

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 201 DATE: 07/27/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: Duck Run WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: man-made trout pond which seeps into the PEM

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  

Code	Scientific Name	Stratum	Status	% Areal Cover
166	Eleocharis tenuis	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	10.00
243	Scirpus atrovirens	Herb	OBL	40.00
323	Scirpus polyphyllus	Herb	OBL	30.00
602	Acer rubrum	Tree	FAC	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Craigsville Hydric Soil? no  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	sandy organic	10 YR 4/1		ox.roots
3"	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 1.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 1.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: sunny
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: 7/26
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: piles of rock & dirt stored in wetland-a trout pond proposed constructed in loc



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 202 DATE: 07/27/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: Duck Run WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: dirt road through the wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
178	Eupatorium perfoliatum	Herb	FACW+	5.00
193	Juncus canadensis	Herb	OBL	30.00
195	Juncus effusus	Herb	FACW+	40.00
290	Panicum dichotomiflorum	Herb	FACW	10.00
324	Oenothera fruticosa	Herb	FAC	15.00
636	Liriodendron tulipifera	Tree	FACU	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Craigsville Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	sand	10 YR 4/1		ox.roots
3"	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: sunny 90 degrees
	Recent Rainfall: 7/26/93

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 203A      DATE: 07/17/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick      STATE: VA      STREAM: unnamed      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: several tributaries flow through the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
189	Impatiens capensis	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	15.00
227	Polygonum sagittatum	Herb	OBL	20.00
282	Leersia virginica	Herb	FACW	30.00
320	Vernonia noveboracensis	Herb	FACW	15.00
401	Acer rubrum	Shrub	FAC	10.00
404	Alnus rugosa	Shrub	FACW+	10.00
602	Acer rubrum	Tree	FAC	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name:				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic	10 YR 2/1		
2-6	sandy loam	5 YR 5/2	5 YR 6/8 (20%)	ox.roots
6-18	silty loam	5 Y 5/2	10 YR 3/6 (15%)	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      2.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Other	Recent Rainfall: 7/26/93

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes

Remarks:

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 203B DATE: 07/27/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PSS  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: a tributary flows through the wetland

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
129	Carex lurida	Herb	OBL	20.00
178	Eupatorium perfoliatum	Herb	FACW+	30.00
189	Impatiens capensis	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	30.00
404	Alnus rugosa	Shrub	FACW+	100.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-1	organic	10 YR 4/2		ox.roots
1-3	silty loam	10 YR 5/1		10 YR 5/6 (5%)ox.roots
3"	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 1.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 1.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 204      DATE: 07/29/1993      INVESTIGATOR: CMH, DMB  
 COUNTY: Frederick STATE: VA STREAM: unnamed      WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PSS1/PEM  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: floodplain wetland (includes a few sm. high ground areas)

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					92.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
114	Bochmeria cylindrica	Herb	FACW		30.00
129	Carex lurida	Herb	OBL		20.00
189	Impatiens capensis	Herb	FACW		10.00
195	Juncus effusus	Herb	FACW+		15.00
268	Typha latifolia	Herb	OBL		10.00
282	Leersia virginica	Herb	FACW		30.00
405	Alnus serrulata	Shrub	OBL		10.00
522	Salix nigra	Shrub	FACW+		30.00
524	Sambucus canadensis	Shrub	FACW		10.00
646	Platanus occidentalis	Tree	FACW		15.00
665	Salix nigra	Tree	FACW+		30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Weidert-Berks Hydric Soil? nl  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 -----  
 0-12      sandy silt      10 YR 3/2      5YR 5/8 (10%)  
 -----

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: 2 T storms last 4day

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 205                      DATE: 07/27/1993                      INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick    STATE: VA    STREAM: unnamed                      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: a tributary flows though the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					66.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		10.00
189	Impatiens capensis	Herb	FACW		10.00
219	Osmunda cinnamomea	Herb	FACW		30.00
261	Thalictrum pubescens	Herb	FACW+		20.00
297	Carex gynandra	Herb	NI		10.00
325	Glyceria melicaria	Herb	OBL		20.00
401	Acer rubrum	Shrub	FAC		100.00
602	Acer rubrum	Tree	FAC		100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Laidig                      Hydric Soil? no  
 Depth      Texture                      Matrix Color                      Mottle Color(%)                      Comments

0-12      organic                      10 YR 2/1

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

☐ Drift Lines

☐ Sediment Deposit

☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12

☒ Water-Stained Leaves

☒ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny 90 degrees

Recent Rainfall: last night

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 206 DATE: 07/27/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: a tributary flows through the wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
179	Galium asprellum	Herb	OBL	10.00
189	Impatiens capensis	Herb	FACW	30.00
288	Pilea pumila	Herb	FACW	20.00
325	Glyceria melicaria	Herb	OBL	30.00
326	Viola incognita	Herb	FACW	10.00
332	Rhododendron roseum	Herb	NI	50.00
464	Lindera benzoin	Shrub	FACW	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Laidig Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic	10 YR 4/1	10 YR 5/6	(10%)ox.roots
4-18	sandy silt	10 YR 4/1		

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny 90 degrees
	Recent Rainfall: 7/26/93

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 207                      DATE: 07/28/1993                      INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick    STATE: VA    STREAM: unnamed                      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: a tributary flows through the wetland

Code	Percent Dominant Species that are OBL, FACW or FAC	Scientific Name	Stratum	Status	80.00 % Areal Cover
189		Impatiens capensis	Herb	FACW	
195		Juncus effusus	Herb	FACW+	
227		Polygonum sagittatum	Herb	OBL	
524		Sambucus canadensis	Shrub	FACW	

Depth	Texture	Matrix Color	Series Name: Laidig	Mottle Color(%)	Hydric Soil? no	Comments
0-6	silty loam	10 YR 6/2		10 YR 6/8 (20%)	saturated	
6-18	silty loam	10 YR 4/1				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: 7/26/93
<input type="checkbox"/> Other	

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks:

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 208      DATE: 07/28/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick      STATE: VA      STREAM: Duck Run      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: abandoned Beaver Pond

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
100	Acorus calamus	Herb	OBL	15.00
122	Carex crinita	Herb	OBL	10.00
129	Carex lurida	Herb	OBL	10.00
189	Impatiens capensis	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	15.00
282	Leersia virginica	Herb	FACW	40.00
401	Acer rubrum	Shrub	FAC	100.00
602	Acer rubrum	Tree	FAC	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Laidig      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic/sandy	N 4/		saturated
4-18	sandy silt	5 Y 7/1		ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      24.0 (in.)  
 Depth to Free Water in Pit:      0.0 (in.)  
 Depth to Saturated Soil:      0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☒ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny 90 degrees  
 Recent Rainfall: 7/26/93

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 209                      DATE: 07/28/1993                      INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick    STATE: VA    STREAM: Duck Run                      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: Duck Run flows through the wetland

Code	Scientific Name	Stratum	Status	88.00 % Areal Cover
116	Caltha palustris	Herb	OBL	15.00
189	Impatiens capensis	Herb	FACW	20.00
217	Onoclea sensibilis	Herb	FACW	20.00
277	Viola spp.	Herb	FAC	15.00
325	Glyceria melicaria	Herb	OBL	20.00
327	Apios americana	Herb	FACW	10.00
401	Acer rubrum	Shrub	FAC	30.00
451	Hamamelis virginiana	Shrub	FAC-	30.00
464	Lindera benzoin	Shrub	FACW	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Laidig                      Hydric Soil? no  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic sandy	7.5 YR 2/0		saturated
2-8	sandy silt	10 YR 3/1		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:                      2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:                      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:                      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Other	Recent Rainfall: 7/26/93

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 210A DATE: 07/28/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: Duck Run WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: Duck Run flows through the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 86.00  
 Code Scientific Name Stratum Status % Areal Cover

129	Carex lurida	Herb	OBL	10.00
189	Impatiens capensis	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	15.00
227	Polygonum sagittatum	Herb	OBL	30.00
262	Thelypteris noveboracensis	Herb	FAC	15.00
282	Leersia virginica	Herb	FACW	30.00
566	Rubus sp.	Shrub	NI	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Laidig Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-2	silty sand	10 YR 3/1		auger refusal
2-8	sandy clay	10 YR 6/1	10 YR 6/6 (5%) 8"	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Other	Recent Rainfall: 7/26/93

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: floodplain area along Duck Run

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 210B DATE: 07/28/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: Duck Run WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PFO  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: Duck Run flows through the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					71.00
Code	Scientific Name	Stratum	Status		% Areal Cover
116	Caltha palustris	Herb	OBL		10.00
129	Carex lurida	Herb	OBL		10.00
189	Impatiens capensis	Herb	FACW		10.00
262	Thelypteris noveboracensis	Herb	FAC		15.00
290	Panicum dichotomiflorum	Herb	FACW		20.00
325	Glyceria melicaria	Herb	OBL		30.00
328	Lindera benzoin	Herb	FACW		5.00
401	Acer rubrum	Shrub	FAC		50.00
416	Betula lenta	Shrub	FACU		30.00
464	Lindera benzoin	Shrub	FACW		40.00
565	Rhododendron roseum	Shrub	NI		30.00
602	Acer rubrum	Tree	FAC		50.00
609	Betula lenta	Tree	FACU		

SOIL PROFILE: (Minimum 18 inches ) Series Name: Laidig					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-3	muck	10 YR 2/1			
3-10	silty loam	10 YR 3/2	10 YR 4/6 (10%)		

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Other	Recent Rainfall: 7/26/93

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: floodplain area along Duck Run

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 211      DATE: 07/28/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: Duck Run      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: Duck Run flows through the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					66.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
219	Osmunda cinnamomea	Herb	FACW		30.00
277	Viola spp.	Herb	FAC		5.00
290	Panicum dichotomiflorum	Herb	FACW		20.00
325	Glyceria melicaria	Herb	OBL		25.00
327	Apios americana	Herb	FACW		5.00
329	Betula lenta	Herb	FACU		15.00
401	Acer rubrum	Shrub	FAC		20.00
416	Betula lenta	Shrub	FACU		20.00
451	Hamamelis virginiana	Shrub	FAC-		20.00
464	Lindera benzoin	Shrub	FACW		40.00
602	Acer rubrum	Tree	FAC		40.00
609	Betula lenta	Tree	FACU		60.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: Laidig      Hydric Soil?  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 -----  
 0-1      organic      10 YR 2/1  
 1-12      sandy silt      10 YR 3/1      10 YR 5/6 (10%)  
 -----

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      2.0 (in.)  
 Depth to Free Water in Pit:      0.0 (in.)  
 Depth to Saturated Soil:      0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)  
 Recent Weather: sunny 90 degrees  
 Recent Rainfall: 7/26/93

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 212 DATE: 07/28/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: a tributary flows through the wetland

Code	Scientific Name	Stratum	Status	82.00 % Areal Cover
139	Carex vulpinoidea	Herb	OBL	10.00
189	Impatiens capensis	Herb	FACW	15.00
195	Juncus effusus	Herb	FACW+	15.00
227	Polygonum sagittatum	Herb	OBL	20.00
282	Leersia virginica	Herb	FACW	40.00
401	Acer rubrum	Shrub	FAC	40.00
464	Lindera benzoin	Shrub	FACW	50.00
467	Liriodendron tulipifera	Shrub	FACU	50.00
602	Acer rubrum	Tree	FAC	50.00
636	Liriodendron tulipifera	Tree	FACU	50.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-8	sandy silt	2.5 Y 5/0	10 YR 5/6 (10%)	
8-16	silty clay	10 YR 6/1	10 YR 6/8 (15%)	

## Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed             | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: 7/26/93
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 213 DATE: 07/28/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: Duck Run WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: floodplain area along Duck Run

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 86.00

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	30.00
189	Impatiens capensis	Herb	FACW	20.00
325	Glyceria melicaria	Herb	OBL	40.00
330	Viola affinis	Herb	FACW	10.00
416	Betula lenta	Shrub	FACU	30.00
456	Ilex verticillata	Shrub	FACW+	20.00
464	Lindera benzoin	Shrub	FACW	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Laidig Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	organic muck	10 YR 2/1		auger refusal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Other	Recent Rainfall: 7/26/93

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 214                      DATE: 07/28/1993                      INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick    STATE: VA    STREAM: unnamed                      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: headwater area to a tributary

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					60.00
Code	Scientific Name	Stratum	Status		% Areal Cover
<hr/>					
2	Sphagnum sp.	Bryo	NI		
217	Onoclea sensibilis	Herb	FACW		20.00
219	Osmunda cinnamomea	Herb	FACW		20.00
263	Thelypteris thelypteroides	Herb	FACW		20.00
277	Viola spp.	Herb	FAC		5.00
290	Panicum dichotomiflorum	Herb	FACW		10.00
464	Lindera benzoin	Shrub	FACW		50.00
565	Rhododendron roseum	Shrub	NI		50.00
602	Acer rubrum	Tree	FAC		100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Laidig				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
<hr/>				
0-1	organic	10 YR 2/1		auger refusal
1-6	sandy clay	10 YR 4/1	10 YR 4/6 (10%)	6"

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 1.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Other	Recent Rainfall: 7/26/93

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 215 DATE: 07/29/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: seep area along road

Code	Scientific Name	Stratum	Status	90.00 % Areal Cover
129	Carex lurida	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	15.00
227	Polygonum sagittatum	Herb	OBL	20.00
285	Carex tribuloides	Herb	FACW	20.00
290	Panicum dichotomiflorum	Herb	FACW	20.00
333	Polygonum persicaria	Herb	FACW	15.00
401	Acer rubrum	Shrub	FAC	40.00
416	Betula lenta	Shrub	FACU	60.00
420	Carpinus caroliniana	Shrub	FAC	100.00
602	Acer rubrum	Tree	FAC	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Weikert Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty loam	10 YR 4/2	10 YR 3/6 (5%)	ox.root channels
3-6	silty clay	10 Yr 4/1	7.5YR 4/6 (30%)	
6-12	silty clay	10 YR 6/2	10 YR 5/8 (40%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Other	Recent Rainfall: 7/26/93

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 216                      DATE: 07/29/1993                      INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick    STATE: VA    STREAM: Duck Run                      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: tributary flows through the area

Code	Scientific Name	Stratum	Status	86.00 % Areal Cover
129	Carex lurida	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	10.00
227	Polygonum sagittatum	Herb	OBL	10.00
269	Unidentifiable grass	Herb	NI	20.00
288	Pilea pumila	Herb	FACW	10.00
323	Scirpus polyphyllus	Herb	OBL	10.00
325	Glyceria mellicaria	Herb	OBL	30.00
464	Lindera benzoin	Shrub	FACW	100.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-2	organic	10 YR 3/1		auger refusal
2-5	silty clay	2.5 Y 5/2	7.5YR 5/8 (20%)	10"
5-10	silty clay	7.5 YR 5/0	7.5YR 6/8 (20%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Other	Recent Rainfall: 6/26/93

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 217 DATE: 07/29/1993 INVESTIGATOR: CMH, DMB  
 COUNTY: Frederick STATE: VA STREAM: Duck Run WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PSS1B

Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: sm. fl.plain/seep wetland caused by impounding effect dirt road

Code	Scientific Name	Stratum	Status	% Areal Cover
189	Impatiens capensis	Herb	FACW	25.00
282	Leersia virginica	Herb	FACW	90.00
296	Saponaria officinalis	Herb	FACU	20.00
464	Lindera benzoin	Shrub	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Craigsville Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-12 organic silt 10 YR 5/2 5 YR 5/6undecomposed veg

Hydric Soil Indicators:

<input checked="" type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 2.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☒ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: drought  
 Recent Rainfall: 2 Tstorms last 4 day

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 218 DATE: 07/29/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: Duck Run WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: depressional ponded area with tributary through it

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	15.00
193	Juncus canadensis	Herb	OBL	20.00
195	Juncus effusus	Herb	FACW+	15.00
243	Scirpus atrovirens	Herb	OBL	10.00
268	Typha latifolia	Herb	OBL	20.00
269	Unidentifiable grass	Herb	NI	20.00
401	Acer rubrum	Shrub	FAC	
464	Lindera benzoin	Shrub	FACW	

SOIL PROFILE: (Minimum 18 inches ) Series Name: Weikert Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	sandy/fibrous	10 YR 4/1		
2-6	silty clay	10 YR 5/1	10 YR 5/6	auger refusal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 2.0 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ Other (Explain in Remarks)  
 Recent Weather: sunny 90 degrees  
 Recent Rainfall: 7/26/93

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 219 DATE: 07/29/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Frederick STATE: VA STREAM: Duck Run WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: tributaries flow through the area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
189	Impatiens capensis	Herb	FACW	10.00
217	Onoclea sensibilis	Herb	FACW	10.00
282	Leersia virginica	Herb	FACW	30.00
288	Pilea pumila	Herb	FACW	10.00
325	Glyceria melicaria	Herb	OBL	20.00
333	Polygonum persicaria	Herb	FACW	20.00
401	Acer rubrum	Shrub	FAC	25.00
415	Betula alleghaniensis	Shrub	FAC	35.00
464	Lindera benzoin	Shrub	FACW	40.00
602	Acer rubrum	Tree	FAC	50.00
608	Betula alleghaniensis	Tree	FAC	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: weikert Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-12 sandy silt 10 YR 4/1 10 YR 4/6 (25%)ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 90 degrees
<input type="checkbox"/> Other	Recent Rainfall: 7/26/93

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 220A DATE: 07/29/1993 INVESTIGATOR: CMH, DMB  
 COUNTY: Frederick STATE: VA STREAM: near Duck Run WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: PEM1E meadow in drainage swale

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	10.00
153	Dichanthelium clandestinum	Herb	FAC+	75.00
189	Impatiens capensis	Herb	FACW	25.00
195	Juncus effusus	Herb	FACW+	15.00
200	Juncus tenuis	Herb	FAC-	15.00
227	Polygonum sagittatum	Herb	OBL	10.00
662	Robinia pseudoacacia	Tree	FACU-	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Weikert-Berks Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic			
1-6	loam	10 YR 4/2	none	
6-12	loam	2.5 Y 5/2	10 YR 6/8 (5%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 12.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: 2 Tstorms last 4 day

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks:

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 220B      DATE: 03/01/1994      INVESTIGATOR: MZ, DAK  
 COUNTY: Frederick      STATE: VA      STREAM: trib. Duck Run      WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PSSIE  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: Part of complex associated with unnamed stream and swale

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				67.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
110	Aster umbellatus	Herb	FACW	30.00
249	Solidago rugosa	Herb	FAC	30.00
269	Unidentifiable grass	Herb	NI	40.00
300	Asclepias sp.	Herb	NI	10.00
395	Aster vimineus	Herb	FAC	10.00
405	Alnus serrulata	Shrub	OBL	80.00
507	Rosa multiflora	Shrub	FACU	5.00
524	Sambucus canadensis	Shrub	FACW	10.00
636	Liriodendron tulipifera	Tree	FACU	20.00
665	Salix nigra	Tree	FACW+	10.00
903	Daucus carota	Herb	FACU	30.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Weikert-Berks      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-1	organic			
1-6	loam	10 YR 4/2		
6-12	loam	2.5 Y 5/2	10 YR 6/8 (5%)	
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	(in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	(in.)	<input type="checkbox"/> Saturated in Upper 12	
		<input type="checkbox"/> Water Marks	
Source/Site Characterization:		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Floodplain		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Backwater		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Depressional		<input type="checkbox"/> Water-Stained Leaves	
		<input type="checkbox"/> Local Soil Survey Data	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Aerial Photographs		Recent Weather:	
<input type="checkbox"/> Other		Recent Rainfall: 2-3" snow on ground	
-----			

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 301 DATE: 04/13/1993 INVESTIGATOR: all crews  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: headwater wetland to an unnamed tributary

Code	Scientific Name	Stratum	Status	50.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	60.00
180	Galium tinctorium	Herb	OBL	30.00
270	Unidentifiable herb	Herb	NI	30.00
645	Pinus strobus	Tree	FACU	20.00
646	Platanus occidentalis	Tree	FACW	50.00
813	Toxicodendron radicans	Vine	FAC	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-1	organic detritu	10 YR 3/2	no	
1-4	silty loam	10 YR 3/1	no	ox.root channel

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: clear
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 302A DATE: 04/14/1993 INVESTIGATOR: MZ, EFA, DAE  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: apparently a former farm pond filled in & adjacent shrub zone

VEGETATION: Code	Percent Dominant Species that are OBL, FACW or FAC	Scientific Name	Stratum	Status	.00 % Areal Cover
106		Apocynum cannabinum	Herb	FACU	10.00
156		Dipsacus sylvestris	Herb	NI	10.00
269		Unidentifiable grass	Herb	NI	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: AvB Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty clay	10 YR 3/2	none	
3-8	clayey	10 YR 5/1	10YR 5/6 (60%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 5.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: clear sunny/cloudy
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? no  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: (see note on 302B)



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 302B      DATE: 04/14/1993      INVESTIGATOR: MZ, EFA, DAE  
 COUNTY: Hardy      STATE: WV      STREAM: unnamed      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: shrub area between road and PEM

Code	Scientific Name	Stratum	Status	14.00 % Areal Cover
250	Solidago sp.	Herb	NI	20.00
269	Unidentifiable grass	Herb	NI	80.00
403	Aesculus sp.	Shrub	NI	20.00
426	Cephalanthus occidentalis	Shrub	OBL	20.00
449	Gleditsia triacanthos	Shrub	FAC-	20.00
507	Rosa multiflora	Shrub	FACU	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: AvB      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silty clay	10 YR 2/2		
4-10	clay	2.5 Y 5/2	2.5 Y 5/6 (20%)	ox.roots
10+ref.				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: partly cloudy  
 Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: vegetation likely to be hydrophytic when identifiable based on BPJ

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 303 DATE: 04/14/1993 INVESTIGATOR: MZ, EFA, DAE  
 COUNTY: Hardy STATE: WV STREAM: WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture wetland with soft rush

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	30.00
269	Unidentifiable grass	Herb	NI	80.00
271	Unidentifiable sedge	Herb	NI	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BuC Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	silty clay loam	10 YR 3/1	none	ox.root channels
8-14	silty clay loam	10 YR 4/1	none	ox.root channels

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? no  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: vegetation likely to bydrophytic when identifiable based on BPJ

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 304 DATE: 04/14/1993 INVESTIGATOR: MZ, EFA, DAE  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture wetland with soft rush

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 33.00

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	30.00
269	Unidentifiable grass	Herb	NI	20.00
271	Unidentifiable sedge	Herb	NI	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BuC Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty loam	10 YR 3/1	none	ox.roots
3-18	sandy	10 YR 6/2	none	ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? no  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: vegetation likely to be hydrophytic when identifiable based on BPJ

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 305 DATE: 04/14/1993 INVESTIGATOR: MZ, EFA, DAE  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	75.00
202	Lemna minor	Herb	OBL	80.00
269	Unidentifiable grass	Herb	NI	50.00
271	Unidentifiable sedge	Herb	NI	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ByB Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	silty loam	10 YR 3/1	none	ox.root channel
8+ref.				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 2.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: partly cloudy  
 Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 311 DATE: 04/15/1993 INVESTIGATOR: JMG, CMH, JMD, BS  
 COUNTY: Hardy STATE: WV STREAM: Trout Run WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: wetland located within a cow pasture, area has been grazed

Code	Scientific Name	Stratum	Status	% Areal Cover
269	Unidentifiable grass	Herb	NI	90.00
270	Unidentifiable herb	Herb	NI	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Tioga Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	silty clay loam	2.5 Y 5/2.3	none	tramped

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny
	Recent Rainfall: 4/12/93

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? no  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: assumption made that under normal circumstances veg. could become established

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 312      DATE: 04/15/1993      INVESTIGATOR: JMG, CMH, JMD  
 COUNTY: Hardy      STATE: WV      STREAM:      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: within pasture land, located at toe of forested slope

Code	Scientific Name	Stratum	Status	.00 % Areal Cover
142	Cirsium sp.	Herb	NI	5.00
200	Juncus tenuis	Herb	FAC-	30.00
231	Pycnanthemum leptodon	Herb	UPL	5.00
269	Unidentifiable grass	Herb	NI	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Mkb      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silty clay loam	2.5 Y 3/5	10 YR 5/6 (20%)	
6-12	clay loam	2.5 Y 2/6	10 YR 5/6 (40%)	high clay conten

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny  
 Recent Rainfall: 4/12/93

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? no  
    Wetland Hydrology? yes      Wetland? yes

Remarks: bpj that wetland veg. exists

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 401 DATE: 04/27/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: Saurkraut Run WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PSS1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
100	Acorus calamus	Herb	OBL	10.00
147	Cuscuta gronovii	Herb	UPL	
162	Elatine americana	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	10.00
258	Symplocarpus foetidus	Herb	OBL	50.00
268	Typha latifolia	Herb	OBL	20.00
405	Alnus serrulata	Shrub	OBL	80.00
602	Acer rubrum	Tree	FAC	10.00
646	Platanus occidentalis	Tree	FACW	90.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? yes Comments
0-8	clay loam	2.5 Y 5/0	7.5YR 3/4 (50%)	
8-12	clay loam	2.5 Y 5/0	7.5YR 3/4 (50%)	
12-18	clay	2.5 Y 5/0	7.5YR 3/4 (50%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input checked="" type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Aerial Photographs	Recent Weather: heavy rains
<input type="checkbox"/> Other	Recent Rainfall: yesterday

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 402      DATE: 04/27/1993      INVESTIGATOR: LDG  
 COUNTY: Hardy      STATE: WV      STREAM:      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PSS1F  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
116	Caltha palustris	Herb	OBL	15.00
153	Dichanthelium clandestinum	Herb	FAC+	5.00
195	Juncus effusus	Herb	FACW+	10.00
209	Lysimachia nummularia	Herb	OBL	15.00
216	Nymphaea odorata	Herb	OBL	5.00
244	Scirpus cyperinus	Herb	FACW+	5.00
258	Symplocarpus foetidus	Herb	OBL	40.00
405	Alnus serrulata	Shrub	OBL	40.00
464	Lindera benzoin	Shrub	FACW	40.00
672	Ulmus rubra	Tree	FAC	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Melvin      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	sandy loam	10 YR 5/1	7.5 YR 4/4	
8-18	silty loam	10 YR 6/1	7.5 YR 5/6	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      5.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input checked="" type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Aerial Photographs	Recent Weather: heavy rains
<input type="checkbox"/> Other	Recent Rainfall: yesterday

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 403 DATE: 04/29/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: Lost River WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEMIE/PSS  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: at toe of slope w/Rt.55 west of hanging rock

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
162	Elatine americana	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	5.00
258	Symplocarpus foetidus	Herb	OBL	80.00
405	Alnus serrulata	Shrub	OBL	15.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-8	clay loam	2.5 Y 5/0	7.5 YR 3/4	
8-12	clay loam	2.5 Y 5/0	7.5 YR 3/4	
12-18	clay loam	2.5 Y 5/0	7.5 YR 3/4	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Aerial Photographs	Recent Weather: fair
<input type="checkbox"/> Other	Recent Rainfall: 3 days ago

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 404      DATE: 04/28/1993      INVESTIGATOR: LDG  
 COUNTY: Hardy      STATE: WV      STREAM:      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				88.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
2	Sphagnum sp.	Bryo	NI	10.00
100	Acorus calamus	Herb	OBL	30.00
116	Caltha palustris	Herb	OBL	5.00
195	Juncus effusus	Herb	FACW+	20.00
216	Nymphaea odorata	Herb	OBL	5.00
258	Symplocarpus foetidus	Herb	OBL	30.00
268	Typha latifolia	Herb	OBL	5.00
405	Alnus serrulata	Shrub	OBL	80.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Rk				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-8	silty clay	7.5 YR 3/10		
8-12	silty clay	7.5 YR 3/10		
12-18	clay	7.5 YR 3/10		
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Aerial Photographs	Recent Weather: fair
<input type="checkbox"/> Other	Recent Rainfall: 4 days ago
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 405 DATE: 04/28/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
100	Acorus calamus	Herb	OBL	30.00
116	Caltha palustris	Herb	OBL	5.00
162	Elatine americana	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	10.00
216	Nymphaea odorata	Herb	OBL	10.00
256	Spirodela polyrhiza	Herb	OBL	
258	Symplocarpus foetidus	Herb	OBL	40.00
405	Alnus serrulata	Shrub	OBL	10.00
522	Salix nigra	Shrub	FACW+	10.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? yes Comments
0-6	sandy loam	5 Y 3/1	none	
10"	silty loam	5 Y 4/1	none	
12-18	silty loam	5 Y 3/1	none	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: fair
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 406 DATE: 04/28/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
100	Acorus calamus	Herb	OBL	70.00
162	Elatine americana	Herb	OBL	50.00
195	Juncus effusus	Herb	FACW+	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: OpF Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	organic muck	2.5 YR 2.5/0		muck
8-18	clay loam	5 Y 6/1		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Aerial Photographs	Recent Weather: fair
<input type="checkbox"/> Other	Recent Rainfall: 3 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 501                      DATE: 04/28/1993                      INVESTIGATOR: MZ, JAP, ABC  
 COUNTY: Hardy                      STATE: WV                      STREAM: Baker Run                      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: natural seep/stream area surrounded by forest

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	50.00
189	Impatiens capensis	Herb	FACW	80.00
258	Symplocarpus foetidus	Herb	OBL	30.00
803	Lonicera japonica	Vine	FAC-	30.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? nl Comments
2-8	silty sand	10 YR 3/1	10 YR 4/6 (10%)	saturated
8-14	sandy	10 YR 4/2	10 YR 4/6 (5%)	saturated

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 5.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny clear
<input type="checkbox"/> Other	Recent Rainfall: 2 days before

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 502                      DATE: 04/28/1993                      INVESTIGATOR: JAP, ABC, MZ  
 COUNTY: Hardy                      STATE: WV                      STREAM: unnamed                      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: natural area, undisturbed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				88.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
100	Acorus calamus	Herb	OBL	5.00
103	Agrostis alba	Herb	FACW	30.00
129	Carex lurida	Herb	OBL	30.00
195	Juncus effusus	Herb	FACW+	20.00
222	Poa palustris	Herb	FACW	50.00
227	Polygonum sagittatum	Herb	OBL	40.00
270	Unidentifiable herb	Herb	NI	30.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb                      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-12	silty sand	10 YR 2/2	7.5YR 5/6 (20%)	
12-18	clay loam	7.5 YR 5/0		
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:                      3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:                      (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:                      (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall: 2 days ago
-----	

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 503 DATE: 04/28/1993 INVESTIGATOR: JAP, ABC, MZ  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: area was probably created as a result of fill material across Cr.

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					88.00
Code	Scientific Name	Stratum	Status		% Areal Cover
103	Agrostis alba	Herb	FACW		20.00
129	Carex lurida	Herb	OBL		30.00
152	Deschampsia cespitosa	Herb	FACW		50.00
189	Impatiens capensis	Herb	FACW		20.00
195	Juncus effusus	Herb	FACW+		20.00
227	Polygonum sagittatum	Herb	OBL		20.00
268	Typha latifolia	Herb	OBL		50.00
270	Unidentifiable herb	Herb	NI		30.00
297	Carex gynandra	Herb	NI		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-8	loamy sand	5 YR 3/2	5 YR 4/6 (10%)	ox.roots	
8-	sandy	7.5 YR 4/2	7.5YR 4/4 (10%)		

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 3.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 3.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 504      DATE: 04/29/1993      INVESTIGATOR: JAP, ABC, MZ  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: relatively undisturbed pasture area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

103	Agrostis alba	Herb	FACW	20.00
129	Carex lurida	Herb	OBL	30.00
195	Juncus effusus	Herb	FACW+	20.00
222	Poa palustris	Herb	FACW	20.00
226	Polygonum pensylvanicum	Herb	FACW	20.00
227	Polygonum sagittatum	Herb	OBL	10.00
297	Carex gynandra	Herb	NI	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErD      Hydric Soil? nl  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0-14      silt      2.5 YR 4/2      2.5YR 4/6 (10%)  
 14-18      silt/some sand      5 YR 4/2      2.5YR 4/6 (10%)

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 2.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 504A      DATE: 04/29/1993      INVESTIGATOR: JAP, ABC, MZ  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: relatively undisturbed pasture area

Code	Scientific Name	Stratum	Status	% Areal Cover
103	Agrostis alba	Herb	FACW	20.00
129	Carex lurida	Herb	OBL	30.00
195	Juncus effusus	Herb	FACW+	20.00
222	Poa palustris	Herb	FACW	20.00
226	Polygonum pensylvanicum	Herb	FACW	20.00
227	Polygonum sagittatum	Herb	OBL	10.00
297	Carex gynandra	Herb	NI	10.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-14	silt	2.5 YR 4/2	2.5YR 4/6 (10%)	
14-18	silt/some sand	5 YR 4/2	2.5YR 4/6 (10%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 2.0 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 2.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

☐ Drift Lines

☐ Sediment Deposit

☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 505      DATE: 04/29/1993      INVESTIGATOR: JAP, ABC, MZ  
 COUNTY: Hardy      STATE: WV      STREAM: unnamed      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: grazed pasture but not significantly disturbed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
103	Agrostis alba	Herb	FACW	30.00
129	Carex lurida	Herb	OBL	40.00
152	Deschampsia cespitosa	Herb	FACW	20.00
189	Impatiens capensis	Herb	FACW	15.00
195	Juncus effusus	Herb	FACW+	20.00
227	Polygonum sagittatum	Herb	OBL	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CaF      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	silt	2.5 YR 4/1	2.5YR 4/6	(10%)
12-18	sandy silt	2.5 YR 4/2	2.5YR 4/6	(15%)

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 3.0 (in.)  
 Depth to Saturated Soil: 2.0 (in.)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

#### Secondary Indicators (2 or more req'd)

☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 506 DATE: 04/29/1993 INVESTIGATOR: JAP, ABC, MZ  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: wetland in open pasture

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
129	Carex lurida	Herb	OBL	30.00
135	Carex tenera	Herb	OBL	30.00
189	Impatiens capensis	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	30.00
227	Polygonum sagittatum	Herb	OBL	20.00

Depth	Texture	Matrix Color	Series Name: BkD Mottle Color(%)	Hydric Soil? no Comments
0-14	clay silt	2.5 YR 4/2	2.5YR 4/6 (10%)	
14-18	gravely silt	2.5 YR 4/2	2.5YR 4/6 (10%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

## ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 507                      DATE: 04/29/1993                      INVESTIGATOR: JAP, ABC, MZ  
COUNTY: Hardy                      STATE: WV                      STREAM: unnamed                      WATERSHED: Cacapon River  
COWARDIN CLASSIFICATION: PEM1E  
Do Normal Circumstances exist on the site?                      yes  
Is the site significantly disturbed (Atypical Situation)?                      no  
Is the area a potential Problem Area?                      no  
Remarks: pasture, but not heavily grazed

Code	Scientific Name	Species that are OBL, FACW or FAC	Stratum	Status	% Areal Cover
VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00					

135	Carex tenera	Herb	OBL	30.00
139	Carex vulpinoidea	Herb	OBL	20.00
189	Impatiens capensis	Herb	FACW	40.00
195	Juncus effusus	Herb	FACW+	40.00
222	Poa palustris	Herb	FACW	50.00
238	Rumex obtusifolius	Herb	FACU	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkD				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-10	silt	2.5 YR 4/2	2.5YR 4/8 (20%)	
10-18	gravely silt	2.5 YR 4/2	2.5Y 6/2 (15%)	

## Hydric Soil Indicators:

```
[ ] Histosol
[X] Sulfidic Material
[ ] Gleyed
[X] mottles
[ ] Histic Epipedon
[ ] Aquic Moisture Regime
[X] Low Chroma
[ ] Entisol (organic context, vertical
streaking, chroma 3, wet spodosol)
```

## HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	1.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	6.0 (in.)	<input checked="" type="checkbox"/>	Inundated
Depth to Saturated Soil:	4.0 (in.)	<input checked="" type="checkbox"/>	Saturated in Upper 12
		<input type="checkbox"/>	Water Marks
Source/Site Characterization:		<input type="checkbox"/>	Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/>	Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/>	Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Backwater		<input type="checkbox"/>	Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional		<input checked="" type="checkbox"/>	Water-Stained Leaves
		<input type="checkbox"/>	Local Soil Survey Data
Recorded Data (Describe in Remarks):		<input type="checkbox"/>	FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs		Recent Weather:	
<input type="checkbox"/> Other		Recent Rainfall:	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 508 DATE: 05/05/1993 INVESTIGATOR: JAP, ABC, MZ  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: active pasture, not significantly disturbed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  
 Code Scientific Name Stratum Status % Areal Cover

100	Acorus calamus	Herb	OBL	70.00
103	Agrostis alba	Herb	FACW	10.00
117	Carex atlantica	Herb	FACW	30.00
129	Carex lurida	Herb	OBL	20.00
195	Juncus effusus	Herb	FACW+	30.00
200	Juncus tenuis	Herb	FAC-	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-10	sandy loam	5 YR 4/2	5 YR 5/8 (20%)	
10-18	coarse sa.loam	5 YR 4/2	7 YR 2/0 (5%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 10.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

## ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#:	509	DATE:	05/05/1993	INVESTIGATOR:	JAP, ABC, MZ
COUNTY:	Hardy	STATE:	WV	STREAM:	unnamed
COWARDIN CLASSIFICATION:		PEM1A			
Do Normal Circumstances exist on the site?				yes	
Is the site significantly disturbed (Atypical Situation)?				no	
Is the area a potential Problem Area?				no	
Remarks: active pasture, not significantly disturbed					

Code	Scientific Name	Stratum	Status	% Areal Cover
VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				

103	Agrostis alba	Herb	FACW	20.00
139	Carex vulpinoidea	Herb	OBL	30.00
165	Eleocharis sp.	Herb	NI	40.00
195	Juncus effusus	Herb	FACW+	50.00
200	Juncus tenuis	Herb	FAC-	20.00
227	Polygonum sagittatum	Herb	OBL	20.00
247	Senecio aureus	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-10	CL	10YR 5/1	10YR 5/1		
10-20	CL	10YR 5/1	10YR 5/1		
20-30	CL	10YR 5/1	10YR 5/1		
30-40	CL	10YR 5/1	10YR 5/1		
40-50	CL	10YR 5/1	10YR 5/1		
50-60	CL	10YR 5/1	10YR 5/1		
60-70	CL	10YR 5/1	10YR 5/1		
70-80	CL	10YR 5/1	10YR 5/1		
80-90	CL	10YR 5/1	10YR 5/1		
90-100	CL	10YR 5/1	10YR 5/1		

0-12	silt	5 YR 3/1	5 YR 4/6 (15%)
12-18	silt	5 YR 4/2	5 YR 4/6 (10%)

## Hydric Soil Indicators:

```
[ ] Histic Epipedon
[ ] Sulfidic Material
[ ] Aquic Moisture Regime
[ ] Gleyed
[X] Low Chroma
[X] mottles
[ ] Entisol (organic context, vertical
streaking, chroma 3, wet spodosol)
```

## HYDROLOGY :

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	1.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	5.0 (in.)	<input type="checkbox"/>	Inundated
Depth to Saturated Soil:	8.0 (in.)	<input type="checkbox"/>	Saturated in Upper 12
		<input type="checkbox"/>	Water Marks
Source/Site Characterization:		<input type="checkbox"/>	Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/>	Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/>	Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Backwater		<input checked="" type="checkbox"/>	Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional		<input type="checkbox"/>	Water-Stained Leaves
		<input type="checkbox"/>	Local Soil Survey Data
Recorded Data (Describe in Remarks):		<input type="checkbox"/>	FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs		Recent Weather:	
<input type="checkbox"/> Other		Recent Rainfall:	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
Wetland Hydrology? yes      Wetland? yes  
Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 511 DATE: 06/22/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture area not significantly disturbed by grazing

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 67.00  
 Code Scientific Name Stratum Status % Areal Cover

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	80.00
103	Agrostis alba	Herb	FACW	30.00
127	Carex laxiflora	Herb	FACU	20.00
135	Carex tenera	Herb	OBL	10.00
152	Deschampsia cespitosa	Herb	FACW	10.00
166	Eleocharis tenuis	Herb	FACW	80.00
194	Juncus dichotomus	Herb	FACW	20.00
247	Senecio aureus	Herb	FACW	10.00
298	Trifolium agrarium	Herb	NI	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	clayey loam	10 YR 5/	none	ox.roots
3-8	silty clay	10 YR 7/1	7.5YR 5/8 (30%)	ox.roots
8-12	clay	10 YR 7/1	7.5YR 5/8 (40%)	no ox.roots
12+	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: sunny
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 512 DATE: 06/22/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture not significantly disturbed by grazing

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
139	Carex vulpinoidea	Herb	OBL	80.00
165	Eleocharis sp.	Herb	NI	30.00
195	Juncus effusus	Herb	FACW+	20.00
222	Poa palustris	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErB Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	sandy silt	10 YR 4/1		oxy roots
3-7	sandy silt	10 YR 4/1	5 YR 4/6	(30%)oxy roots
7+	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny  
 Recent Rainfall: 0.3"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 513 DATE: 06/23/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture but not significantly disturbed

Code	Scientific Name	Stratum	Status	% Areal Cover
103	Agrostis alba	Herb	FACW	20.00
152	Deschampsia cespitosa	Herb	FACW	30.00
189	Impatiens capensis	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	30.00
227	Polygonum sagittatum	Herb	OBL	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments	Hydric Soil? no
0-5	fine sandy loam	5 YR 3/2		oxy roots	
5-13	sand loam	5 YR 3/2	5 YR 4/6 (30%)		

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: sunny
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: .25 2 days ago
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 520A      DATE: 09/20/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Hardy      STATE: WV      STREAM: unnamed      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: lightly grazed pasture

Code	Scientific Name	Stratum	Status	% Areal Cover
189	Impatiens capensis	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	20.00
227	Polygonum sagittatum	Herb	OBL	20.00
249	Solidago rugosa	Herb	FAC	30.00
269	Unidentifiable grass	Herb	NI	80.00
350	Polygonum hydropiper	Herb	OBL	10.00
382	Mentha citrata	Herb	FACW+	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silty loam	10 YR 4/3	none	ox.roots,organic
4-18	silty loam	10 YR 3/2		ox.roots,concr.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: although chroma does not fit, BPJ indicates soils can be considered hydric - 37

## ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 520B                      DATE: 09/20/1993                      INVESTIGATOR: MZ, DAK  
COUNTY: Hardy                      STATE: WV                      STREAM: unnamed                      WATERSHED: South Br. Potomac River  
COWARDIN CLASSIFICATION: PSS1E  
Do Normal Circumstances exist on the site?                      yes  
Is the site significantly disturbed (Atypical Situation)?                      no  
Is the area a potential Problem Area?                      no  
Remarks: forest patch in lightly grazed pasture

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				100.00
Code	Scientific Name	Stratum	Status	% Areal Cover
189	<i>Impatiens capensis</i>	Herb	FACW	20.00
195	<i>Juncus effusus</i>	Herb	FACW+	20.00
227	<i>Polygonum sagittatum</i>	Herb	OBL	10.00
249	<i>Solidago rugosa</i>	Herb	FAC	20.00
269	Unidentifiable grass	Herb	NI	80.00
350	<i>Polygonum hydropiper</i>	Herb	OBL	10.00
382	<i>Mentha citrata</i>	Herb	FACW+	30.00
404	<i>Alnus rugosa</i>	Shrub	FACW+	20.00
665	<i>Salix nigra</i>	Tree	FACW+	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-4	silty loam	10 YR 4/3	none	ox.roots,organic	
4-18	silty loam	10 YR 3/2	none	ox.roots,concr.	

Hydric Soil Indicators:

```

[ ] Histosol
[ ] Sulfidic Material
[ ] Gleyed
[ ] mottles
[ ] Histic Epipedon
[ ] Aquic Moisture Regime
[X] Low Chroma
[ ] Entisol (organic context, vertical
    streaking, chroma 3, wet spodosol)

```

## HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	18.0 (in.)	<input type="checkbox"/>	Inundated
Depth to Saturated Soil:	18.0 (in.)	<input type="checkbox"/>	Saturated in Upper 12
		<input type="checkbox"/>	Water Marks
Source/Site Characterization:		<input checked="" type="checkbox"/>	Drift Lines
<input type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/>	Sediment Deposit
<input type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/>	Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Backwater		<input checked="" type="checkbox"/>	Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional		<input type="checkbox"/>	Water-Stained Leaves
		<input type="checkbox"/>	Local Soil Survey Data
Recorded Data (Describe in Remarks):		<input type="checkbox"/>	FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Aerial Photographs		Recent Weather:	
<input type="checkbox"/> Other		Recent Rainfall:	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
Wetland Hydrology? yes      Wetland? yes  
Remarks: although chroma does not fit, BPJ indicates soils can be considered hydric - 37

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 520C DATE: 09/20/1993 INVESTIGATOR: MZ, DAK  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: lightly grazed pasture

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
189	Impatiens capensis	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	20.00
227	Polygonum sagittatum	Herb	OBL	20.00
249	Solidago rugosa	Herb	FAC	30.00
269	Unidentifiable grass	Herb	NI	80.00
350	Polygonum hydropiper	Herb	OBL	10.00
383	Setaria faberii	Herb	NI	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silty loam	10 YR 4/3	none	ox.roots,organic
4-18	silty loam	10 YR 3/2		ox.roots,concr.

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: although chroma does not fit, BPJ indicates soils can be considered hydric - 37

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 530                      DATE: 03/01/1994                      INVESTIGATOR: MZ, DAK  
 COUNTY: Hardy                      STATE: WV                      STREAM:                      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site?                      no  
 Is the site significantly disturbed (Atypical Situation)?                      yes  
 Is the area a potential Problem Area?                      no  
 Remarks: pasture-vegetation disturbed by grazing; 2 sub-surface drainpipes

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					67.00
Code	Scientific Name	Stratum	Status		% Areal Cover
156	Dipsacus sylvestris	Herb	NI		10.00
195	Juncus effusus	Herb	FACW+		10.00
249	Solidago rugosa	Herb	FAC		20.00
269	Unidentifiable grass	Herb	NI		90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ba-Basher                      Hydric Soil? yes				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	clay/loam	10 YR 4/4		
4-12	clay/loam	10 YR 4/2	10 YR 6/8 (10%)	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 8.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: snow
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met; expect additional hydrophytic vegetation during growing sea

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 601 DATE: 06/24/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy STATE: WV STREAM: Clifford Hollow WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? yes  
 Remarks: only veg. present is sparse sprouts of unknown herb

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC  
 Code Scientific Name Stratum Status % Areal Cover

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pc Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-36 peat 10 YR 6/1  
 36 refusal

Hydric Soil Indicators:

☐ Histosol ☒ Histic Epipedon  
☒ Sulfidic Material ☐ Aquic Moisture Regime  
☐ Gleyed ☒ Low Chroma  
☐ mottles ☐ Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:  
 Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? no  
 Wetland Hydrology? yes Wetland? yes

Remarks: even the veg. not present-hydrophytic veg. will be present during growing season

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 610A      DATE: 06/23/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy      STATE: WV      STREAM: unnamed      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: stormwater detention pond that has dried out & contains 40% veg.

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      71.00

Code	Scientific Name	Stratum	Status	% Areal Cover
135	Carex tenera	Herb	OBL	20.00
153	Dichanthelium clandestinum	Herb	FAC+	10.00
189	Impatiens capensis	Herb	FACW	5.00
227	Polygonum sagittatum	Herb	OBL	5.00
269	Unidentifiable grass	Herb	NI	20.00
297	Carex gynandra	Herb	NI	20.00
299	Panicum xalapense	Herb	NI	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkF      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	organic loam	10 YR 2/1	none	
12+	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny hot
<input type="checkbox"/> Other	Recent Rainfall: .25 2 days ago

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 610B DATE: 06/23/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: stormwater detention pond that has dried out & contains 50% veg.

Code	Scientific Name	Stratum	Status	% Areal Cover
128	Carex leptoneuria	Herb	FACW	20.00
297	Carex gynandra	Herb	NI	20.00
299	Panicum xalapense	Herb	NI	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkF Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	organic loam	10 YR 2/1	none	
12+	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: sunny hot
	Recent Rainfall: .25 2 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 611      DATE: 06/24/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy      STATE: WV      STREAM: unnamed      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status		% Areal Cover
152	Deschampsia cespitosa	Herb	FACW		20.00
165	Eleocharis sp.	Herb	NI		50.00
200	Juncus tenuis	Herb	FAC-		20.00
243	Scirpus atrovirens	Herb	OBL		20.00
250	Solidago sp.	Herb	NI		20.00
270	Unidentifiable herb	Herb	NI		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pc					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-2	gravelly sand	10 YR 3/2	none		
2-6	sand	10 YR 3/1	7.5YR 4/6 (20%)		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 1.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny high 80's
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 612 DATE: 06/24/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: grazed pasture not significantly disturbed

Code	Scientific Name	Stratum	Status	% Areal Cover
126	Carex hystericina	Herb	OBL	10.00
144	Collinsonia canadensis	Herb	FAC	20.00
154	Dichanthelium acuminatum	Herb	FAC	40.00
155	Dichanthelium sphaerocarpon	Herb	FACU	20.00
189	Impatiens capensis	Herb	FACW	5.00
201	Justicia americana	Herb	OBL	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pc Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	sand	10 YR 3/3	none	ox.root,vert str
2-4	sand	10 YR 3/2	none	ox.root,vert str
4-7	sand	10 YR 4/2	5 YR 4/6 (20%)	ox.root
7+	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny warm
<input type="checkbox"/> Other	Recent Rainfall: .25' 3 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 613                      DATE: 06/24/1993                      INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy                      STATE: WV                      STREAM: unnamed                      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: ]

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					71.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
135	Carex tenera	Herb	OBL		20.00
139	Carex vulpinoidea	Herb	OBL		20.00
155	Dichanthelium sphaerocarpon	Herb	FACU		20.00
197	Juncus scirpoides	Herb	FACW		20.00
200	Juncus tenuis	Herb	FAC-		30.00
225	Polygonum lapathifolium	Herb	FACW		20.00
250	Solidago sp.	Herb	NI		30.00
300	Asclepias sp.	Herb	NI		20.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrD					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-8	silt loam	10 YR 5/2	7.5YR 4/6	(20%)ox.roots	
8+	refusal				
-----					

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 8.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 701 DATE: 05/03/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: VA STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	60.00
247	Senecio aureus	Herb	FACW	30.00
256	Spirodela polyrhiza	Herb	OBL	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pc Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	loam	10 YR 3/4		
3-10	clay loam	7.5 YR 5/0	7.5 YR 4/6	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 5.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: fair
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: last week
<input checked="" type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 702 DATE: 05/03/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 80.00  
 Code Scientific Name Stratum Status % Areal Cover

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100	Acorus calamus	Herb	OBL	40.00
165	Eleocharis sp.	Herb	NI	10.00
195	Juncus effusus	Herb	FACW+	30.00
247	Senecio aureus	Herb	FACW	10.00
268	Typha latifolia	Herb	OBL	10.00

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SOIL PROFILE: (Minimum 18 inches ) Series Name: TgA Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments

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0-6	clay loam	10 YR 5/1	7.5 YR 4/6	
6-12	clay loam	2.5 Y 5/0	7.5 YR 4/4	
12-18	clay loam	2.5 Y 5/0	7.5 YR 4/4	

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## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

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Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Aerial Photographs	Recent Weather: fair
<input type="checkbox"/> Other	Recent Rainfall: last week

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WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 708 DATE: 05/03/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: TgA Hydric Soil? nl  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3		7.5 YR 3/0		muck
3-12	clay loam	10 YR 7/2	7.5 YR 4/4	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: fair
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: last week
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 709                      DATE: 05/03/1993                      INVESTIGATOR: LDG  
 COUNTY: Hardy                      STATE: WV                      STREAM: unnamed                      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC                      100.00  
 Code                      Scientific Name                      Stratum                      Status                      % Areal Cover

-----  
 195      Juncus effusus                      Herb                      FACW+                      80.00  
 -----

SOIL PROFILE: (Minimum 18 inches ) Series Name: Tygart                      Hydric Soil? nl  
 Depth                      Texture                      Matrix Color                      Mottle Color(%)                      Comments

-----  
 Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:                      (in.)  
 Depth to Free Water in Pit:                      (in.)  
 Depth to Saturated Soil:                      (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:  
 Recent Rainfall:

-----  
 WETLAND DETERMINATION:      Hydric soils present?                      Hydrophytic Vegetation?  
    Wetland Hydrology?                      Wetland?

Remarks:

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 710 DATE: 05/04/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 150.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkB Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	muck			
3-8		10 YR 7/1	7.5 YR 4/4	
8-18		10 YR 7/1	7.5 YR 5/6	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 5.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Aerial Photographs	Recent Weather: fair
<input type="checkbox"/> Other	Recent Rainfall: last week

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 711 DATE: 05/04/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00  
 Code Scientific Name Stratum Status % Areal Cover

132	Carex sp.	Herb	FACW	20.00
164	Eleocharis rostellata	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	60.00
217	Onoclea sensibilis	Herb	FACW	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkB Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-3	clay loam	10 YR 6/1	2.5 YR 4/6	
3-10	clay loam	10 YR 6/2	2.5 YR 5/6	
10-18		10 YR 6/2	2.5 YR 5/6	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 10.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: fair
<input checked="" type="checkbox"/> Aerial Photographs	Recent Rainfall: last week
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 712 DATE: 05/04/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: Walnut WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 78.00

Code	Scientific Name	Stratum	Status	% Areal Cover
100	Acorus calamus	Herb	OBL	30.00
132	Carex sp.	Herb	FACW	20.00
165	Eleocharis sp.	Herb	NI	15.00
189	Impatiens capensis	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	10.00
211	Mentha aquatica	Herb	OBL	5.00
245	Scirpus validus	Herb	OBL	5.00
268	Typha latifolia	Herb	OBL	5.00
464	Lindera benzoin	Shrub	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Me

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? yes	Comments
0-6	silty loam	10 YR 5/1	7.5 YR 4/6		
6-12		7.5 YR 6/0	7.5 YR 4/8		
12-18		7.5 YR 6/0	7.5 YR 4/6		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 3.0 (in.)  
 Depth to Free Water in Pit: 6.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

☐ Drift Lines

☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: fair  
 Recent Rainfall: last week

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 713 DATE: 05/04/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	2.00
100	Acorus calamus	Herb	OBL	10.00
132	Carex sp.	Herb	FACW	20.00
165	Eleocharis sp.	Herb	NI	10.00
169	Equisetum fluviatile	Herb	OBL	5.00
195	Juncus effusus	Herb	FACW+	50.00
247	Senecio aureus	Herb	FACW	2.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? yes
0-6	sandy loam	10 YR 4/2		
6-12		10 YR 6/2	7.5 YR 4/6	
12-18		10 YR 6/1	7.5 YR 4/6	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 3.0 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

### Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

#### Drift Lines

#### Sediment Deposit

#### Drainage Patterns in Wetlands

### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

#### FAC-Neutral Test

#### Other (Explain in Remarks)

### Recent Weather:

### Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 714 DATE: 05/05/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
100	Acorus calamus	Herb	OBL	20.00
132	Carex sp.	Herb	FACW	60.00
189	Impatiens capensis	Herb	FACW	5.00
247	Senecio aureus	Herb	FACW	2.00
258	Symplocarpus foetidus	Herb	OBL	10.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-6		10 YR 4/2	7.5 YR 4/6	
6-12		10 YR 5/1	7.5 YR 4/6	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	3.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	(in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	(in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input checked="" type="checkbox"/> Sediment Deposit	
		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
Source/Site Characterization:		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/> Water-Stained Leaves	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather:	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall:	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria observed

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 715      DATE: 05/05/1993      INVESTIGATOR: LDG  
 COUNTY: Hardy      STATE: WV      STREAM:      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				80.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
132	Carex sp.	Herb	FACW	20.00
171	Equisetum sylvaticum	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	30.00
247	Senecio aureus	Herb	FACW	10.00
268	Typha latifolia	Herb	OBL	10.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Clarksburg				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-4	muck	7.5 YR 2/0		
4-12		10 YR 7/0	7.5 YR 4/4	
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	3.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	(in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	(in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input checked="" type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input type="checkbox"/> Floodplain		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: fair	
		Recent Rainfall: last week	
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WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology?      Wetland? yes  
 Remarks: all 3 criteria observed

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 716 DATE: 05/05/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					91.00
Code	Scientific Name	Stratum	Status		% Areal Cover
100	Acorus calamus	Herb	OBL		5.00
112	Barbarea orthoceras	Herb	OBL		5.00
132	Carex sp.	Herb	FACW		10.00
164	Eleocharis rostellata	Herb	OBL		10.00
178	Eupatorium perfoliatum	Herb	FACW+		5.00
189	Impatiens capensis	Herb	FACW		10.00
195	Juncus effusus	Herb	FACW+		5.00
211	Mentha aquatica	Herb	OBL		5.00
247	Senecio aureus	Herb	FACW		5.00
258	Symplocarpus foetidus	Herb	OBL		5.00
268	Typha latifolia	Herb	OBL		5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Dunning					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-6		10 YR 4/3	7.5 YR 4/4		
6-12		10 YR 5/1	7.5 YR 4/6		
12-18		10 YR 6/1	7.5 YR 4/6		

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 8.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: fair
	Recent Rainfall: last week

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 717 DATE: 05/05/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: Tombs Run WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
189	Impatiens capensis	Herb	FACW	30.00
211	Mentha aquatica	Herb	OBL	40.00
247	Senecio aureus	Herb	FACW	10.00
464	Lindera benzoin	Shrub	FACW	40.00
537	Ulmus rubra	Shrub	FAC	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Potomac Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6		10 YR 4/3	7.5 YR 4/4	
6-12		10 YR 7/1	7.5 YR 4/6	
12-18		10 YR 6/1	5 YR 5/8	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: light rain
<input type="checkbox"/> Other	Recent Rainfall: last week

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria observed

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 718 DATE: 05/06/1993 INVESTIGATOR: LDG  
 COUNTY: Hardy STATE: WV STREAM: Tombs Hollow WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1/PUB  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00  
 Code Scientific Name Stratum Status % Areal Cover

100	Acorus calamus	Herb	OBL	50.00
132	Carex sp.	Herb	FACW	30.00
169	Equisetum fluviatile	Herb	OBL	10.00
322	Cardamine rotundifolia	Herb	OBL	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Clarksburg Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-3	muck	7.5 YR 2/0		muck
3-10	clay loam	2.5 YR 5/0	7.5 YR 4/4	
10-18		7.5 YR 5/0	7.5 Yr 4/6	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations: Wetland Hydrology Indicators:

Depth of Surface Water: 6.0 (in.) Primary Indicators:

Depth to Free Water in Pit: 3.0 (in.) ☒ Inundated

Depth to Saturated Soil: (in.) ☒ Saturated in Upper 12

Source/Site Characterization:

<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Water Marks
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Depressional	Secondary Indicators (2 or more req'd)
	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
	<input type="checkbox"/> FAC-Neutral Test
	<input type="checkbox"/> Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: light rain
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: last week
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria observed



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 720 DATE: 08/23/1993 INVESTIGATOR: CMH, DMK  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture swale wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	25.00
195	Juncus effusus	Herb	FACW+	20.00
320	Vernonia noveboracensis	Herb	FACW	30.00
364	Setaria glauca	Herb	FAC	20.00
365	Juncus biflorus	Herb	FACW	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: TgA Hydric Soil? nl  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic			Fe mg. conc.
1-3	loam	5 Y 2.5/1	none	
3-8	clay	2.5 Y 4/2	none	ox.roots
8-12	fine sandy clay	2.5 Y 5/0	none	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: ?

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: while not presently saturated there is evidence suggest sat.-early growing seas

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 721 DATE: 08/23/1993 INVESTIGATOR: CMH, DMK  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture drainage swale

Code	Scientific Name	Stratum	Status	% Areal Cover
103	Agrostis alba	Herb	FACW	20.00
133	Carex stipata	Herb	OBL	20.00
194	Juncus dichotomus	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	20.00
269	Unidentifiable grass	Herb	NI	20.00
320	Vernonia noveboracensis	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: TgA Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	organic silt	10 YR 4/3		
3-12	silt loam	5 Y 4/2		ox.roots, Fe conc

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: drought
	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: best prof. judgement of investigator area likely sat. to surface early growing

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 722      DATE: 08/23/1993      INVESTIGATOR: CMH, DMK  
 COUNTY: Hardy      STATE: WV      STREAM: unnamed      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: pasture swale wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      71.00

Code	Scientific Name	Stratum	Status	% Areal Cover
103	Agrostis alba	Herb	FACW	15.00
132	Carex sp.	Herb	FACW	20.00
194	Juncus dichotomus	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	20.00
317	Solidago altissima	Herb	FACU	30.00
320	Vernonia noveboracensis	Herb	FACW	20.00
366	Agrimonia parviflora	Herb	FAC	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkB      Hydric Soil? n1

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic loam	7.5 YR 3/4	none	
4-12	clay	5 Y 4/2	none	ox.root zones, Fe

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: best prof judgement, area is likely sat. to surface early in growing season

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 723                      DATE: 08/24/1993                      INVESTIGATOR: CMH, DMK  
 COUNTY: Hardy                      STATE: WV                      STREAM: Walnut Bottom                      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: pasture/floodplain wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC                      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
103	Agrostis alba	Herb	FACW	15.00
194	Juncus dichotomus	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	20.00
243	Scirpus atrovirens	Herb	OBL	20.00
320	Vernonia noveboracensis	Herb	FACW	30.00
367	Arthraxon hispidus	Herb	NI	30.00
368	Carex frankii	Herb	OBL	20.00
522	Salix nigra	Shrub	FACW+	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ln                      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	silt loam	10 YR 4/2		conc. Fe conc. ox.root
8-12	fine sandy clay	2.5 Y 4/2		conc. ox.root, Fe conc

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: not presently saturated, area is probably early in growing season

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 801A DATE: 05/10/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PFO1C  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: floodplain forested wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 80.00  
 Code Scientific Name Stratum Status % Areal Cover

153	Dichanthelium clandestinum	Herb	FAC+	30.00
189	Impatiens capensis	Herb	FACW	90.00
539	Vaccinium corymbosum	Shrub	FACW	20.00
543	Viburnum cassinoides	Shrub	FACW	20.00
616	Carya ovata	Tree	FACU-	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Basher Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-6	sandy silt	10 YR 4/2	no	
6-12	silt	10 YR 6/1	7.5YR 5/8 (40%)	ox.roots
12+	silt	10 YR 5/1	10 YR 5/8 (20%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: 0

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 801B      DATE: 05/10/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: floodplain pasture

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      67.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

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133	Carex stipata	Herb	OBL	75.00
153	Dichanthelium clandestinum	Herb	FAC+	20.00
195	Juncus effusus	Herb	FACW+	20.00

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SOIL PROFILE: (Minimum 18 inches ) Series Name:      Hydric Soil?  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments

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0-6	sandy silt	10 YR 4/2	no	
6-12	silt	10 YR 6/1	7.5YR 5/8 (40%)	ox.roots
12+	silt	10 YR 5/1	10 YR 5/8 (20%)	

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Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: 0

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WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: adjoining area 801 A to north-all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 802      DATE: 05/11/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: open & light in forested floodplain wetland with spring seeps

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
139	Carex vulpinoidea	Herb	OBL	10.00
170	Equisetum sp.	Herb	NI	60.00
189	Impatiens capensis	Herb	FACW	10.00
212	Mentha spicata	Herb	FACW+	30.00
222	Poa palustris	Herb	FACW	20.00
616	Carya ovata	Tree	FACU-	40.00
646	Platanus occidentalis	Tree	FACW	10.00
				30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic			
2-12	loam	N 2.5/0 (black)	no	roots & fib.mats
12+	refusal-gravel			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 5.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny hot
<input type="checkbox"/> Other	Recent Rainfall: 0

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 803 DATE: 05/11/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: typical pasture wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	40.00
153	Dichanthelium clandestinum	Herb	FAC+	20.00
195	Juncus effusus	Herb	FACW+	20.00
222	Poa palustris	Herb	FACW	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkB Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silt loam	10 YR 3/2	2.5YR 4/6 (10%)	ox.roots
6-12	loam	10 YR 4/1	5 YR 5/8 (15%)	
12+	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 5.0 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☒ Drift Lines

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ Other (Explain in Remarks)  
 Recent Weather: sunny  
 Recent Rainfall: 0

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 804 DATE: 05/11/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: typical pasture wetland-extends along several drainage ways

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
165	Eleocharis sp.	Herb	NI	60.00
195	Juncus effusus	Herb	FACW+	60.00
198	Juncus sp.	Herb	NI	30.00
219	Osmunda cinnamomea	Herb	FACW	10.00
222	Poa palustris	Herb	FACW	30.00
243	Scirpus atrovirens	Herb	OBL	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkB Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	clayey silt	2.5 N		many roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny hot
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 805                      DATE: 05/11/1993                      INVESTIGATOR: MZ, ABC  
 COUNTY: Grant                      STATE: WV                      STREAM: unnamed                      WATERSHED: North Br. Potomac River

COWARDIN CLASSIFICATION: PEM1E

Do Normal Circumstances exist on the site?                      yes

Is the site significantly disturbed (Atypical Situation)?                      no

Is the area a potential Problem Area?                      no

Remarks: floodplain emergent wetland surrounded by trees

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					80.00
Code	Scientific Name	Stratum	Status		% Areal Cover
133	Carex stipata	Herb	OBL		20.00
189	Impatiens capensis	Herb	FACW		20.00
222	Poa palustris	Herb	FACW		20.00
247	Senecio aureus	Herb	FACW		20.00
250	Solidago sp.	Herb	NI		40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkC					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-12	gravelly silt	2.5 Y 6/2	7.5YR 6/8 (10%)	ox.roots	
12+	refusal				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:                      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:                      (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:                      (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: 0

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 806                      DATE: 05/12/1993                      INVESTIGATOR: MZ, ABC  
 COUNTY: Grant                      STATE: WV                      STREAM: unnamed                      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: typical pasture wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				50.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
132	Carex sp.	Herb	FACW	30.00
165	Eleocharis sp.	Herb	NI	20.00
222	Poa palustris	Herb	FACW	40.00
247	Senecio aureus	Herb	FACW	20.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkC				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-6	clayey silt	10 YR 3/1	5 YR 4/6 (10%)	ox.roots,lots
6-12+	clayey silt	10 YR 4/1	5 YR 4/6 (10%)	lots of roots
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.5 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	(in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	(in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
		<input type="checkbox"/> Water Marks	
Source/Site Characterization:		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
<input checked="" type="checkbox"/> Floodplain		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Backwater		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Depressional		<input type="checkbox"/> Water-Stained Leaves	
		<input type="checkbox"/> Local Soil Survey Data	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Aerial Photographs		Recent Weather: sunny	
<input type="checkbox"/> Other		Recent Rainfall: 0	
-----			

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: stream above flows in dispersed over land pattern to lower channel zone, 3 crite

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 807 DATE: 05/12/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture wetland-relatively undisturbed

Code	Scientific Name	Stratum	Status	% Areal Cover
133	Carex stipata	Herb	OBL	40.00
195	Juncus effusus	Herb	FACW+	20.00
222	Poa palustris	Herb	FACW	50.00
247	Senecio aureus	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsB, BrD3 Hydric Soil?  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-18 silty clay N4/ 2.5YR 4/8 (20%)ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 1.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: 0

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 807B DATE: 08/25/1993 INVESTIGATOR: CMH, DMK  
 COUNTY: Grant STATE: WV STREAM: near Thorn Run WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: meadow swale

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	30.00
184	Glyceria striata	Herb	OBL	50.00
195	Juncus effusus	Herb	FACW+	70.00
320	Vernonia noveboracensis	Herb	FACW	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	loam	7.5 YR 3/2	none	
3-12	loamy clay	5 Y 5/1	none	ox.root, Fe Conc

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 16.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: drought
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: shower previous nite
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: best prof judgement area is sat. to surge early in growing season

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 808 DATE: 05/13/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River

COWARDIN CLASSIFICATION: PEM1E

Do Normal Circumstances exist on the site? yes

Is the site significantly disturbed (Atypical Situation)? no

Is the area a potential Problem Area? no

Remarks: linear floodplain wetland with PEM % PFO zones

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  
 Code Scientific Name Stratum Status % Areal Cover

Code	Scientific Name	Stratum	Status	% Areal Cover
				5.00
132	Carex sp.	Herb	FACW	10.00
133	Carex stipata	Herb	OBL	30.00
189	Impatiens capensis	Herb	FACW	30.00
195	Juncus effusus	Herb	FACW+	20.00
222	Poa palustris	Herb	FACW	30.00
665	Salix nigra	Tree	FACW+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Me Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	sandy silt	10 YR 4/1	2.5YR 3/6 (40%)	
6-12	silt	10 YR 5/1	7.5YR 4/6 (25%)	ox.roots, many
12+	refusal-rock			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

☒ Drift Lines

☐ Sediment Deposit

☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12

☐ Water-Stained Leaves

☐ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge

☐ Aerial Photographs

☐ Other

Recent Weather: cloudy

Recent Rainfall: .5 in 5/12/93

WETLAND DETERMINATION: Hydric soils present? yes

Wetland Hydrology? yes

Hydrophytic Vegetation? yes

Wetland? yes

Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 808B      DATE: 08/25/1993      INVESTIGATOR: CMH, DMK  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      yes  
 Remarks: pasture swale wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				60.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
132	Carex sp.	Herb	FACW	30.00
166	Eleocharis tenuis	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	30.00
269	Unidentifiable grass	Herb	NI	40.00
281	Polygonum punctatum	Herb	OBL	15.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Me				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-1	org.sandy loam	2.5 Y 3/3	none	
1-8	clay	5 Y 4/2	none	ox.roots
8-12	clay	5 Y 4/1	none	Fe conc.ox.roots
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: shower previous day
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: not presently sat., evidence of seasoned sat., early in growing season

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 809 DATE: 05/13/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: typical pasture wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	30.00
195	Juncus effusus	Herb	FACW+	20.00
222	Poa palustris	Herb	FACW	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Me Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	gravelly clay	10 YR 6/2	7.5YR 5/8 (15%)	ox.roots
6-12	sandy clay	10 YR 5/1	7.5YR 5/8 (25%)	
12-18	sandy clay	10 YR 5/2	5 YR 5/8 (15%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 810 DATE: 12/03/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: toxic waste trib? multible deer & livestock carcass

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  
 Code Scientific Name Stratum Status % Areal Cover

Code	Scientific Name	Stratum	Status	% Areal Cover
119	Carex bromoides	Herb	FACW	10.00
142	Cirsium sp.	Herb	NI	50.00
153	Dichanthelium clandestinum	Herb	FAC+	80.00
195	Juncus effusus	Herb	FACW+	25.00
237	Rubus hispidus	Herb	FACW	90.00
250	Solidago sp.	Herb	NI	90.00
268	Typha latifolia	Herb	OBL	25.00
271	Unidentifiable sedge	Herb	NI	15.00
320	Vernonia noveboracensis	Herb	FACW	10.00
404	Alnus rugosa	Shrub	FACW+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-8 silty clay 10 YR 6/1 none  
 8-12 silty clay 10 YR 6/1 10 YR 6/8 (50%)mang.concr

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 1.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 812A DATE: 03/14/1994 INVESTIGATOR: EFA, DAK  
 COUNTY: Grant STATE: WV STREAM: trib.PattersonWATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: sediment deposit from upslope & road

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
6	Moss sp.	Bryo	NI	10.00
129	Carex lurida	Herb	OBL	5.00
156	Dipsacus sylvestris	Herb	NI	5.00
178	Eupatorium perfoliatum	Herb	FACW+	5.00
228	Polygonum sp.	Herb	NI	15.00
237	Rubus hispidus	Herb	FACW	40.00
242	Scirpus americanus	Herb	OBL	10.00
250	Solidago sp.	Herb	NI	50.00
268	Typha latifolia	Herb	OBL	75.00
269	Unidentifiable grass	Herb	NI	80.00
320	Vernonia noveboracensis	Herb	FACW	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrF Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silty loam	10 YR 5/2	10 YR 7/8 (20%)	O.R.C./sat
4-12	sandy clay	10 YR 6/2	10 YR 7/8 (35%)	O.R.C./sat

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: 30 degrees
<input type="checkbox"/> Other	Recent Rainfall: snow showers

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 812B DATE: 03/14/1994 INVESTIGATOR: EFA, DAK  
 COUNTY: Grant STATE: WV STREAM: trib. Patterson WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: sediment deposit from upslope & road

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
156	Dipsacus sylvestris	Herb	NI	30.00
164	Eleocharis rostellata	Herb	OBL	50.00
177	Eupatoriadelphus purpureus	Herb	FAC	10.00
195	Juncus effusus	Herb	FACW+	40.00
198	Juncus sp.	Herb	NI	20.00
268	Typha latifolia	Herb	OBL	50.00
269	Unidentifiable grass	Herb	NI	90.00
271	Unidentifiable sedge	Herb	NI	75.00
320	Vernonia noveboracensis	Herb	FACW	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrF Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silty clay	10 YR 5/0		O.R.C.
6-18	silty clay	10 YR 5/0	10 YR 5/4 (50%)	O.R.C.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 8.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: 30 Degrees
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: snow showers
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 813 DATE: 03/14/1994 INVESTIGATOR: EFA, DAK  
 COUNTY: Grant STATE: WV STREAM: trib. Patterson WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: hummocks of grass, heavily grazed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
156	Dipsacus sylvestris	Herb	NI	5.00
164	Eleocharis rostellata	Herb	OBL	25.00
195	Juncus effusus	Herb	FACW+	10.00
198	Juncus sp.	Herb	NI	25.00
237	Rubus hispidus	Herb	FACW	25.00
269	Unidentifiable grass	Herb	NI	90.00
271	Unidentifiable sedge	Herb	NI	25.00
320	Vernonia noveboracensis	Herb	FACW	75.00
377	Potentilla palustris	Herb	OBL	10.00
903	Daucus carota	Herb	FACU	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErC Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	clay	10 YR 3/2	10 YR 4/4 (10%)	ox.roots channel

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: 30 degrees
<input type="checkbox"/> Other	Recent Rainfall: snow showers

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 814 DATE: 03/15/1994 INVESTIGATOR: EFA, DAK  
 COUNTY: Grant STATE: WV STREAM: Patterson Creek WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1H  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: hummocks of grass

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	10.00
242	Scirpus americanus	Herb	OBL	90.00
250	Solidago sp.	Herb	NI	5.00
269	Unidentifiable grass	Herb	NI	90.00
277	Viola spp.	Herb	FAC	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErC Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silty clay	2.5 Y 4/2		ox.roots channel
4	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 12.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: cold 30, windy
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: snow showers
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 815 DATE: 03/17/1994 INVESTIGATOR: EFA, DAK  
 COUNTY: Grant STATE: WV STREAM: Thorn Run WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 86.00

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	5.00
178	Eupatorium perfoliatum	Herb	FACW+	5.00
195	Juncus effusus	Herb	FACW+	75.00
214	Mimulus ringens	Herb	OBL	15.00
237	Rubus hispidus	Herb	FACW	60.00
269	Unidentifiable grass	Herb	NI	95.00
270	Unidentifiable herb	Herb	NI	50.00
271	Unidentifiable sedge	Herb	NI	65.00
320	Vernonia noveboracensis	Herb	FACW	85.00
507	Rosa multiflora	Shrub	FACU	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Me Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silt loam	10 YR 6/2		ox.roots
6-18	silty clay	10 YR 6/1	7.5YR 5/8 (40%)	ox.root channel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cold 17 in AM
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 816      DATE: 03/17/1994      INVESTIGATOR: EFA, DAK  
 COUNTY: Grant      STATE: WV      STREAM: M.F.Patterson      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1F/PFO  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      yes  
 Remarks: most of the vegetation is hummocked

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
6	Moss sp.	Bryo	NI		30.00
178	Eupatorium perfoliatum	Herb	FACW+		25.00
195	Juncus effusus	Herb	FACW+		30.00
198	Juncus sp.	Herb	NI		25.00
242	Scirpus americanus	Herb	OBL		30.00
269	Unidentifiable grass	Herb	NI		90.00
271	Unidentifiable sedge	Herb	NI		75.00
391	Andropogon virginicus	Herb	FACU		40.00
507	Rosa multiflora	Shrub	FACU		5.00
602	Acer rubrum	Tree	FAC		5.00
646	Platanus occidentalis	Tree	FACW		5.00
664	Salix babylonica	Tree	FACW-		10.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: CiC					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-6	silt loam	10 YR 5/1		sat surface ox.rt	
6-16	silty clay	10 YR 3/1	7.5YR 4/4 (30%)		
16-18	silty clay	7.5 YR 5/0	7.5YR 4/8 (25%)		
-----					

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 4.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)  
 Recent Weather: cold 20 degrees  
 Recent Rainfall:

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 818 DATE: 04/20/1994 INVESTIGATOR: MZ  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC  
 Code Scientific Name Stratum Status % Areal Cover

SOIL PROFILE: (Minimum 18 inches ) Series Name: Hydric Soil?  
 Depth Texture Matrix Color Mottle Color(%) Comments

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

Secondary Indicators (2 or more req'd)

☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands  
☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present?  
 Wetland Hydrology?

Hydrophytic Vegetation?  
 Wetland?

Remarks:



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 901 DATE: 05/10/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Grant STATE: WV STREAM: Patterson Creek WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: small swale in pasture

Code	Scientific Name	Stratum	Status	% Areal Cover
189	Impatiens capensis	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	25.00
269	Unidentifiable grass	Herb	NI	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkB Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	silty loam	10 YR 4/2 (80%)	10 YR 5/6 (20%)	ox.roots ch 0-10
12	auger refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny clear
<input type="checkbox"/> Other	Recent Rainfall: no data

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: best Professional Judgement-3 parameters present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 902                      DATE: 05/11/1993                      INVESTIGATOR: EFA, DAE  
 COUNTY: Grant                      STATE: WV                      STREAM: Patterson Creek                      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: floodplain, partial pasture

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				66.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
132	Carex sp.	Herb	FACW	90.00
140	Chrysosplenium americanum	Herb	OBL	30.00
247	Senecio aureus	Herb	FACW	20.00
636	Liriodendron tulipifera	Tree	FACU	
646	Platanus occidentalis	Tree	FACW	
656	Quercus alba	Tree	FACU	
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkC				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-4	muck	10 YR 3/2		auger refusal 4"
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	4.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
		<input checked="" type="checkbox"/> Water Marks	
Source/Site Characterization:		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
<input checked="" type="checkbox"/> Floodplain		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Backwater		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Water-Stained Leaves	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Other		Recent Weather: sunny clear	
		Recent Rainfall: no data	
-----			

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 903 DATE: 05/11/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Grant STATE: WV STREAM: Patterson Creek WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					86.00
Code	Scientific Name	Stratum	Status		% Areal Cover
132	Carex sp.	Herb	FACW		50.00
169	Equisetum fluviatile	Herb	OBL		90.00
189	Impatiens capensis	Herb	FACW		90.00
247	Senecio aureus	Herb	FACW		10.00
274	Viola cucullata	Herb	FACW		10.00
603	Acer saccharinum	Tree	FACW		10.00
613	Carpinus caroliniana	Tree	FAC		5.00
630	Fraxinus pennsylvanica	Tree	FACW		5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkC Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-12 muck 10 YR 2/1 auger refusal 12

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny clear
<input type="checkbox"/> Other	Recent Rainfall: no data

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 904 DATE: 05/12/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Grant STATE: WV STREAM: Elklick Run WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 86.00

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	20.00
164	Eleocharis rostellata	Herb	OBL	100.00
169	Equisetum fluviatile	Herb	OBL	20.00
179	Galium asprellum	Herb	OBL	90.00
217	Onoclea sensibilis	Herb	FACW	20.00
247	Senecio aureus	Herb	FACW	10.00
250	Solidago sp.	Herb	NI	75.00
603	Acer saccharinum	Tree	FACW	

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silt loam	10 YR 3/1		root material
4-18	silt loam	2.5 YR 3/2	2.5YR 3/2ox	root channel

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input checked="" type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: clear 90 degrees
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 905 DATE: 05/12/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Grant STATE: WV STREAM: Elklick Run WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: channeled by farmer

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	75.00
153	Dichanthelium clandestinum	Herb	FAC+	20.00
183	Glechoma hederacea	Herb	UPL	20.00
274	Viola cucullata	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-18 sandy silt loam 10 YR 4/1 7.5YR 5/6 (10%)ox.rt.ch./Mn Com

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: 3 parameters present

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 906 DATE: 05/12/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Grant STATE: WV STREAM: Elklick Run WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: there is a pond upslope of the wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
100	Acorus calamus	Herb	OBL	90.00
105	Anthoxanthum odoratum	Herb	FACU	5.00
137	Carex trichocarpa	Herb	OBL	75.00
153	Dichanthelium clandestinum	Herb	FAC+	75.00
164	Eleocharis rostellata	Herb	OBL	50.00
247	Senecio aureus	Herb	FACW	80.00
270	Unidentifiable herb	Herb	NI	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-18 silt loam 10 YR 5/1 7.5YR 5/6 (30%)ox.root channels

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny clear
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met-see 906 A for further info

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 906A DATE: 05/13/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Grant STATE: WV STREAM: Elklick Run WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
105	Anthoxanthum odoratum	Herb	FACU	5.00
132	Carex sp.	Herb	FACW	90.00
164	Eleocharis rostellata	Herb	OBL	100.00
195	Juncus effusus	Herb	FACW+	70.00
229	Potentilla simplex	Herb	FACU	80.00
274	Viola cucullata	Herb	FACW	50.00
507	Rosa multiflora	Shrub	FACU	5.00
616	Carya ovata	Tree	FACU-	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrF Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silty clay	10 YR 5/1	10 YR 4/6 (20%)	
6"	auger refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: rain previous night
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: previous night
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BPJ swale contains 3 parameters-veg. distinctly different from lower section

## ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 907                      DATE: 09/21/1993                      INVESTIGATOR: EFA, BJJ  
COUNTY: Grant                      STATE: WV                      STREAM: Patterson Creek                      WATERSHED: North Br. Potomac River  
COWARDIN CLASSIFICATION: PEM1F  
Do Normal Circumstances exist on the site?                      yes  
Is the site significantly disturbed (Atypical Situation)?                      no  
Is the area a potential Problem Area?                      no  
Remarks:

Code	Scientific Name	Species that are OBL, FACW or FAC Stratum	Status	91.00 % Areal Cover
------	-----------------	---	--------	------------------------

100	<i>Acorus calamus</i>	Herb	OBL	75.00
129	<i>Carex lurida</i>	Herb	OBL	10.00
195	<i>Juncus effusus</i>	Herb	FACW+	10.00
199	<i>Juncus subcaudatus</i>	Herb	OBL	10.00
227	<i>Polygonum sagittatum</i>	Herb	OBL	70.00
244	<i>Scirpus cyperinus</i>	Herb	FACW+	10.00
247	<i>Senecio aureus</i>	Herb	FACW	5.00
269	Unidentifiable grass	Herb	NI	90.00
302	<i>Lycopus uniflorus</i>	Herb	OBL	50.00
333	<i>Polygonum persicaria</i>	Herb	FACW	75.00
374	<i>Juncus torreyi</i>	Herb	FACW	5.00
381	<i>Cyperus lancastrimensis</i>	Herb	FACU	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkD				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4 refusal	silt loam	10 YR 4/1	7.5YR 5/8 (20%)	faint sulfidic odor

### Hydric Soil Indicators:

```
[ ] Histic Epipedon
[X] Sulfidic Material
[ ] Aquic Moisture Regime
[ ] Gleyed
[X] Low Chroma
[X] Entisol (organic context, vertical
streaking, chroma 3, wet spodosol)
```

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	6.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/>	Inundated
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/>	Saturated in Upper 12
Source/Site Characterization:		<input type="checkbox"/>	Water Marks
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/>	Drift Lines
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/>	Sediment Deposit
<input checked="" type="checkbox"/> Floodplain		<input checked="" type="checkbox"/>	Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/>	Oxidized Root Channels/Upper 12
		<input type="checkbox"/>	Water-Stained Leaves
		<input type="checkbox"/>	Local Soil Survey Data
Recorded Data (Describe in Remarks):		<input type="checkbox"/>	FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs		Recent Weather: rain in AM	
<input type="checkbox"/> Other		Recent Rainfall:	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
                                  Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 908 DATE: 09/21/1993 INVESTIGATOR: EFA, WJJ  
 COUNTY: Grant STATE: WV STREAM: Patterson Creek WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
100	Acorus calamus	Herb	OBL	50.00
114	Boehmeria cylindrica	Herb	FACW	90.00
129	Carex lurida	Herb	OBL	10.00
169	Equisetum fluviatile	Herb	OBL	40.00
189	Impatiens capensis	Herb	FACW	40.00
227	Polygonum sagittatum	Herb	OBL	100.00
302	Lycopus uniflorus	Herb	OBL	80.00
333	Polygonum persicaria	Herb	FACW	30.00
380	Aster nemoralis	Herb	FACW+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkD Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	gravelly silt	10 YR 4/3	7.5YR 5/8 (10%)	saturated gravel
6-18	silty clay	7.5 YR 4/2	7.5 YR 5/8	contain charcoal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: rain in AM
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: 3 parameters present

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1001 DATE: 05/18/1993 INVESTIGATOR: JMG, JD  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PFO1W  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: PFO surrounded by deciduous forest and bordered by WV RT. 42.

Code	Scientific Name	Stratum	Status	% Areal Cover
263	Thelypteris thelypteroides	Herb	FACW	90.00
401	Acer rubrum	Shrub	FAC	70.00
406	Amelanchier arborea	Shrub	FAC-	40.00
451	Hamamelis virginiana	Shrub	FAC-	25.00
497	Quercus rubra	Shrub	FACU	40.00
503	Rhododendron viscosum	Shrub	OBL	25.00
602	Acer rubrum	Tree	FAC	70.00
661	Quercus rubra	Tree	FACU	30.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? nl
0-4 in	organic	10 YR 4/1		WoC known to hav
4-12 in	SCL	10 YR 3/1		high and/or
12-16 in	SCL	10 YR 4/1		perched water

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 10.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 10.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: sunny
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: today 5/18
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1002 DATE: 05/18/1993 INVESTIGATOR: JMG, JD  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: PEM within a cow pasture with perennial tributaries.

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
134	Carex stricta	Herb	OBL	60.00
140	Chrysosplenium americanum	Herb	OBL	30.00
195	Juncus effusus	Herb	FACW+	40.00
217	Onoclea sensibilis	Herb	FACW	50.00
258	Symplocarpus foetidus	Herb	OBL	80.00
412	Aronia arbutifolia	Shrub	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: WoC Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12 in	silty loam	10 YR 5/1	7.5 YR 5/8 (30)	saturated
12-16 in	silty clay loam	10 YR 5/2	10 YR 6/6 (40)	saturated

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny/rain
	Recent Rainfall: today

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1003      DATE: 05/18/1993      INVESTIGATOR: JMG, JD  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PFO1W  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: Portions of the wetland were filled for residential development.

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      55.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
258	Symplocarpus foetidus	Herb	OBL	100.00
401	Acer rubrum	Shrub	FAC	15.00
401	Acer rubrum	Shrub	FAC	60.00
409	Amelanchier laevis	Shrub	UPL	30.00
451	Hamamelis virginiana	Shrub	FAC-	40.00
497	Quercus rubra	Shrub	FACU	15.00
497	Quercus rubra	Shrub	FACU	40.00
602	Acer rubrum	Tree	FAC	60.00
661	Quercus rubra	Tree	FACU	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: WoC      Hydric Soil? nl				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6 in	SC	10 YR 4/1		saturated
6-12 in	CL	10 YR 5/1		saturated
12-16 in	SCL	10 YR 5/1		saturated

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 2.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☐ Drift Lines

Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Secondary Indicators (2 or more req'd)

☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: sunny  
 Recent Rainfall: today

WETLAND DETERMINATION:	Hydric soils present? yes	Hydrophytic Vegetation? yes
	Wetland Hydrology? yes	Wetland? yes
Remarks: all 3 criteria met		

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1004      DATE: 05/20/1993      INVESTIGATOR: JMG, JD  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM2B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: area has been logged, adjacent to Rt. 93 and BP gas station

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status		% Areal Cover
218	Osmunda claytoniana	Herb	FAC		30.00
237	Rubus hispidus	Herb	FACW		20.00
249	Solidago rugosa	Herb	FAC		50.00
415	Betula alleghaniensis	Shrub	FAC		30.00
451	Hamamelis virginiana	Shrub	FAC-		50.00
497	Quercus rubra	Shrub	FACU		20.00
602	Acer rubrum	Tree	FAC		40.00
661	Quercus rubra	Tree	FACU		60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: WoC      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4 in	organic	10 YR 2/1		known to have
4-6 in	sandy silt	10 YR 4/2		a high and or
6-12 in	sandy silt	10 YR 5/2	10 YR 7/8	(10%perched water

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: rain
<input type="checkbox"/> Other	Recent Rainfall: 5/18 5/19

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1005 DATE: 05/19/1993 INVESTIGATOR: JMG, JD  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: within and around the wetland has been logged.

Code	Scientific Name	Stratum	Status	% Areal Cover
104	Alopecurus sp.	Herb	NI	20.00
195	Juncus effusus	Herb	FACW+	10.00
218	Osmunda claytoniana	Herb	FAC	10.00
237	Rubus hispidus	Herb	FACW	40.00
271	Unidentifiable sedge	Herb	NI	30.00
487	Prunus serotina	Shrub	FACU	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: WoC Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6 in	organic	10 YR 2/1		known to have
6-12 in	sandy silt	10 YR 5/2	10 YR 7/6 (10%)	high and/or
12-16 in	sandy silt	10 YR 6/2	19 YR 7/8 (15%)	patched water

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 7.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 7.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: Rain
<input type="checkbox"/> Other	Recent Rainfall: 5/18 5/19

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: confirmed hydric soil and wetland hydrology indicate the vegetation hydrophytic

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1006 DATE: 05/20/1993 INVESTIGATOR: JMG, JD  
 COUNTY: Grant STATE: WV STREAM: Little Creek WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: a reclaimed coal strip mine is located above the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 83.00  
 Code Scientific Name Stratum Status % Areal Cover

2	Sphagnum sp.	Bryo	NI
132	Carex sp.	Herb	FACW
166	Eleocharis tenuis	Herb	FACW
195	Juncus effusus	Herb	FACW+
237	Rubus hispidus	Herb	FACW
249	Solidago rugosa	Herb	FAC
401	Acer rubrum	Shrub	FAC
415	Betula alleghaniensis	Shrub	FAC
451	Hamamelis virginiana	Shrub	FAC-
469	Lyonia ligustrina	Shrub	FACW
541	Vaccinium myrtilloides	Shrub	FAC

SOIL PROFILE: (Minimum 18 inches ) Series Name: CeB Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-2	organic			CeB known to
2-6	loam	10 YR 3/1		have low permea-
6-12	sandy loam	7.5 YR 2/0		bility & high

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	1.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input checked="" type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Floodplain		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: sunny	
		Recent Rainfall: 5/18 5/19	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes

Remarks:

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1007      DATE: 05/20/1993      INVESTIGATOR: JMG, JD  
 COUNTY: Grant      STATE: WV      STREAM: Little Creek      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: seep within pasture land/old farmstead site

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

122	Carex crinita	Herb	OBL	
219	Osmunda cinnamomea	Herb	FACW	
237	Rubus hispidus	Herb	FACW	
249	Solidago rugosa	Herb	FAC	

SOIL PROFILE: (Minimum 18 inches ) Series Name: WoC      Hydric Soil? nl  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments

0-3 in	organic WIH			saturated
3-12 in	silty loam	5 Y 6/1		Fe, Ma concretio
12-16 in	clayey loam	10 YR 7/1		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      1.0 (in.)  
 Depth to Free Water in Pit:      0.0 (in.)  
 Depth to Saturated Soil:      0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: sunny

Recent Rainfall: 5/18 5/19

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes

Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1008      DATE: 06/01/1993      INVESTIGATOR: CMH, DAE  
 COUNTY: Grant      STATE: WV      STREAM: Little Creek      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: wooded seep area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      77.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

2	Sphagnum sp.	Bryo	NI	
131	Carex scabrata	Herb	OBL	
166	Eleocharis tenuis	Herb	FACW	
218	Osmunda claytoniana	Herb	FAC	
219	Osmunda cinnamomea	Herb	FACW	
237	Rubus hispidus	Herb	FACW	
262	Thelypteris noveboracensis	Herb	FAC	
269	Unidentifiable grass	Herb	NI	
451	Hamamelis virginiana	Shrub	FAC-	
464	Lindera benzoin	Shrub	FACW	
602	Acer rubrum	Tree	FAC	
608	Betula alleghaniensis	Tree	FAC	
661	Quercus rubra	Tree	FACU	

SOIL PROFILE: (Minimum 18 inches ) Series Name: CeB      Hydric Soil? nl  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments

0-5	organic muck	10 YR 2/1	none	
5-12	sandy org. loam	10 YR 3/1	none	Ma, Fe conc.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	(in.)	Primary Indicators:	
Depth to Free Water in Pit:	5.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input checked="" type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input type="checkbox"/> Floodplain		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: sunny	
		Recent Rainfall: ?	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 101                      DATE: 07/26/1993                      INVESTIGATOR: CMH, DMB  
 COUNTY: Shenandoah STATE: VA STREAM: unnamed                      WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1/PUB  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: sm. wetland in along swale drainage way/ditch

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					83.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
132	Carex sp.	Herb	FACW		30.00
202	Lemna minor	Herb	OBL		20.00
280	Alisma subcordatum	Herb	OBL		10.00
281	Polygonum punctatum	Herb	OBL		10.00
282	Leersia virginica	Herb	FACW		60.00
283	Veronica anagallis-aquatica	Herb	OBL		15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: 51D					Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-6	silty clay	10 YR 4/2	none	saturated	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:                      2.0 (in.)  
 Depth to Free Water in Pit:                      (in.)  
 Depth to Saturated Soil:                      3.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: drought  
 Recent Rainfall: none

WETLAND DETERMINATION:	Hydric soils present? yes	Hydrophytic Vegetation? yes
	Wetland Hydrology? yes	Wetland? yes
Remarks: all 3 criteria met		

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1020      DATE: 05/18/1993      INVESTIGATOR: CMH, ABC  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: area is an abandoned farmstead along small drainageway

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      71.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	15.00
133	Carex stipata	Herb	OBL	20.00
189	Impatiens capensis	Herb	FACW	20.00
217	Onoclea sensibilis	Herb	FACW	5.00
219	Osmunda cinnamomea	Herb	FACW	10.00
251	Solidago uliginosa	Herb	OBL	15.00
405	Alnus serrulata	Shrub	OBL	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ca      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	fssl	10 YR 4/3	none	w/organics
2-8	fsl	5 GY 5/1	7.5 YR 5/8 (10)	
8-12	sl	5 GY 5/1	7.5 YR 5/8 (20)	

Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input checked="" type="checkbox"/> Aquic Moisture Regime                                      |
| <input checked="" type="checkbox"/> Gleyed  | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      (in.)	Primary Indicators:
Depth to Free Water in Pit:      4.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: light rain/fog
	Recent Rainfall: light earlier in day

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1021                      DATE: 05/18/1993                      INVESTIGATOR: CMH, ABC  
 COUNTY: Grant                      STATE: WV                      STREAM: unnamed                      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PFO1B  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks: seep area in woods

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC                      71.00

Code	Scientific Name	Stratum	Status	% Areal Cover
111	Anthyrium felix-femina	Herb	FAC	2.00
132	Carex sp.	Herb	FACW	10.00
189	Impatiens capensis	Herb	FACW	10.00
263	Thelypteris thelypteroides	Herb	FACW	15.00
269	Unidentifiable grass	Herb	NI	5.00
415	Betula alleghaniensis	Shrub	FAC	10.00
602	Acer rubrum	Tree	FAC	5.00
				100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Wharton                      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic muck			
4-10-12	silty loam	10 YR 4/1	7.5 YR 4/6 (5)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: clear several weeks
<input type="checkbox"/> Other	Recent Rainfall: earlier in day

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1022A      DATE: 05/19/1993      INVESTIGATOR: CMH  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: pasture swale wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
113	Bidens frondosa	Herb	FACW	
116	Caltha palustris	Herb	OBL	
133	Carex stipata	Herb	OBL	
166	Eleocharis tenuis	Herb	FACW	
189	Impatiens capensis	Herb	FACW	
195	Juncus effusus	Herb	FACW+	
250	Solidago sp.	Herb	NI	
274	Viola cucullata	Herb	FACW	

SOIL PROFILE: (Minimum 18 inches ) Series Name: Wharton      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-16	sl	10 YR 5/1	10 YR 6/8 (5)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: rain w/in last 2days
	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1022B DATE: 05/19/1993 INVESTIGATOR: CMH  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture swale wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 87.00  
 Code Scientific Name Stratum Status % Areal Cover

Code	Scientific Name	Stratum	Status	% Areal Cover
113	Bidens frondosa	Herb	FACW	
116	Caltha palustris	Herb	OBL	
133	Carex stipata	Herb	OBL	
166	Eleocharis tenuis	Herb	FACW	
189	Impatiens capensis	Herb	FACW	
195	Juncus effusus	Herb	FACW+	
250	Solidago sp.	Herb	NI	
274	Viola cucullata	Herb	FACW	

SOIL PROFILE: (Minimum 18 inches ) Series Name: Wharton Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-16	<1	10 YR 5/1	10 YR 6/8 (5%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: rain w/in last 2 day
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1023 DATE: 05/19/1993 INVESTIGATOR: JMG, JD  
 COUNTY: Grant STATE: WV STREAM: Head Water WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: wetland located in pastureland adjacent to Rt. 93

Code	Scientific Name	Stratum	Status	% Areal Cover
133	Carex stipata	Herb	OBL	50.00
165	Eleocharis sp.	Herb	NI	30.00
189	Impatiens capensis	Herb	FACW	15.00
275	Viola pallens	Herb	OBL	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: WnB Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-12	sl	10 YR 5/1	10 YR 6/8 (5)	saturated
12-18	sl	10 YR 6/1	10 YR 6/8 (25)	saturated

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: clear w/light rain
	Recent Rainfall: 0.5

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1024      DATE: 05/19/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Grant      STATE: WV      STREAM: Headwater      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      50.00

Code	Scientific Name	Stratum	Status	% Areal Cover
229	Potentilla simplex	Herb	FACU	10.00
241	Saxifraga pennsylvanica	Herb	OBL	20.00
249	Solidago rugosa	Herb	FAC	40.00
250	Solidago sp.	Herb	NI	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: WnB      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic			
2-6	clay loam	2.5 Y 6/2		
6-12	clay loam	10 YR 6/2	7.5 YR 6/8 (15)	
12-16	clay loam	10 YR 5/2	7.5 YR 6/8 (15)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 1.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: sunny

Recent Rainfall: 5/18 5/19

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1101A DATE: 05/24/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: area cleared for power line ROW, some disturbance, not significant

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
131	Carex scabrata	Herb	OBL	80.00
165	Eleocharis sp.	Herb	NI	30.00
195	Juncus effusus	Herb	FACW+	20.00
196	Juncus marginatus	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Cavode Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-12	clay	10 YR 6/1	7.5YR 6/8 (5%)	few ox.roots
12-18	clay	10 YR 7/1	7.5YR 5/8 (20%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: partly cloudy  
 Recent Rainfall: 1/2 " yesterday

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1101B      DATE: 05/24/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PFO4A  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      50.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
269	Unidentifiable grass	Herb	NI	25.00
501	Rhododendron maximum	Shrub	FAC	30.00
669	Tsuga canadensis	Tree	FACU	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Cavode      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	muck deg. peat	10 YR 2/1	none	organic peat

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

### Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☒ Other (Explain in Remarks)

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: BPJ suggests 3 parameters present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1101C      DATE: 05/24/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PFO5E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: area has been logged & apparently flooded at some time

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				60.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
1	Polytrichum sp.	Bryo	NI	40.00
119	Carex bromoides	Herb	FACW	20.00
150	Cystopteris bulbifera	Herb	FAC	20.00
250	Solidago sp.	Herb	NI	50.00
474	Ostrya virginiana	Shrub	FACU-	32.00
511	Rubus allegheniensis	Shrub	FACU-	40.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: CeB Cavode				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-6	loamy clay	10 YR 5/2	none	with org. streak
6-12	clay	10 YR 6/2	10YR 5/8 (10%)	
12-18	clay	10 YR 6/8	10YR 5/1 (5%)	
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: 1/2" yesterday
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1101D DATE: 05/24/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PFO4A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
269	Unidentifiable grass	Herb	NI	25.00
561	Acer spicatum	Shrub	FACU	30.00
669	Tsuga canadensis	Tree	FACU	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Cavode Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	muck deg. peat	10 2/1	none	organic peat

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BpJ suggests 3 parameters present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1102 DATE: 05/25/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Grant STATE: WV STREAM: Four Mile Run WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: adjacent to beaver pond-water seeps overland thru site

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	40.00
133	Carex stipata	Herb	OBL	50.00
165	Eleocharis sp.	Herb	NI	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CeB Cavode Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty loam	7.5 YR 4/0	7.5YR 4/6 (40%)	ox.roots
3-8	silty loam	2.5 Y 5/2	10 YR 4/6 (20%)	ox.roots
8-16	silty clay	2.5 Y 6/2	none	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☒ Backwater  
☐ Depressional

☐ Drift Lines

☐ Sediment Deposit

☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12

☐ Water-Stained Leaves

☐ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: partly cloudy

Recent Rainfall: 1/2 inch 2 days ago

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1102A      DATE: 05/25/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Grant      STATE: WV      STREAM: Four Mile Run      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: adjacent to beaver pond - water seeps overland thru site

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	40.00
133	Carex stipata	Herb	OBL	50.00
165	Eleocharis sp.	Herb	NI	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CeB Cavode      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty loam	7.5 Yr 4/0	7.5YR 4/6 (40%)	ox.roots
3-8	silty loam	2.5 Y 5/2	10 YR 4/6 (20%)	ox.roots
8-16	silty clay	2.5 Y 6/2	none	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☒ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: partly cloudy  
 Recent Rainfall: .5" 2 days ago

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1102B DATE: 05/25/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Grant STATE: WV STREAM: Four Mile Run WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PSS1E/PEM  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00

Code	Scientific Name	Stratum	Status	% Areal Cover
139	Carex vulpinoidea	Herb	OBL	50.00
189	Impatiens capensis	Herb	FACW	40.00
269	Unidentifiable grass	Herb	NI	40.00
401	Acer rubrum	Shrub	FAC	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CeB Cavode Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	sandy silt	2.5 Y 3/0		
6-12	sandy silt	2.5 Y 2/0		
12-16	clay loam	2.5 Y 4/2		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☒ Backwater  
☐ Depressional

☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: partly cloudy  
 Recent Rainfall: .5" 2 days ago

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1103      DATE: 05/25/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Grant      STATE: WV      STREAM:      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: mine land emergent wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
1	Polytrichum sp.	Bryo	NI	40.00	
198	Juncus sp.	Herb	NI	40.00	
250	Solidago sp.	Herb	NI	20.00	
270	Unidentifiable herb	Herb	NI	20.00	

SOIL PROFILE: (Minimum 18 inches ) Series Name: CeB Cavode				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	clay loam	7.5 YR 5/8	7.5YR 7/0 (15%)	
6-12	clay	7.5 YR 7/0	7.5YR 7/8 (50%)	
12-16	clay	7.5 YR 7/8	2.5 Y 7/0 (30%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.5 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input checked="" type="checkbox"/> Water Marks	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Sediment Deposit	
<input type="checkbox"/> Floodplain		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: partly cloudy	
		Recent Rainfall: .5" 2 days ago	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? no  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: vet. was unidentifiable - hydrophytic veg. exists during the growing season



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1104 DATE: 05/25/1993 INVESTIGATOR: MZ, JMD  
COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
COWARDIN CLASSIFICATION: PEM1E/PSS  
Do Normal Circumstances exist on the site? yes  
Is the site significantly disturbed (Atypical Situation)? no  
Is the area a potential Problem Area? no  
Remarks: firebreak cleared in forested area, regrown to shrub level

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	40.00
168	Epilobium hirsutum	Herb	FACW	20.00
237	Rubus hispidus	Herb	FACW	30.00
270	Unidentifiable herb	Herb	NI	40.00
541	Vaccinium myrtilloides	Shrub	FAC	30.00
559	Viburnum recognitum	Shrub	FACW+	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silt loam	10 YR 4/1		many roots
6-12	silt loam	7.5 YR 2/0		
12-16	sandy loam	10 YR 3/1		10 YR 8/8 (10%) ox.root channel

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: partly cloudy
	Recent Rainfall: .5" 2 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
Wetland Hydrology? yes Wetland? yes  
Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1110                      DATE: 05/25/1993                      INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker                      STATE: WV                      STREAM: unnamed                      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				88.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
2	Sphagnum sp.	Bryo	NI	100.00
132	Carex sp.	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	10.00
237	Rubus hispidus	Herb	FACW	100.00
251	Solidago uliginosa	Herb	OBL	10.00
275	Viola pallens	Herb	OBL	5.00
538	Vaccinium angustifolium	Shrub	FACU	25.00
539	Vaccinium corymbosum	Shrub	FACW	50.00
559	Viburnum recognitum	Shrub	FACW+	5.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc/Lsa				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-18	muck silt	10 YR 3/1	none	org.root mat.
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast cool
<input type="checkbox"/> Other	Recent Rainfall: last weekend
-----	

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation?  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met; past beaver activity-good water quality/clarity

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1110A      DATE: 05/25/1993      INVESTIGATOR: EFA, DAF  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      88.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
132	Carex sp.	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	10.00
237	Rubus hispidus	Herb	FACW	100.00
251	Solidago uliginosa	Herb	OBL	10.00
275	Viola pallens	Herb	OBL	5.00
538	Vaccinium angustifolium	Shrub	FACU	25.00
539	Vaccinium corymbosum	Shrub	FACW	50.00
559	Viburnum recognitum	Shrub	FACW+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC/LSa      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	muck/silt	10 YR 3/1	none	organic root

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☒ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: overcast, cool  
 Recent Rainfall: last weekend

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: past beaver activity, good water quality/clarity

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1111      DATE: 05/25/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	95.00
237	Rubus hispidus	Herb	FACW	50.00
251	Solidago uliginosa	Herb	OBL	90.00
452	Hypericum densiflorum	Shrub	FAC+	30.00
539	Vaccinium corymbosum	Shrub	FACW	50.00
541	Vaccinium myrtilloides	Shrub	FAC	95.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: VdE/VcC      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	peat	10 YR 2/1	none	org. silt root
3-5	silty sand	10 YR 6/2	none	
5-6	sand	10 YR 6/8	none	auger refusal

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: scattered showers
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: BPJ suggests sphagnum mat & peat material serves as hydric supporting hydrophyt

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1112      DATE: 05/25/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      yes  
 Remarks: strip mine site-borders unnamed perennial stream

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
164	Eleocharis rostellata	Herb	OBL	95.00
195	Juncus effusus	Herb	FACW+	50.00
237	Rubus hispidus	Herb	FACW	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silt loam	10 YR 4/2		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: overcast

Recent Rainfall: scattered showers

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: disturbed site <1 acre-voland shrub cover intact along stream

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1113      DATE: 05/26/1993      INVESTIGATOR: DAE, EFA  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      71.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
251	Solidago uliginosa	Herb	OBL	10.00
462	Kalmia latifolia	Shrub	FACU	20.00
538	Vaccinium angustifolium	Shrub	FACU	80.00
539	Vaccinium corymbosum	Shrub	FACW	70.00
559	Viburnum recognitum	Shrub	FACW+	5.00
602	Acer rubrum	Tree	FAC	

SOIL PROFILE: (Minimum 18 inches ) Series Name: VeC/ViC/Vb      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	peat organic			
3-6	silty sand	5 YR 2.5/1		
6-10	silty sand	10 YR 4/2	6/8 10 YR (50%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: 0

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; see notes swale typical of other c/o WBTZ

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1114 DATE: 05/25/1993 INVESTIGATOR: EFA, DAE, JMD  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 66.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
538	Vaccinium angustifolium	Shrub	FACU	80.00
539	Vaccinium corymbosum	Shrub	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	peat organic			
4-6	silty clay	10 YR 6/2	10 YR 7/8	
6-12	silty sand	10 YR 4/2	10 YR 7/6	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 8.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: overcast  
 Recent Rainfall: 1/2 3 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: may be separated hydrologically from elder swamp by Rt.93

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1114A DATE: 05/26/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/PFO  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	90.00
539	Vaccinium corymbosum	Shrub	FACW	50.00
541	Vaccinium myrtilloides	Shrub	FAC	20.00
559	Viburnum recognitum	Shrub	FACW+	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silty loam	10 YR 2/2	none	
6-12	clay loam	10 YR 3/2	none	
12-16	clay loam	10 YR 4/1	none	
16	auger refusal		none	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: overcast
	Recent Rainfall: 1/2 " few days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland?  
 Remarks: all 3 criteria met; seep directly south and upslope from 36" culvert beneath Rt. 9



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1114B DATE: 05/25/1993 INVESTIGATOR: EFA, DAE, JMD  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1/ML1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 66.00  

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
538	Vaccinium angustifolium	Shrub	FACU	80.00
539	Vaccinium corymbosum	Shrub	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC Brinkerton Hydric Soil? yes  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	peat/organic			
4-6	silty clay	10 YR 6/2	10 YR 7/8	
6-12	silty-sand	10 YR 4/2	10 YR 7/6	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 8.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: overcast  
 Recent Rainfall: 1/2" 3 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes

Remarks: may be separated hydrologically from elder swamp by Rt.93. all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1115 DATE: 05/26/1993 INVESTIGATOR: EFA, DAE, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00  

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	50.00
462	Kalmia latifolia	Shrub	FACU	10.00
538	Vaccinium angustifolium	Shrub	FACU	60.00
539	Vaccinium corymbosum	Shrub	FACW	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb/DmC Hydric Soil? nl  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	clay loam	10 YR 4/1	no mottle	
6-12	clay loam	10 YR 7/1	no mottle	
12-18	clay	10 YR 6/1	10 YR 6/8 (30%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather:
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: 5" 3 days ago
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BPJ Beaver activity ponded & flooded area - area silted in partly

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1120 DATE: 05/26/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: clearing fed by spring seep and small unnamed stream

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 71.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	40.00
119	Carex bromoides	Herb	FACW	40.00
195	Juncus effusus	Herb	FACW+	20.00
237	Rubus hispidus	Herb	FACW	40.00
270	Unidentifiable herb	Herb	NI	30.00
453	Hypericum prolificum	Shrub	FACU	30.00
541	Vaccinium myrtilloides	Shrub	FAC	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Brinkerton Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	sandy silt	10 YR 4/1	none	ox.roots
6-12	sandy silt	10 YR 5/1	none	ox.roots
12-16	sandy silt	10 YR 4/1	10 YR 6/8 (5%)	ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

#### Secondary Indicators (2 or more req'd)

☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: cloudy  
 Recent Rainfall: .5" 3 days ago

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1122 DATE: 05/26/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1B/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: relatively undisturbed area fed by spring seeps - on slope

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 83.00  
 Code Scientific Name Stratum Status % Areal Cover

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	50.00
2	Sphagnum sp.	Bryo	NI	50.00
119	Carex bromoides	Herb	FACW	20.00
237	Rubus hispidus	Herb	FACW	20.00
539	Vaccinium corymbosum	Shrub	FACW	40.00
541	Vaccinium myrtilloides	Shrub	FAC	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Brinkerton Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	moss organic			
4-8	sandy silt	10 YR 6/2	none	
8-12	silty clay	10 YR 4/1	10 YR 7/8 (15%)	
12+				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: .5" 3 days ago

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met in wet spots - BPJ used to draw boundary around zone 50%+

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1123 DATE: 05/27/1993 INVESTIGATOR: EFA, DAE, JMD  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
132	Carex sp.	Herb	FACW	90.00
237	Rubus hispidus	Herb	FACW	90.00
251	Solidago uliginosa	Herb	OBL	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silt loam	10 YR 2/1	none	organic material
6-12	muck	10 YR 4/1	none	
12-16	silty loam	10 YR 4/1	none	auger refusal 16

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 4.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☒ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met; system is associated with larger wetland system upslope

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1124 DATE: 05/27/1993 INVESTIGATOR: EFA, DAE, JMD  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	70.00
4	Lycopodium sp.	Bryo	NI	30.00
538	Vaccinium angustifolium	Shrub	FACU	90.00
539	Vaccinium corymbosum	Shrub	FACW	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb/ViC Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic peat			
4-6	sandy clay	10 YR 5/1	10YR 6/8 (5%)	ox.root channel
6-12	sandy clay	10 YR 6/1	10YR 6/8 (30%)	ox.root channel
12-16	sandy clay	10 YR 6/1	10 YR 6/8	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: overcast
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: 1/2" few days ago
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met; seeps ties into roadside ditch along Rt.93 (south of road)

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1125 DATE: 05/27/1993 INVESTIGATOR: EFA, DAE, JMD  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	90.00
538	Vaccinium angustifolium	Shrub	FACU	90.00
539	Vaccinium corymbosum	Shrub	FACW	20.00
569	Myrica gale	Shrub	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb/ViC/Dob Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic peat			organic muck
1-4	silt clay	10 YR 3/1	none	saturated
4-6	silt clay	10 YR 5/2	none	saturated
6-8	silt sand	10 YR 5/8		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 2.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1126A      DATE: 05/27/1993      INVESTIGATOR: EFA, DAE, JMD  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      75.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
453	Hypericum prolificum	Shrub	FACU	70.00
538	Vaccinium angustifolium	Shrub	FACU	80.00
539	Vaccinium corymbosum	Shrub	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC/brinkerton Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	organic peat			saturated
8-10	sandy clay	10 YR 5/1	none	saturated
10-12	sandy clay	2.5 Y 5/2	10 YR 6/8 (50%)	saturated
12"	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: overcast
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: 1/2" few days ago
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1126B DATE: 05/27/1993 INVESTIGATOR: EFA, DAE, JMD  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
453	Hypericum prolificum	Shrub	FACU	70.00
538	Vaccinium angustifolium	Shrub	FACU	80.00
539	Vaccinium corymbosum	Shrub	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Brinkerton Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8"	organic peat			saturated
8-10"	sandy/clay	10 YR 5/1		none saturated
10-12"	sandy/clay	2.5 Y 5/2		10YR 6/8 (50%) saturated
12"				auger refusal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: overcast

Recent Rainfall: 1/2" a few days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1127      DATE: 05/27/1993      INVESTIGATOR: EFA, DAE, JMD  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

Code	Scientific Name	Stratum	Status	50.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
132	Carex sp.	Herb	FACW	80.00
462	Kalmia latifolia	Shrub	FACU	20.00
538	Vaccinium angustifolium	Shrub	FACU	40.00
539	Vaccinium corymbosum	Shrub	FACW	20.00

Depth	Texture	Matrix Color	Series Name: BSC Mottle Color(%)	Hydric Soil? yes Comments
0-12	sphagnum peat			saturated
12-16	sandy muck	10 YR 3/1	none	sulfidic smell

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: 1/2" few days ago

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; two swales-one wet meadow

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1128 DATE: 05/28/1993 INVESTIGATOR: EFA, DAE, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 86.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	90.00
132	Carex sp.	Herb	FACW	40.00
195	Juncus effusus	Herb	FACW+	20.00
237	Rubus hispidus	Herb	FACW	60.00
249	Solidago rugosa	Herb	FAC	90.00
251	Solidago uliginosa	Herb	OBL	30.00
452	Hypericum densiflorum	Shrub	FAC+	60.00
539	Vaccinium corymbosum	Shrub	FACW	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	organic	10 YR 3/1		saturated
6-12	silty loam	10 YR 3/2	none	
12-16	sandy clay	10 YR 5/2	10 YR 6/8 (10%)	
16"	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 5.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

☒ Drift Lines

☐ Sediment Deposit

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recent Weather: overcast

Recent Rainfall: 1/2" few days ago

WETLAND DETERMINATION: Hydric soils present? yes

Wetland Hydrology? yes

Hydrophytic Vegetation? yes

Wetland? yes

Remarks: all 3 criteria met; see notes

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1130      DATE: 08/30/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Beaver Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: sphagnum hummocks

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	90.00
169	Equisetum fluviatile	Herb	OBL	10.00
182	Gentiana linearis	Herb	OBL	5.00
237	Rubus hispidus	Herb	FACW	95.00
243	Scirpus atrovirens	Herb	OBL	10.00
251	Solidago uliginosa	Herb	OBL	90.00
268	Typha latifolia	Herb	OBL	20.00
297	Carex gynandra	Herb	NI	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	peat sphagnum			
2 rock/				
refusal				

Hydric Soil Indicators:

<input checked="" type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: heavy rain
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1131 DATE: 08/30/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
164	Eleocharis rostellata	Herb	OBL	50.00
174	Eriophorum virginicum	Herb	OBL	70.00
182	Gentiana linearis	Herb	OBL	5.00
195	Juncus effusus	Herb	FACW+	25.00
219	Osmunda cinnamomea	Herb	FACW	10.00
237	Rubus hispidus	Herb	FACW	90.00
251	Solidago uliginosa	Herb	OBL	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	peat sphagnum			
2 rock/ refusal				

## Hydric Soil Indicators:

<input checked="" type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 12.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☒ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: heavy rain  
 Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1132 DATE: 08/30/1993 INVESTIGATOR: EFA, DAK  
COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
COWARDIN CLASSIFICATION: PEM1F/ML  
Do Normal Circumstances exist on the site? yes  
Is the site significantly disturbed (Atypical Situation)? no  
Is the area a potential Problem Area? no  
Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
161	Dryopteris spinulosa	Herb	FAC+	40.00
174	Eriophorum virginicum	Herb	OBL	25.00
199	Juncus subcaudatus	Herb	OBL	
219	Osmunda cinnamomea	Herb	FACW	5.00
237	Rubus hispidus	Herb	FACW	100.00
243	Scirpus atrovirens	Herb	OBL	10.00
251	Solidago uliginosa	Herb	OBL	40.00
268	Typha latifolia	Herb	OBL	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: VeC Hydric Soil? no  
Depth Texture Matrix Color Mottle Color(%) Comments

0-2 peat sphagnum  
2 refusal /bedrock

## Hydric Soil Indicators:

<input checked="" type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: heavy rain
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
Wetland Hydrology? yes      Wetland? yes  
Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1133      DATE: 08/31/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Beaver Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM/ML1J  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: wetland is associated with roadside ditch

Code	Scientific Name	Stratum	Status	% Areal Cover
178	Eupatorium perfoliatum	Herb	FACW+	
195	Juncus effusus	Herb	FACW+	30.00
243	Scirpus atrovirens	Herb	OBL	25.00
251	Solidago uliginosa	Herb	OBL	5.00
268	Typha latifolia	Herb	OBL	80.00
305	Carex scoparia	Herb	FACW	75.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-4	peat sphagnum			
4-6	sandy clay	10 YR 7/1		ox.roots channel
6-10	sandy muck	10 YR 3/8		

Hydric Soil Indicators:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Histosol | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material   | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed              | <input type="checkbox"/> Low Chroma  |
| <input type="checkbox"/> mottles             | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: heavy rain yesterday
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall:
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: associated with roadside ditch, 3 parameters present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1134 DATE: 08/31/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1J/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					89.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		90.00
178	Eupatorium perfoliatum	Herb	FACW+		15.00
195	Juncus effusus	Herb	FACW+		80.00
219	Osmunda cinnamomea	Herb	FACW		5.00
230	Pteridium aquilinum	Herb	FACU		15.00
237	Rubus hispidus	Herb	FACW		90.00
243	Scirpus atrovirens	Herb	OBL		20.00
251	Solidago uliginosa	Herb	OBL		10.00
268	Typha latifolia	Herb	OBL		25.00
305	Carex scoparia	Herb	FACW		80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: VeC					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-6	peat sphagnum			saturated	
6-8	sand	10 YR 3/1		ox.roots channel	
8-10	sand	7.5YR 6/8 (50%)	10 YR 7/1		
10-12	sand	7.5YR 6/8			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather:
	Recent Rainfall: heavy rain yesterday

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1140      DATE: 08/26/1993      INVESTIGATOR: CMH, DMK  
 COUNTY: Tucker      STATE: WV      STREAM: near Four Mile      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: mine waste material ditch

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

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193	Juncus canadensis	Herb	OBL	80.00
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SOIL PROFILE: (Minimum 18 inches ) Series Name: mined land      Hydric Soil? nl  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments

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## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall: shower 2 days ago

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WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: soils need not be checked since innundation/OBL Sp. present - sat. year rou

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1141      DATE: 08/26/1993      INVESTIGATOR: CMH  
 COUNTY: Tucker      STATE: WV      STREAM: near Beaver Cr      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      yes  
 Remarks: moss lichen wetland on slab bedrock slopes

Code	Scientific Name	Stratum	Status	83.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
174	Eriophorum virginicum	Herb	OBL	10.00
237	Rubus hispidus	Herb	FACW	30.00
251	Solidago uliginosa	Herb	OBL	15.00
304	Hypericum prolificum	Herb	FACU	15.00
315	Vaccinium myrtilloides	Herb	FAC	40.00
369	Viburnum cassinoides	Herb	FACW	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic			saturated
2-5	sand	7.5 YR 8/0		
5	bedrock			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: drought
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1151      DATE: 08/30/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				56.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
1	Polytrichum sp.	Bryo	NI	40.00
2	Sphagnum sp.	Bryo	NI	100.00
174	Eriophorum virginicum	Herb	OBL	60.00
200	Juncus tenuis	Herb	FAC-	40.00
237	Rubus hispidus	Herb	FACW	20.00
251	Solidago uliginosa	Herb	OBL	40.00
268	Typha latifolia	Herb	OBL	20.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: BSC BRINKERTON Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-4	Organic		none	saturated
4-8	clay loam	10 YR 4/1	none	saturated
8-12	clay loam	10 YR 6/2	10 YR 7/8 (40%)	saturated
12-18	clay loam	10 YR 7/8	10 YR 4/1 (40%)	saturated
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      (in.)	Primary Indicators:
Depth to Free Water in Pit:      (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy, hot
<input type="checkbox"/> Other	Recent Rainfall:
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WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1152 DATE: 08/30/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
110	Aster umbellatus	Herb	FACW	20.00
251	Solidago uliginosa	Herb	OBL	20.00
297	Carex gynandra	Herb	NI	80.00
452	Hypericum densiflorum	Shrub	FAC+	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	organic	10 YR 2/1		saturated
6-12	sandy silt	10 YR 5/1	10 YR 5/6 (40%)	
12-18	sandy silt	5 YR 4/1	none	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy, rainy
<input type="checkbox"/> Other	Recent Rainfall: 0.5 in

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all three criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1153 DATE: 08/31/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: vegetated channel area

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	40.00
219	Osmunda cinnamomea	Herb	FACW	20.00
251	Solidago uliginosa	Herb	OBL	50.00
297	Carex gynandra	Herb	NI	20.00
602	Acer rubrum	Tree	FAC	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-8	sandy silt	10 YR 4/2		saturated
8-12	clay loam	10 YR 5/1		ox.roots
12-18	sandy clay	10 YR 5/1	10 5/8 (10%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1154      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: Open and brushy area north of 93, part of Elder Swamps.

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					87.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		100.00
174	Eriophorum virginicum	Herb	OBL		30.00
200	Juncus tenuis	Herb	FAC-		20.00
237	Rubus hispidus	Herb	FACW		40.00
251	Solidago uliginosa	Herb	OBL		30.00
297	Carex gynandra	Herb	NI		40.00
452	Hypericum densiflorum	Shrub	FAC+		20.00
559	Viburnum recognitum	Shrub	FACW+		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-4	organic			saturated	
4-8	sandy loam	10 YR 3/2	none	saturated	
8-12	sandy loam	10 YR 5/1	none	ox.roots	
12-18	sandy loam	10 YR 4/1	none	ox.roots	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12

☐ Water Marks  
☐ Drift Lines

☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12

☐ Water-Stained Leaves

☐ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1160 DATE: 10/19/1993 INVESTIGATOR: TJS,DMTS  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: AREA HAS BEEN PARTIALLY FILLED W/=12" OF CINDER MATERIAL

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	5.00
110	Aster umbellatus	Herb	FACW	15.00
195	Juncus effusus	Herb	FACW+	25.00
244	Scirpus cyperinus	Herb	FACW+	10.00
249	Solidago rugosa	Herb	FAC	20.00
404	Alnus rugosa	Shrub	FACW+	10.00
452	Hypericum densiflorum	Shrub	FAC+	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CeB Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1"	ORGANIC			
1-10"	SANDY CLAP	10 YR 3/2		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: ALL 3 CRITERIA MET

## ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1201                      DATE: 06/01/1993                      INVESTIGATOR: JMG, ABC  
COUNTY: Tucker                      STATE: WV                      STREAM: unnamed                      WATERSHED: North Br. Potomac River  
COWARDIN CLASSIFICATION: PEM1E  
Do Normal Circumstances exist on the site?                      yes  
Is the site significantly disturbed (Atypical Situation)?                      no  
Is the area a potential Problem Area?                      no  
Remarks: the wetland is within a reclaimed strip mine-tributary flow thru

Code	Scientific Name	Stratum	Status	% Areal Cover
VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				80.00

2	Sphagnum sp.	Bryo	NI	40.00
132	Carex sp.	Herb	FACW	30.00
195	Juncus effusus	Herb	FACW+	20.00
251	Solidago uliginosa	Herb	OBL	5.00
301	Solidago ohioensis	Herb	OBL	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm stripmine Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	silty/organic	10 YR 4/1		
2-6	gravelly silt	10 YR 4/2	10 YR 5/6	(5) Auger refusal

### Hydric Soil Indicators:

```
[ ] Histosol
[ ] Sulfidic Material
[ ] Gleyed
[X] mottles
[ ] Histic Epipedon
[X] Aquic Moisture Regime
[X] Low Chroma
[ ] Entisol (organic context, vertical
streaking, chroma 3, wet spodosol)
```

## HYDROLOGY:

Field Observations:

Depth of Surface Water: 6.0 (in.)  
Depth to Free Water in Pit: 0.0 (in.)  
Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

```
[ ] Inundated
[X] Saturated in Upper 12
[ ] Water Marks
```

Source/Site Characterization:

```
[ ] Seasonal High Water Table
[X] Spring/Seep
[ ] Floodplain
[ ] Backwater
[ ] Depressional
```

[X] Drainage Patterns in Wetlands  
Secondary Indicators (2 or more req'd)

```
[X] Oxidized Root Channels/Upper 12
[ ] Water-Stained Leaves
[ ] Local Soil Survey Data
```

Recorded Data (Describe in Remarks):

[ ] Stream, Lake, or Tide Gauge  
[ ] Aerial Photographs  
[ ] Other

[ ] Local Soil Survey Data  
[ ] FAC-Neutral Test  
[ ] Other (Explain in Remarks)

```
Recent Weather: sunny
Recent Rainfall: unknown
```

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
Wetland Hydrology? yes      Wetland? yes  
Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1202 DATE: 06/01/1993 INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker STATE: WV STREAM: near Beaver Cr WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1Bx

Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: mine reclamation pond which has filled in-no inlet/outlet channel

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 83.00  
 Code Scientific Name Stratum Status % Areal Cover

2	Sphagnum sp.	Bryo	NI	80.00
121	Carex canescens	Herb	OBL	10.00
131	Carex scabrata	Herb	OBL	50.00
132	Carex sp.	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	20.00
251	Solidago uliginosa	Herb	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: mined land Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 2.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

#### Secondary Indicators (2 or more req'd)

☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☒ Other (Explain in Remarks)

### Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny

Recent Rainfall: unknown

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: best professional judgement exercised on soils-hydric soil present

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1203 DATE: 06/02/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: area is on a hill side

Code	Scientific Name	Stratum	Status	64.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	20.00
247	Senecio aureus	Herb	FACW	30.00
262	Thelypteris noveboracensis	Herb	FAC	30.00
275	Viola pallens	Herb	OBL	10.00
302	Lycopus uniflorus	Herb	OBL	10.00
415	Betula alleghaniensis	Shrub	FAC	20.00
487	Prunus serotina	Shrub	FACU	20.00
561	Acer spicatum	Shrub	FACU	80.00
562	Crataegus sp.	Shrub	NI	20.00
608	Betula alleghaniensis	Tree	FAC	60.00
651	Prunus serotina	Tree	FACU	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: DmC Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-2 organic 10 YR 2/1 probe refusal 8"  
 2-8 sandy loam 10 YR

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny
	Recent Rainfall: 5/31/93

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: Sphagnum moss and Crataegus species are known to occur in wetland areas

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1204 DATE: 06/02/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1E

Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: head water area to an unnamed tributary, FACU species in wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	30.00
122	Carex crinita	Herb	OBL	20.00
219	Osmunda cinnamomea	Herb	FACW	30.00
275	Viola pallens	Herb	OBL	10.00
303	Rubus pubescens	Herb	FACW	10.00
409	Amelanchier laevis	Shrub	UPL	100.00
415	Betula alleghaniensis	Shrub	FAC	100.00
608	Betula alleghaniensis	Tree	FAC	40.00
669	Tsuga canadensis	Tree	FACU	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BSC Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic	7.5 YR 2/0		Auger refusal
2-5	organic silt	10 YR 3/1		9"
5-9	silty sand	10 YR 3/2	10 YR 5/8 (3)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: sunny
	Recent Rainfall: 5/31/93

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1205      DATE: 06/02/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: a tributary flows through the wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
122	Carex crinita	Herb	OBL	10.00
219	Osmunda cinnamomea	Herb	FACW	30.00
237	Rubus hispidus	Herb	FACW	20.00
269	Unidentifiable grass	Herb	NI	30.00
275	Viola pallens	Herb	OBL	10.00
519	Salix fragilis	Shrub	FAC+	100.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	organic	5 YR 2.5/1		saturated
3-8	fine sandy loam	5 YR 5/1		saturated
8-12	fine sandy loam	7.5 YR 6/0	7.5 YR 6/8 (49)	saturated

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: 5/31/93

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1206      DATE: 06/02/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1E

Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no

Remarks: tributary flows through the wetland, small ponded area w/in 1-2ft

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		30.00
122	Carex crinita	Herb	OBL		40.00
237	Rubus hispidus	Herb	FACW		10.00
249	Solidago rugosa	Herb	FAC		20.00
415	Betula alleghaniensis	Shrub	FAC		100.00
453	Hypericum prolificum	Shrub	FACU		50.00
561	Acer spicatum	Shrub	FACU		40.00
608	Betula alleghaniensis	Tree	FAC		100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErC					Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-2	organic	10 YR 2/1		Auger refusal	
2-6	silty loam	10 YR 3/1	10 YR 6/6 (5%)	6 inches	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: 5/31/93

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1207      DATE: 06/02/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: large seep area next to Rt. 93

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	40.00
122	Carex crinita	Herb	OBL	40.00
237	Rubus hispidus	Herb	FACW	10.00
251	Solidago uliginosa	Herb	OBL	10.00
563	Prunus arbutifolia	Shrub	NI	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErC      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic	10 YR 2/2		Auger refusal at
4-12	gravely sandy	1 5 Y 5/1		12 inches

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: sunny
	Recent Rainfall: ?

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes

Remarks:

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1208 DATE: 06/02/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: seep area at the edge of deciduous forest

Code	Scientific Name	Stratum	Status	80.00 % Areal Cover
122	Carex crinita	Herb	OBL	50.00
251	Solidago uliginosa	Herb	OBL	30.00
401	Acer rubrum	Shrub	FAC	70.00
453	Hypericum prolificum	Shrub	FACU	20.00
559	Viburnum recognitum	Shrub	FACW+	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErC Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic	10 YR 2/1		
2-8	sandy loam	10 YR 5/1	10 YR 4/6 (20%)	
8-16	sandy loam	10 YR 4/1	10 YR 6/8	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: ?

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1209      DATE: 06/02/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: headwater area of a perennial tributary

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				70.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
2	Sphagnum sp.	Bryo	NI	50.00
249	Solidago rugosa	Herb	FAC	10.00
262	Thelypteris noveboracensis	Herb	FAC	10.00
275	Viola pallens	Herb	OBL	30.00
415	Betula alleghaniensis	Shrub	FAC	60.00
501	Rhododendron maximum	Shrub	FAC	100.00
561	Acer spicatum	Shrub	FACU	10.00
561	Acer spicatum	Shrub	FACU	40.00
608	Betula alleghaniensis	Tree	FAC	40.00
669	Tsuga canadensis	Tree	FACU	50.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-2	organic	10 YR 2/1		probe refusal
2-4	sandy gravel	10 YR 6/1		4"
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	1.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
		<input type="checkbox"/> Water Marks	
Source/Site Characterization:		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Floodplain		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Backwater		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Water-Stained Leaves	
		<input type="checkbox"/> Local Soil Survey Data	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Aerial Photographs		Recent Weather: sunny	
<input type="checkbox"/> Other		Recent Rainfall: ?	
-----			

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1210      DATE: 06/02/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: isolated seep wetland on a rocky slope

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					83.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		20.00
122	Carex crinita	Herb	OBL		20.00
219	Osmunda cinnamomea	Herb	FACW		30.00
237	Rubus hispidus	Herb	FACW		20.00
251	Solidago uliginosa	Herb	OBL		10.00
651	Prunus serotina	Tree	FACU		100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-3	organic	7.5 YR 2/0		Auger refusal	
3-10	sandy loam	10 YR 4/1		10 inches	

Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol          | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material | <input checked="" type="checkbox"/> Aquic Moisture Regime                                      |
| <input type="checkbox"/> Gleyed            | <input checked="" type="checkbox"/> Low Chroma   |
| <input type="checkbox"/> mottles           | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input type="checkbox"/> Sediment Deposit	
		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather: sunny	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall: 5/31/93	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1211A      DATE: 06/03/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: perennial tributary flows through the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					86.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		20.00
122	Carex crinita	Herb	OBL		30.00
237	Rubus hispidus	Herb	FACW		15.00
249	Solidago rugosa	Herb	FAC		10.00
251	Solidago uliginosa	Herb	OBL		10.00
275	Viola pallens	Herb	OBL		15.00
453	Hypericum prolificum	Shrub	FACU		100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm stripmine      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic silt	10 YR 3/2		saturated
1-16	sandy silt	10 YR 6/2	10 YR 6/8 (10%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)  
 Recent Weather: overcast  
 Recent Rainfall: 6/2/93

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all criteria met - hydric soil indicators      present

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1211B DATE: 06/03/1993 INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: manmade wetland within mine reclamation area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	20.00
2	Sphagnum sp.	Bryo	NI	60.00
131	Carex scabrata	Herb	OBL	50.00
133	Carex stipata	Herb	OBL	15.00
195	Juncus effusus	Herb	FACW+	10.00
196	Juncus marginatus	Herb	FACW	10.00
251	Solidago uliginosa	Herb	OBL	5.00
274	Viola cucullata	Herb	FACW	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm stripmine Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2-4	organic muck	root ma		
4-16	sandy clay loam	10 YR 5/2		none apparantFe concretions

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather:
	Recent Rainfall: intermittent pre wks

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; water quality appears acid (mine drainage)

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1211C DATE: 06/03/1993 INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker STATE: WV STREAM: trib.Beaver Cr WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: wetland within mine reclamation area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  
 Code Scientific Name Stratum Status % Areal Cover

1	Polytrichum sp.	Bryo	NI	10.00
2	Sphagnum sp.	Bryo	NI	90.00
131	Carex scabrata	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	80.00
268	Typha latifolia	Herb	OBL	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm stripmined Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: clear/last week rain
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: soils meet hydric criteria based on BPJ

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1212      DATE: 06/03/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E

Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: wetland located within a swale.      no surface water at observation

Code	Scientific Name	Stratum	Status	86.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	20.00
122	Carex crinita	Herb	OBL	40.00
219	Osmunda cinnamomea	Herb	FACW	5.00
237	Rubus hispidus	Herb	FACW	10.00
249	Solidago rugosa	Herb	FAC	5.00
251	Solidago uliginosa	Herb	OBL	20.00
453	Hypericum prolificum	Shrub	FACU	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: DmC      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	org. material	10 YR 2/2		auger refusal
1-2	sandy silt	10 YR 3/1		8 inches
3-8	sandy silt	10 YR 5/1	10 YR 1/8 (20%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      0.0 (in.)  
 Depth to Free Water in Pit:      0.0 (in.)  
 Depth to Saturated Soil:      0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: cloudy  
 Recent Rainfall: 6/2/93

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: hydric soil indicators present-all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1213      DATE: 06/14/1993      INVESTIGATOR: ABC, JMG, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: tributary flows through the wetland - a small POW is w/in wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	20.00
122	Carex crinita	Herb	OBL	50.00
195	Juncus effusus	Herb	FACW+	10.00
237	Rubus hispidus	Herb	FACW	10.00
251	Solidago uliginosa	Herb	OBL	10.00
401	Acer rubrum	Shrub	FAC	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic	7.5 YR 2/0		
1-4	silty clay	5 Y 4/1		gleyed
4-16	silty clay	10 YR 4/1		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 80 degrees
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: hydric soil indicators present/all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1214 DATE: 06/14/1993 INVESTIGATOR: JMG, DAE, ABC  
COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
COWARDIN CLASSIFICATION: PEM1B/ML  
Do Normal Circumstances exist on the site? yes  
Is the site significantly disturbed (Atypical Situation)? no  
Is the area a potential Problem Area? no  
Remarks: POW seeps into swale/depressional area

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	30.00
110	Aster umbellatus	Herb	FACW	5.00
195	Juncus effusus	Herb	FACW+	30.00
248	Euthamia graminifolia	Herb	FAC	5.00
251	Solidago uliginosa	Herb	OBL	10.00
453	Hypericum prolificum	Shrub	FACU	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic	10 YR 2/2		saturated
1-5	silt loam	10 YR 5/1	10 YR 5/8 (40%)	
5-12	silt loam	10 YR 7/1	10 YR 4/6 (45%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 80 degrees
<input type="checkbox"/> Other	Recent Rainfall: 3

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
Wetland Hydrology? yes      Wetland? yes  
Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1215A      DATE: 06/15/1993      INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: a tributary flows through the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				71.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
2	Sphagnum sp.	Bryo	NI	20.00
122	Carex crinita	Herb	OBL	40.00
237	Rubus hispidus	Herb	FACW	15.00
251	Solidago uliginosa	Herb	OBL	10.00
304	Hypericum prolificum	Herb	FACU	15.00
453	Hypericum prolificum	Shrub	FACU	50.00
559	Viburnum recognitum	Shrub	FACW+	50.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-1	organic	10 YR 3/2		
1-18	silty sand	10 YR 4/1		
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 80 degrees
<input type="checkbox"/> Other	Recent Rainfall: 3
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
                                  Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1215B DATE: 06/15/1993 INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: headwater seeps and tributaries flow through the area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 83.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	40.00
122	Carex crinita	Herb	OBL	30.00
219	Osmunda cinnamomea	Herb	FACW	10.00
249	Solidago rugosa	Herb	FAC	10.00
275	Viola pallens	Herb	OBL	10.00
401	Acer rubrum	Shrub	FAC	50.00
409	Amelanchier laevis	Shrub	UPL	20.00
415	Betula alleghaniensis	Shrub	FAC	50.00
501	Rhododendron maximum	Shrub	FAC	30.00
602	Acer rubrum	Tree	FAC	30.00
608	Betula alleghaniensis	Tree	FAC	70.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	organic	10 YR		Auger refusal
3-5	sandy loam	7.5 YR 4/10	7.5 YR 5/8	(20% 5 inches)

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: sunny 80 degrees
	Recent Rainfall: ?

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1216      DATE: 06/15/1993      INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: tributary flows through the wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	
166	Eleocharis tenuis	Herb	FACW	
195	Juncus effusus	Herb	FACW+	
249	Solidago rugosa	Herb	FAC	
251	Solidago uliginosa	Herb	OBL	
305	Carex scoparia	Herb	FACW	

SOIL PROFILE: (Minimum 18 inches ) Series Name: BSC      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	peat/sphagnum			organic material
1-6	silty sand	10 YR 5/2	10 YR 6/8 (10%)	
6-18	silty clay	10 YR 6/1	10 YR 7/6 (20%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 80 degrees
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1217      DATE: 06/15/1993      INVESTIGATOR: ABC, DAE, JMG  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML

Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: a tributary flows through the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
2	Sphagnum sp.	Bryo	NI	40.00
122	Carex crinita	Herb	OBL	30.00
237	Rubus hispidus	Herb	FACW	10.00
251	Solidago uliginosa	Herb	OBL	10.00
305	Carex scoparia	Herb	FACW	10.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc      Hydric Soil? yes				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-8	silt loam	10 YR 5/1	10 YR 6/8 (30%)	Auger refusal
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	2.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input type="checkbox"/> Floodplain		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: sunny 80 degrees	
		Recent Rainfall: ?	
-----			

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1218 DATE: 06/15/1993 INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: a tributary flows through the wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
122	Carex crinita	Herb	OBL	70.00
219	Osmunda cinnamomea	Herb	FACW	10.00
237	Rubus hispidus	Herb	FACW	5.00
249	Solidago rugosa	Herb	FAC	10.00
251	Solidago uliginosa	Herb	OBL	5.00
559	Viburnum recognitum	Shrub	FACW+	50.00
564	Unidentifiable shrub	Shrub	NI	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty loam	10 YR 3/1		
3-16	silty clay	10 YR 6/1	10 YR 7/8 (30%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 80 degrees
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1219      DATE: 06/15/1993      INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: piles of dirt and logs have been dumped in the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					87.00
Code	Scientific Name	Stratum	Status		% Areal Cover
<hr/>					
2	Sphagnum sp.	Bryo	NI		5.00
122	Carex crinita	Herb	OBL		10.00
129	Carex lurida	Herb	OBL		15.00
166	Eleocharis tenuis	Herb	FACW		10.00
195	Juncus effusus	Herb	FACW+		10.00
219	Osmunda cinnamomea	Herb	FACW		20.00
237	Rubus hispidus	Herb	FACW		20.00
251	Solidago uliginosa	Herb	OBL		10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
<hr/>					
0-1	sandy silt	10 YR 4/1	10 YR 4/6 (40%)	organic material	
1-3	silty loam	10 YR 3/1			
3-9	sandy silt	10 YR 3/2	10 YR 4/4 (20%)		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 5.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 80 degrees
<input type="checkbox"/> Other	Recent Rainfall: ?

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1220A DATE: 06/15/1993 INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: a tributary flows through the wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
122	Carex crinita	Herb	OBL	40.00
262	Thelypteris noveboracensis	Herb	FAC	30.00
275	Viola pallens	Herb	OBL	70.00
306	Viburnum recognitum	Herb	FACW	20.00
401	Acer rubrum	Shrub	FAC	50.00
415	Betula alleghaniensis	Shrub	FAC	50.00
543	Viburnum cassinoides	Shrub	FACW	30.00
559	Viburnum recognitum	Shrub	FACW+	70.00
602	Acer rubrum	Tree	FAC	60.00
608	Betula alleghaniensis	Tree	FAC	40.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments	Hydric Soil? yes
0-5	silty sand	10 YR 4/2	10 YR 5/6 (10%)	saturated	
5/18	silty loam	5 Y 4/2		saturated	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 4.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 80 degrees
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1220B      DATE: 06/15/1993      INVESTIGATOR: ABC, DAE, JMG  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: tributary flows through the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	30.00
122	Carex crinita	Herb	OBL	50.00
237	Rubus hispidus	Herb	FACW	5.00
251	Solidago uliginosa	Herb	OBL	10.00
306	Viburnum recognitum	Herb	FACW	5.00
543	Viburnum cassinoides	Shrub	FACW	30.00
559	Viburnum recognitum	Shrub	FACW+	70.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silty loam	10 YR 3/1		organic material
4-16	silty loam	10 Yr 7/1	10 YR 6/8 (30%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 5.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ Other (Explain in Remarks)  
 Recent Weather: sunny 80 degrees  
 Recent Rainfall: ?

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1221      DATE: 06/15/1993      INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: a tributary flows through the wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	20.00
122	Carex crinita	Herb	OBL	20.00
124	Carex folliculata	Herb	NI	30.00
195	Juncus effusus	Herb	FACW+	10.00
251	Solidago uliginosa	Herb	OBL	20.00
453	Hypericum prolificum	Shrub	FACU	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silt loam	10 YR 3/1		organic
3-6	silt loam	10 YR 4/2		10 YR 6/8 (20%) organic

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: sunny  
 Recent Rainfall: 0.01

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1222 DATE: 06/16/1993 INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: located on the periphery of a reclaimed strip mine

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	10.00
195	Juncus effusus	Herb	FACW+	20.00
237	Rubus hispidus	Herb	FACW	10.00
251	Solidago uliginosa	Herb	OBL	30.00
453	Hypericum prolificum	Shrub	FACU	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic	10 YR 4/1	none	
2-3	silt clay	7.5 YR 4/0	10 YR (30%)	ox.root channel
3-12	silt clay	10 YR 5/1	10 YR (10%)	ox.root channel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny clear
<input type="checkbox"/> Other	Recent Rainfall: brief thunder/sh 1wk

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: reclaimed strip mine area - all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1223 DATE: 06/16/1993 INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: a tributary flows through the wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	20.00
122	Carex crinita	Herb	OBL	30.00
237	Rubus hispidus	Herb	FACW	30.00
262	Thelypteris noveboracensis	Herb	FAC	10.00
307	Carex interior	Herb	OBL	10.00
543	Viburnum cassinoides	Shrub	FACW	20.00
559	Viburnum recognitum	Shrub	FACW+	80.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty loam	10 YR 3/1		Auger refusal
3-9	silty clay	10 YR 5/1	10 YR 6/8 (30%)	9 inches

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 80 degrees
<input type="checkbox"/> Other	Recent Rainfall: ?

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1224      DATE: 06/16/1993      INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1H  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      66.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	30.00
237	Rubus hispidus	Herb	FACW	20.00
269	Unidentifiable grass	Herb	NI	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	org.mat./peat	10 YR 3/2	none	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 6.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12

☐ Water Marks  
☐ Drift Lines

☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves

☐ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny clear

Recent Rainfall: heavy rain last week

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: the grass is growing within the water of the POWZ - all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1225 DATE: 06/16/1993 INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: a tributary flows into the wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	10.00
122	Carex crinita	Herb	OBL	50.00
237	Rubus hispidus	Herb	FACW	30.00
251	Solidago uliginosa	Herb	OBL	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	org. material	10 YR 2/2	none	
2-6	sandy silt	5 Y 5/2	none	ox.root channel
6-8	gravely sand	5 Y 5/2	10 YR 5/6 (20%)	ox.root channel

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: sunny clear
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: heavy rain last week
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1226      DATE: 06/16/1993      INVESTIGATOR: JMG, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: area has been strip mined and reclaimed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	20.00
195	Juncus effusus	Herb	FACW+	50.00
237	Rubus hispidus	Herb	FACW	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	clay silt	N 4/	none	ox.roots
6-18	clay	5 Y 4/1	none	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 12.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny clear
<input type="checkbox"/> Other	Recent Rainfall: brief thunderstorms

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1227 DATE: 06/16/1993 INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area has been strip mined and reclaimed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 50.00  
 Code Scientific Name Stratum Status % Areal Cover

198	Juncus sp.	Herb	NI	70.00
305	Carex scoparia	Herb	FACW	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-8 silty clay n/4 5 YR 5/8 (10%) ox.roots  
 8-12 gravelly/sandy 7.5 YR 2/0 7.5 YR 4/0

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 80 degrees
<input type="checkbox"/> Other	Recent Rainfall: last week

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1228      DATE: 06/16/1993      INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: area has been strip mined & reclaimed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
-----					
195	Juncus effusus	Herb	FACW+	10.00	
268	Typha latifolia	Herb	OBL	30.00	
269	Unidentifiable grass	Herb	NI	20.00	
305	Carex scoparia	Herb	FACW	40.00	
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0"-18"	gravel/sand	10 YR 4/2	none	
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 24.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny/clear
<input type="checkbox"/> Other	Recent Rainfall: heavy rain last week
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WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1229A      DATE: 06/02/1993      INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: seep wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
131	Carex scabrata	Herb	OBL	30.00
219	Osmunda cinnamomea	Herb	FACW	20.00
237	Rubus hispidus	Herb	FACW	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-5	organic muck			undecomposed
5-12	silty clay loam 10 YR 5/1		none	with Mn, fe conc

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1229B      DATE: 06/02/1993      INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: seep wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
131	Carex scabrata	Herb	OBL	30.00
219	Osmunda cinnamomea	Herb	FACW	20.00
237	Rubus hispidus	Herb	FACW	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-5				undecomposed
5-12	silty clay loam	10 YR 5/1	none	with Mn, fe conc

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      (in.)  
 Depth to Free Water in Pit:      (in.)  
 Depth to Saturated Soil:      0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:  
 Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1230 DATE: 06/16/1993 INVESTIGATOR: JMG, DAE, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	10.00
106	Apocynum cannabinum	Herb	FACU	10.00
237	Rubus hispidus	Herb	FACW	30.00
251	Solidago uliginosa	Herb	OBL	40.00
308	Rumex acetosella	Herb	NI	10.00
487	Prunus serotina	Shrub	FACU	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic	7.5 YR 3/3		
0-4	sandy silt	10 YR 4/1		
4-18	silty clay	10 YR 5/1	10 YR 6/8 (10%)moist	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 80 degrees
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1231A DATE: 06/16/1993 INVESTIGATOR: DAE, JMG, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: unland islands throughout the wetland area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
122	Carex crinita	Herb	OBL	25.00
133	Carex stipata	Herb	OBL	25.00
248	Euthamia graminifolia	Herb	FAC	20.00
249	Solidago rugosa	Herb	FAC	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bo,ErC,Bp,Ty,BcHydric Soil? yes				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	sandy loam	10 YR 2/1		organic material
2-18	sandy clay	10 YR 4/1		in layers

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 12.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

### Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ Other (Explain in Remarks)  
 Recent Weather: sunny 80 degrees  
 Recent Rainfall: ?

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1231C      DATE: 09/02/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS/ML1A  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: Shrubby area along intermittent stream.

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      70.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	70.00
2	Sphagnum sp.	Bryo	NI	30.00
195	Juncus effusus	Herb	FACW+	20.00
237	Rubus hispidus	Herb	FACW	60.00
251	Solidago uliginosa	Herb	OBL	30.00
262	Thelypteris noveboracensis	Herb	FAC	20.00
305	Carex scoparia	Herb	FACW	20.00
338	Bromus purgans	Herb	FACU	20.00
452	Hypericum densiflorum	Shrub	FAC+	40.00
541	Vaccinium myrtilloides	Shrub	FAC	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LSA      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-6	clay loam	10 YR 4/2	none	
6-12	clay loam	10 YR 7/1	10 YR 7/8 (20%)	
12-18	clay loam	10 YR 7/1	10 YR 6/8 (30%)	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1232 DATE: 06/30/1993 INVESTIGATOR: JMG, DMB  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: isolated wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	30.00
132	Carex sp.	Herb	FACW	10.00
166	Eleocharis tenuis	Herb	FACW	30.00
195	Juncus effusus	Herb	FACW+	20.00
237	Rubus hispidus	Herb	FACW	10.00
543	Viburnum cassinoides	Shrub	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BSC Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic	10 YR 2/2		saturated
1-3	silt	10 YR 3/1		Auger refusal
3-6	sandy silt	10 YR 4/1		6 inches

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 18.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny 80 degrees
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met, small depressional wetland Pub fringed by emergent

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1233      DATE: 07/01/1993      INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: wetland in an old reclamation site

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					85.00
Code	Scientific Name	Stratum	Status		% Areal Cover
1	Polytrichum sp.	Bryo	NI		40.00
2	Sphagnum sp.	Bryo	NI		80.00
166	Eleocharis tenuis	Herb	FACW		20.00
195	Juncus effusus	Herb	FACW+		15.00
237	Rubus hispidus	Herb	FACW		20.00
251	Solidago uliginosa	Herb	OBL		15.00
252	Sparganium americanum	Herb	OBL		20.00
268	Typha latifolia	Herb	OBL		10.00
305	Carex scoparia	Herb	FACW		5.00
311	Eleocharis smallii	Herb	OBL		20.00
453	Hypericum prolificum	Shrub	FACU		25.00
541	Vaccinium myrtilloides	Shrub	FAC		25.00
543	Viburnum cassinoides	Shrub	FACW		10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm mined land      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic	10 YR 3/2		
1-5	silt clay	10 YR 5/2	10 YR 6/8 (30%)	
5-12	clay	10 YR 5/1	10 YR 5/8 (40%)	Mn conc.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: scattered showers
	Recent Rainfall: June 2.24" aver.4.4"

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met - hydric soil indicators present

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1234A DATE: 07/01/1993 INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker STATE: WV STREAM: near Beaver Cr WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: wetland between 2 abandoned RR grades

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	40.00
2	Sphagnum sp.	Bryo	NI	40.00
124	Carex folliculata	Herb	NI	10.00
153	Dichanthelium clandestinum	Herb	FAC+	20.00
165	Eleocharis sp.	Herb	NI	
237	Rubus hispidus	Herb	FACW	25.00
312	Glyceria canadensis	Herb	OBL	20.00
453	Hypericum prolificum	Shrub	FACU	80.00
559	Viburnum recognitum	Shrub	FACW+	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-2 organic 10 YR 2/1  
 2-4 silty clay 5 Y 4/1 none Fe Conc.  
 4-12 clay 2.5 Y 5/4 10 YR 6/8 (40%) Fe Conc.

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☒ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: scattered showers  
 Recent Rainfall: June 2.24" Aver. 4.4"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met - hydric soil indicators present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1234B DATE: 07/01/1993 INVESTIGATOR: CMH  
 COUNTY: Tucker STATE: WV STREAM: near Beaver Cr WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: drainage swale between 2 abandoned RR grades

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	20.00
2	Sphagnum sp.	Bryo	NI	80.00
166	Eleocharis tenuis	Herb	FACW	70.00
195	Juncus effusus	Herb	FACW+	30.00
237	Rubus hispidus	Herb	FACW	30.00
251	Solidago uliginosa	Herb	OBL	20.00
305	Carex scoparia	Herb	FACW	20.00
453	Hypericum prolificum	Shrub	FACU	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic	10 YR 2/1		
2-4	silty clay	5 Y 4/1	none	Fe conc.
4-12	clay	2.5 Y 5/4	10 YR 6/8 (40%)	Fe conc.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 2.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☒ Backwater  
☒ Depressional

☐ Drift Lines

☐ Sediment Deposit

Secondary Indicators (2 or more req'd)

☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recent Weather: 2" deficit for June  
 Recent Rainfall: rains/thu. w/in 3day

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met - hydric soil indicators present



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1235A DATE: 07/02/1993 INVESTIGATOR: DAE  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: fringe wetland at edge of Beaver Pond

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					88.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		70.00
129	Carex lurida	Herb	OBL		20.00
184	Glyceria striata	Herb	OBL		70.00
195	Juncus effusus	Herb	FACW+		90.00
237	Rubus hispidus	Herb	FACW		30.00
252	Sparganium americanum	Herb	OBL		15.00
305	Carex scoparia	Herb	FACW		20.00
567	Vaccinium sp.	Shrub	NI		40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-8 10 YR 6/1 none  
 8-12 silty clay 10 YR 6/1 10 YR 6/8 (50%)mang. conc.

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 6.0 (in.)  
 Depth to Free Water in Pit: 1.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☒ Backwater  
☒ Depressional

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: scattered showers  
 Recent Rainfall: June 2.24" Aver4.4"m

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1235C      DATE: 09/02/1993      INVESTIGATOR: MZ  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO4E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: pine forest on beaver pond

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					50.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		50.00
645	Pinus strobus	Tree	FACU		100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	silty clay	10 YR 6/1	none	
8-12	silty clay	10 Yr 6/1	10 YR 6/8 (50%)	mong.concr.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      1.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1236 DATE: 07/12/1993 INVESTIGATOR: CMH, JMG, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	89.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
117	Carex atlantica	Herb	FACW	80.00
129	Carex lurida	Herb	OBL	20.00
227	Polygonum sagittatum	Herb	OBL	15.00
237	Rubus hispidus	Herb	FACW	15.00
251	Solidago uliginosa	Herb	OBL	15.00
297	Carex gynandra	Herb	NI	30.00
309	Scirpus rubrotinctus	Herb	OBL	30.00
523	Salix sericea	Shrub	OBL	60.00

Depth	Texture	Matrix Color	Series Name: Brb Mottle Color(%)	Hydric Soil? yes Comments
0-1	organic			
1-4	organic loam	10 YR 2/1	none	
4-6	sandy loam	10 YR 4/1	none	
6-12	sandy loam	10 YR 5/1	2.5 Y 5/6 (30%)	

## Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol                     | <input type="checkbox"/> Histic Epipedon   |
| <input checked="" type="checkbox"/> Sulfidic Material | <input checked="" type="checkbox"/> Aquic Moisture Regime                                      |
| <input type="checkbox"/> Gleyed                       | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles           | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

- ☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

#### Secondary Indicators (2 or more req'd)

- ☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

- ☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

- ☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: clear  
 Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes  
 Wetland Hydrology? yes  
 Remarks: all 3 criteria met  
 Hydrophytic Vegetation? yes  
 Wetland? yes

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1240 DATE: 08/31/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: rehabilitated surface mine area

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	40.00
174	Eriophorum virginicum	Herb	OBL	20.00
182	Gentiana linearis	Herb	OBL	20.00
200	Juncus tenuis	Herb	FAC-	80.00
243	Scirpus atrovirens	Herb	OBL	20.00
488	Prunus virginiana	Shrub	FAC	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	sandy silt	10 YR 3/1	none	saturated
8-12	sandy silt	10 YR 3/1	none	saturated
12-18	silty gravel	10 YR 4/1	none	saturated

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1241      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: Beaver Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: largely emergent area between Route 93 and rail bed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					89.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		60.00
174	Eriophorum virginicum	Herb	OBL		20.00
195	Juncus effusus	Herb	FACW+		30.00
237	Rubus hispidus	Herb	FACW		50.00
243	Scirpus atrovirens	Herb	OBL		20.00
251	Solidago uliginosa	Herb	OBL		20.00
268	Typha latifolia	Herb	OBL		20.00
452	Hypericum densiflorum	Shrub	FAC+		40.00
541	Vaccinium myrtilloides	Shrub	FAC		40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-8	organic			saturated	
8-12	clay loam	10 YR 3/1		saturated	
12-18	clay loam	10 YR 5/1		ox.roots	

Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol          | <input checked="" type="checkbox"/> Histic Epipedon  |
| <input type="checkbox"/> Sulfidic Material | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed            | <input checked="" type="checkbox"/> Low Chroma   |
| <input type="checkbox"/> mottles           | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	(in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input type="checkbox"/> Sediment Deposit	
		<input type="checkbox"/> Drainage Patterns in Wetlands	
		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Spring/Seep		<input type="checkbox"/> Water-Stained Leaves	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather:	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall:	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1242A DATE: 08/31/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	20.00
131	Carex scabrata	Herb	OBL	40.00
195	Juncus effusus	Herb	FACW+	20.00
244	Scirpus cyperinus	Herb	FACW+	20.00
268	Typha latifolia	Herb	OBL	20.00
453	Hypericum prolificum	Shrub	FACU	30.00
518	Salix exigua (S. interior)	Shrub	OBL	20.00
526	Spiraea alba	Shrub	FACW+	50.00
559	Viburnum recognitum	Shrub	FACW+	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	organic	7.5 YR 2/0		saturated
8-12	peat	7.5 YR 2/0		sulfidic
12-18	loam	2.5 Y 3/0		sulfidic

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1242B      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					100.00
Code	Scientific Name	Stratum	Status		% Areal Cover
129	Carex lurida	Herb	OBL		20.00
131	Carex scabrata	Herb	OBL		40.00
195	Juncus effusus	Herb	FACW+		20.00
244	Scirpus cyperinus	Herb	FACW+		20.00
268	Typha latifolia	Herb	OBL		20.00
453	Hypericum prolificum	Shrub	FACU		30.00
518	Salix exigua (S. interior)	Shrub	OBL		20.00
526	Spiraea alba	Shrub	FACW+		50.00
559	Viburnum recognitum	Shrub	FACW+		50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA-Lickdale					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)		Comments
0-8	organic	7.5 YR 2/0			sat.
8-12	peat	7.5 YR 2/0			sulfidic
12-18	loam	2.5 Y 3/0			sulfidic

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1243A      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/EM  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					78.00
Code	Scientific Name	Stratum	Status		% Areal Cover
<hr/>					
1	Polytrichum sp.	Bryo	NI		40.00
2	Sphagnum sp.	Bryo	NI		80.00
129	Carex lurida	Herb	OBL		30.00
195	Juncus effusus	Herb	FACW+		40.00
237	Rubus hispidus	Herb	FACW		60.00
244	Scirpus cyperinus	Herb	FACW+		20.00
251	Solidago uliginosa	Herb	OBL		30.00
452	Hypericum densiflorum	Shrub	FAC+		40.00
541	Vaccinium myrtilloides	Shrub	FAC		30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
<hr/>					
0-4	organic moss		none	saturated	
4-8	clay loam	10 YR 5/1	none	saturated	
8-12	clay loam	10 YR 5/1	none	ox.roots	
12-18	silty loam	10 YR 3/1	none		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1243B      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1EM/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: shrubby area with acid mine drainage

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					78.00
Code	Scientific Name	Stratum	Status		% Areal Cover
1	Polytrichum sp.	Bryo	NI		40.00
2	Sphagnum sp.	Bryo	NI		80.00
129	Carex lurida	Herb	OBL		30.00
195	Juncus effusus	Herb	FACW+		40.00
237	Rubus hispidus	Herb	FACW		60.00
244	Scirpus cyperinus	Herb	FACW+		20.00
251	Solidago uliginosa	Herb	OBL		30.00
452	Hypericum densiflorum	Shrub	FAC+		40.00
541	Vaccinium myrtilloides	Shrub	FAC		30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA-Lickdale      Hydric Soil? yes				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic-moss		none	sat.
4-8	clay loam	10 YR 5/1		sat.
8-12	clay loam	10 YR 5/1		ox.roots
12-18	silty loam	10 YR 3/1		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1244      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: former surface mined land with pond

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      67.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	40.00
2	Sphagnum sp.	Bryo	NI	80.00
174	Eriophorum virginicum	Herb	OBL	20.00
195	Juncus effusus	Herb	FACW+	20.00
200	Juncus tenuis	Herb	FAC-	30.00
237	Rubus hispidus	Herb	FACW	30.00
251	Solidago uliginosa	Herb	OBL	20.00
338	Bromus purgans	Herb	FACU	20.00
371	Dulichium arundinaceum	Herb	OBL	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic moss		none	
4-8	clay loam	10 YR 5/1		ox.roots sat.
8-18	clay loam	10 YR 3/1		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: sunny
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: 0.5
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1245A      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: former surface mined area with ponds

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					100.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
-----					
195	Juncus effusus	Herb	FACW+	30.00	
200	Juncus tenuis	Herb	FAC-	30.00	
244	Scirpus cyperinus	Herb	FACW+	30.00	
251	Solidago uliginosa	Herb	OBL	20.00	
268	Typha latifolia	Herb	OBL	80.00	
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-6	organic			
6-12	clay loam	10 YR 5/1	10 YR 5/8 (15%)	
12-18	clay loam	10 YR 7/1	none	ox.roots
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: 0.5"
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1245B DATE: 08/31/1993 INVESTIGATOR: MX, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: former surface mined area with ponds

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  
 Code Scientific Name Stratum Status % Areal Cover

195	Juncus effusus	Herb	FACW+	30.00
200	Juncus tenuis	Herb	FAC-	20.00
244	Scirpus cyperinus	Herb	FACW+	20.00
251	Solidago uliginosa	Herb	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-6	organic			
6-12	clay loam	10 YR 5/1	10 YR 5/8 (15%)	
12-18	clay loam	10 YR 7/1	none ox.roots	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny  
 Recent Rainfall: .5"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1246A      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: shrubby intermittent drainage

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				86.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
195	Juncus effusus	Herb	FACW+	20.00
237	Rubus hispidus	Herb	FACW	50.00
251	Solidago uliginosa	Herb	OBL	50.00
267	Typha angustifolia	Herb	OBL	20.00
452	Hypericum densiflorum	Shrub	FAC+	30.00
541	Vaccinium myrtilloides	Shrub	FAC	30.00
559	Viburnum recognitum	Shrub	FACW+	30.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-6	organic			
6-12	sandy silt	10 YR 6/1	none	ox.roots
12-18	clayey silt	10 YR 6/2	none	ox.roots
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:   18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny, hot
<input type="checkbox"/> Other	Recent Rainfall: 0.5 in yesterday
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1246B      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: shrubby intermittent drainage

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	20.00
251	Solidago uliginosa	Herb	OBL	50.00
267	Typha angustifolia	Herb	OBL	20.00
452	Hypericum densiflorum	Shrub	FAC+	30.00
541	Vaccinium myrtilloides	Shrub	FAC	30.00
559	Viburnum recognitum	Shrub	FACW+	30.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-6	organic			
6-12	sandy silt	10 YR 6/1	none	ox.roots
12-18	clayey silt	10 YR 6/2	none	ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny/hot
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1247      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: AMD causes soils to be orange

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      70.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
132	Carex sp.	Herb	FACW	30.00
174	Eriophorum virginicum	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	20.00
200	Juncus tenuis	Herb	FAC-	30.00
244	Scirpus cyperinus	Herb	FACW+	20.00
251	Solidago uliginosa	Herb	OBL	30.00
297	Carex gynandra	Herb	NI	30.00
371	Dulichium arundinaceum	Herb	OBL	40.00
539	Vaccinium corymbosum	Shrub	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silty loam	7.5 YR 7/8		saturated
6-12	silty loam	7.5 YR 2/0	7.5YR 7/2 (30%)	saturated
12-18		7.5 YR 4/4	7.5YR 2/0 (30%)	saturated

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12

☐ Water Marks

☐ Drift Lines

☐ Sediment Deposit

☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12

☐ Water-Stained Leaves

☐ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1248A DATE: 06/04/1993 INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker STATE: WV STREAM: near Beaver Cr WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: several seeps in lg. meadow, no inlet/outlet channels delineated

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00  
 Code Scientific Name Stratum Status % Areal Cover

1	Polytrichum sp.	Bryo	NI	
2	Sphagnum sp.	Bryo	NI	
174	Eriophorum virginicum	Herb	OBL	
195	Juncus effusus	Herb	FACW+	
237	Rubus hispidus	Herb	FACW	
251	Solidago uliginosa	Herb	OBL	
285	Carex tribuloides	Herb	FACW	
297	Carex gynandra	Herb	NI	
312	Glyceria canadensis	Herb	OBL	
314	Danthonia compressa	Herb	FACU	

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-1	organic muck			
1-5	fine sandy clay	10 YR 5/1	none	conc. (Fe)
5-10	clayey sand	10 YR 5/1	10 YR 5/8	(80%)
<10	rock			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: heavy rain last nite
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1248B      DATE: 06/04/1993      INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1B/PEM  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: 20-50' wide along small stream

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      67.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

121	Carex canescens	Herb	OBL	
124	Carex folliculata	Herb	NI	
132	Carex sp.	Herb	FACW	
153	Dichanthelium clandestinum	Herb	FAC+	
237	Rubus hispidus	Herb	FACW	
262	Thelypteris noveboracensis	Herb	FAC	
277	Viola spp.	Herb	FAC	
406	Amelanchier arborea	Shrub	FAC-	
544	Viburnum dentatum	Shrub	FAC	

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc      Hydric Soil? yes  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments

0-4	org. muck			
4-16	sandy silt bam	10 YR 3/1	none	conc. (Fe)

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: heavy rain last nite
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall:
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1249A      DATE: 06/03/1993      INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: trib. Beaver Cr      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: 100-YR floodplain of Beaver Creek

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					50.00
Code	Scientific Name	Stratum	Status		% Areal Cover
1	Polytrichum sp.	Bryo	NI		50.00
2	Sphagnum sp.	Bryo	NI		50.00
132	Carex sp.	Herb	FACW		5.00
181	Gaultheria procumbens	Herb	FACU		10.00
184	Glyceria striata	Herb	OBL		20.00
195	Juncus effusus	Herb	FACW+		10.00
230	Pteridium aquilinum	Herb	FACU		2.00
237	Rubus hispidus	Herb	FACW		20.00
251	Solidago uliginosa	Herb	OBL		10.00
315	Vaccinium myrtilloides	Herb	FAC		20.00
406	Amelanchier arborea	Shrub	FAC-		5.00
453	Hypericum prolificum	Shrub	FACU		5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BSC					Hydric Soil?
Depth	Texture	Matrix Color	Mottle Color(%)		Comments
0-1	organic	5 YR 2.5/1			saturated
1-4	organic loam	5 YR 3/1			saturated
4-8	fine sandy loam	10 YR 5/1	10 YR 6/8		saturated
8-	rock				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather:
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1249B      DATE: 06/04/1993      INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: extension from PEM/ML bay area

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	80.00
453	Hypericum prolificum	Shrub	FACU	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm-strip mine      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic			
2-7	sandy clay	10 YR 5/2	10 YR 5/8 (20%)	Fe. Conc.
7	bedrock			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: heavy rain last nite
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall:
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met - hydric soil indicators present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1250      DATE: 06/03/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: tributaries flow through the wetland area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					86.00
Code	Scientific Name	Stratum	Status		% Areal Cover
110	Aster umbellatus	Herb	FACW		10.00
188	Hypericum punctatum	Herb	FAC		20.00
237	Rubus hispidus	Herb	FACW		10.00
248	Euthamia graminifolia	Herb	FAC		5.00
251	Solidago uliginosa	Herb	OBL		40.00
315	Vaccinium myrtilloides	Herb	FAC		15.00
519	Salix fragilis	Shrub	FAC+		100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bra,BrB,LdA      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	fibrous org.	10 YR 4/1		saturated
3-8	silt	2.5 Y 2/0	10 YR 4/6 (5%)	
8-16	fine sandy loam	10 YR 3/1	7.5 YR 5/6 (5%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny
	Recent Rainfall: 5/31

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1250C DATE: 09/01/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS/ML1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: somewhat drier shrubby area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					63.00
Code	Scientific Name	Stratum	Status		% Areal Cover
1	Polytrichum sp.	Bryo	NI		30.00
2	Sphagnum sp.	Bryo	NI		30.00
132	Carex sp.	Herb	FACW		30.00
237	Rubus hispidus	Herb	FACW		50.00
338	Bromus purgans	Herb	FACU		20.00
452	Hypericum densiflorum	Shrub	FAC+		30.00
539	Vaccinium corymbosum	Shrub	FACW		40.00
541	Vaccinium myrtilloides	Shrub	FAC		40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsB					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-4	organic				
4-12	loamy clay	10 YR 3/1	none		
12-18	clay loam	10 YR 3/2	none	saturated at 16	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 16.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1251A      DATE: 08/31/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					88.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		70.00
195	Juncus effusus	Herb	FACW+		30.00
200	Juncus tenuis	Herb	FAC-		60.00
219	Osmunda cinnamomea	Herb	FACW		30.00
237	Rubus hispidus	Herb	FACW		60.00
244	Scirpus cyperinus	Herb	FACW+		20.00
251	Solidago uliginosa	Herb	OBL		30.00
541	Vaccinium myrtilloides	Shrub	FAC		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)		Comments
0-3	organic				
3-6	sandy silt	10 YR 3/2			
6-12	sandy silt	10 YR 4/2			
12-18	silty clay	10 YR 7/2	10 YR 6/8 (40%)		

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: 0.5 in yesterday

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1251B      DATE: 09/02/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      67.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	30.00
195	Juncus effusus	Herb	FACW+	50.00
200	Juncus tenuis	Herb	FAC-	50.00
251	Solidago uliginosa	Herb	OBL	30.00
268	Typha latifolia	Herb	OBL	30.00
452	Hypericum densiflorum	Shrub	FAC+	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	clay loam	10 YR 6/1		sat./ ox.roots
6-12	clay loam	10 YR 6/1	10 YR 8/6 (10%)	sat./ ox.roots
12-18	clay	10 YR 7/1	10 YR 6/8 (40%)	sat./ ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1252A      DATE: 09/01/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: cottongrass meadow with intermittent drainage

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				60.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
1	Polytrichum sp.	Bryo	NI	70.00
2	Sphagnum sp.	Bryo	NI	30.00
132	Carex sp.	Herb	FACW	50.00
174	Eriophorum virginicum	Herb	OBL	50.00
251	Solidago uliginosa	Herb	OBL	20.00
541	Vaccinium myrtilloides	Shrub	FAC	20.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrA				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-10	peat		none	saturated
10-16	silt loam	10 YR 2/1	none	saturated
16-18	sandy silt	10 YR 4/1	none	sulfidic
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: 0.5 2 days ago
-----	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1252B      DATE: 09/01/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: drier terrace above cottongrass meadow

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC	80.00			
Code      Scientific Name      Stratum      Status      % Areal Cover				
110	Aster umbellatus	Herb	FACW	30.00
139	Carex vulpinoidea	Herb	OBL	30.00
251	Solidago uliginosa	Herb	OBL	20.00
269	Unidentifiable grass	Herb	NI	20.00
305	Carex scoparia	Herb	FACW	30.00
376	Phleum pratense	Herb	FACU	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsB      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	organic			
6-12	clay loam	10 YR 3/1		
12-18	clay loam	10 YR 7/1	10 YR 7/8 (30%)	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic-Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 18.0 (in.)  
 Depth to Saturated Soil: 18.0 (in.)

Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: cloudy

Recent Rainfall: 0.5 2 days ago

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1252C DATE: 09/01/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: shrub wetland along stream

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
237	Rubus hispidus	Herb	FACW	60.00
251	Solidago uliginosa	Herb	OBL	60.00
371	Dulichium arundinaceum	Herb	OBL	40.00
404	Alnus rugosa	Shrub	FACW+	50.00
559	Viburnum recognitum	Shrub	FACW+	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BSA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-12	loamy clay	10 YR 3/1	none	
12-18	clay loam	10 YR 3/2	none	saturated

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1252D      DATE: 09/01/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: shrubby areas adjacent to cottongrass meadows

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					71.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
1	Polytrichum sp.	Bryo	NI		70.00
2	Sphagnum sp.	Bryo	NI		30.00
132	Carex sp.	Herb	FACW		20.00
174	Eriophorum virginicum	Herb	OBL		20.00
251	Solidago uliginosa	Herb	OBL		20.00
452	Hypericum densiflorum	Shrub	FAC+		30.00
539	Vaccinium corymbosum	Shrub	FACW		40.00
541	Vaccinium myrtilloides	Shrub	FAC		30.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsB					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)		Comments
-----					
0-10	peat				saturated
10-16	silt loam	10 YR 2/1			saturated
16-18	sandy silt	10 YR 4/1			sulfidic
-----					

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: cloudy
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: 0.5 2 days ago
<input type="checkbox"/> Other	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1252E DATE: 09/01/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: somewhat drier shrubby area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 63.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
2	Sphagnum sp.	Bryo	NI	30.00
132	Carex sp.	Herb	FACW	30.00
237	Rubus hispidus	Herb	FACW	50.00
251	Solidago uliginosa	Herb	OBL	10.00
338	Bromus purgans	Herb	FACU	20.00
452	Hypericum densiflorum	Shrub	FAC+	30.00
539	Vaccinium corymbosum	Shrub	FACW	40.00
541	Vaccinium myrtilloides	Shrub	FAC	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsB Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-12	loamy clay	10 YR 3/1	none	
12-18	clay loam	10 YR 3/2	none	saturated at 16

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 16.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1252F      DATE: 09/01/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: cottongrass meadow with intermittent stream

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				60.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
1	Polytrichum sp.	Bryo	NI	70.00
2	Sphagnum sp.	Bryo	NI	30.00
132	Carex sp.	Herb	FACW	50.00
174	Eriophorum virginicum	Herb	OBL	50.00
251	Solidago uliginosa	Herb	OBL	20.00
541	Vaccinium myrtilloides	Shrub	FAC	30.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrA				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-10	peat		none	saturated
10-16	silt loam	10 YR 2/1	none	saturated
16-18	sandy silt	10 YR 4/1	none	sulfidic
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: cloudy
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: 0.5 2 days ago
<input type="checkbox"/> Other	
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1252G      DATE: 09/01/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: somewhat drier shrubby area

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
2	Sphagnum sp.	Bryo	NI	30.00
132	Carex sp.	Herb	FACW	30.00
237	Rubus hispidus	Herb	FACW	50.00
251	Solidago uliginosa	Herb	OBL	10.00
338	Bromus purgans	Herb	FACU	20.00
452	Hypericum densiflorum	Shrub	FAC+	30.00
539	Vaccinium corymbosum	Shrub	FACW	40.00
541	Vaccinium myrtilloides	Shrub	FAC	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsB      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-12	loamy clay	10 YR 3/1	none	
12-18	clay loam	10 YR 3/2	none	saturated at 16

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 16.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1252H DATE: 09/01/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: somewhat drier shrubby area

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
2	Sphagnum sp.	Bryo	NI	30.00
132	Carex sp.	Herb	FACW	30.00
237	Rubus hispidus	Herb	FACW	50.00
251	Solidago uliginosa	Herb	OBL	10.00
338	Bromus purgans	Herb	FACU	20.00
452	Hypericum densiflorum	Shrub	FAC+	30.00
539	Vaccinium corymbosum	Shrub	FACW	40.00
541	Vaccinium myrtilloides	Shrub	FAC	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsB Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-12	loamy clay	10 YR 3/1	none	
12-18	clay loam	10 YR 3/2	none	saturated at 16

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 16.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1253A DATE: 09/02/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: shrubby area surrounding former pond

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 80.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	20.00
2	Sphagnum sp.	Bryo	NI	20.00
174	Eriophorum virginicum	Herb	OBL	20.00
195	Juncus effusus	Herb	FACW+	20.00
200	Juncus tenuis	Herb	FAC-	20.00
239	Sagittaria latifolia	Herb	OBL	40.00
251	Solidago uliginosa	Herb	OBL	40.00
305	Carex scoparia	Herb	FACW	20.00
452	Hypericum densiflorum	Shrub	FAC+	80.00
541	Vaccinium myrtilloides	Shrub	FAC	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic			
2-6	clay loam	10 YR 4/1		
6-12	clay loam	10 YR 5/1	10 YR 6/8 (20%)	ox.roots
12-18	clay loam	10 YR 6/1	10 YR 7/8 (20%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: partly cloudy
	Recent Rainfall: 0.2 yesterday

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1253B DATE: 09/02/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML

Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: former pond area grown up with herbs

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
2	Sphagnum sp.	Bryo	NI	20.00
195	Juncus effusus	Herb	FACW+	30.00
200	Juncus tenuis	Herb	FAC-	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-6	clay loam	10 YR 2/1		
6-12	clay loam	10 YR 3/1		
12-18	silty loam	10 YR 6/1		sat./ ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1254 DATE: 09/02/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: Shrubby area adjacent to Beaver Creek

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	80.00
2	Sphagnum sp.	Bryo	NI	30.00
195	Juncus effusus	Herb	FACW+	30.00
237	Rubus hispidus	Herb	FACW	80.00
251	Solidago uliginosa	Herb	OBL	60.00
452	Hypericum densiflorum	Shrub	FAC+	50.00
541	Vaccinium myrtilloides	Shrub	FAC	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	peat			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: partly cloudy
	Recent Rainfall: 0.2 yesterday

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1255      DATE: 09/02/1993      INVESTIGATOR: MZ  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: shrubby area next to road

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status		% Areal Cover
1	Polytrichum sp.	Bryo	NI		70.00
2	Sphagnum sp.	Bryo	NI		30.00
195	Juncus effusus	Herb	FACW+		20.00
237	Rubus hispidus	Herb	FACW		30.00
251	Solidago uliginosa	Herb	OBL		50.00
305	Carex scoparia	Herb	FACW		20.00
452	Hypericum densiflorum	Shrub	FAC+		75.00
541	Vaccinium myrtilloides	Shrub	FAC		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-5	organic			
5-12	clay loam	10 YR 4/2	none	
12-18	clay loam	10 YR 7/2	10 YR 7/8 (30%)	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 18.0 (in.)  
 Depth to Saturated Soil: 18.0 (in.)

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

Secondary Indicators (2 or more req'd)

☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1257 DATE: 09/02/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: apparently reclaimed surface mine area - soils mixed

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	70.00
165	Eleocharis sp.	Herb	NI	50.00
195	Juncus effusus	Herb	FACW+	40.00
237	Rubus hispidus	Herb	FACW	70.00
244	Scirpus cyperinus	Herb	FACW+	30.00
251	Solidago uliginosa	Herb	OBL	30.00
269	Unidentifiable grass	Herb	NI	20.00
452	Hypericum densiflorum	Shrub	FAC+	30.00
541	Vaccinium myrtilloides	Shrub	FAC	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic			
4-12	clay loam	10 YR 4/1	none	ox.roots
12-16	clay loam	10 YR 3/1	10 YR 8/6 (15%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: partly cloudy
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: 0.2 in yesterday
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1258A DATE: 09/02/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: cattail area bounded by road fill and hillside

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 60.00  
 Code Scientific Name Stratum Status % Areal Cover

1	Polytrichum sp.	Bryo	NI	20.00
2	Sphagnum sp.	Bryo	NI	80.00
165	Eleocharis sp.	Herb	NI	40.00
195	Juncus effusus	Herb	FACW+	80.00
243	Scirpus atrovirens	Herb	OBL	20.00
268	Typha latifolia	Herb	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-6 organic peat  
 6-12 sandy silt 10 YR 5/1 ox.roots/ sat.  
 12-18 silty clay 10 YR 5/1 10 YR 7/8 (20%)

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1258B      DATE: 09/02/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F

Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: vegetated floodplain in surface mined area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				80.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
118	Carex baileyi	Herb	OBL	20.00
200	Juncus tenuis	Herb	FAC-	40.00
243	Scirpus atrovirens	Herb	OBL	20.00
297	Carex gynandra	Herb	NI	20.00
305	Carex scoparia	Herb	FACW	20.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-14	muck			
14-18	sandy silt	10 YR 5/1		
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      3.0 (in.)  
 Depth to Free Water in Pit:      (in.)  
 Depth to Saturated Soil:      (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes	Hydrophytic Vegetation? yes
Wetland Hydrology? yes	Wetland? yes
Remarks: all 3 criteria met	

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1259A DATE: 09/02/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: wet meadow in surface mine reclamation area

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
165	Eleocharis sp.	Herb	NI	40.00
200	Juncus tenuis	Herb	FAC-	40.00
371	Dulichium arundinaceum	Herb	OBL	30.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-14	organic silt			saturated
14-18	silty loam	10 YR 3/1		saturated

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☒ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:  
 Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1259B DATE: 09/02/1993 INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 80.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	60.00
219	Osmunda cinnamomea	Herb	FACW	20.00
237	Rubus hispidus	Herb	FACW	20.00
269	Unidentifiable grass	Herb	NI	20.00
452	Hypericum densiflorum	Shrub	FAC+	60.00
541	Vaccinium myrtilloides	Shrub	FAC	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	organic			
6-12	clay loam	10 YR 4/1	none	ox.roots
12-18	silty clay	10 YR 6/2	10 YR 7/8 (20%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1260      DATE: 06/28/1993      INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: Pendleton Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: wetlands straddling drainage ditch & backed up behind culvert

Code	Scientific Name	Stratum	Status	67.00 % Areal Cover
129	Carex lurida	Herb	OBL	5.00
166	Eleocharis tenuis	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	30.00
237	Rubus hispidus	Herb	FACW	25.00
270	Unidentifiable herb	Herb	NI	5.00
277	Viola spp.	Herb	FAC	10.00
305	Carex scoparia	Herb	FACW	15.00
317	Solidago altissima	Herb	FACU	25.00
412	Aronia arbutifolia	Shrub	FACW	15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: DkB      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-5	silt loam	10 YR 3/1		Fe Conc.
5	too disturbed	for ID		ox.roots, un

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☒ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

Secondary Indicators (2 or more req'd)

☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather:

Recent Rainfall: zero

WETLAND DETERMINATION:      Hydric soils present?      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: best professional judgement that soils developing hydric conditions

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1261      DATE: 06/28/1993      INVESTIGATOR: CMH  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEMIE/PSS  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: wetland along drainageway

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	30.00
117	Carex atlantica	Herb	FACW	40.00
133	Carex stipata	Herb	OBL	20.00
184	Glyceria striata	Herb	OBL	20.00
237	Rubus hispidus	Herb	FACW	40.00
251	Solidago uliginosa	Herb	OBL	50.00
522	Salix nigra	Shrub	FACW+	10.00
523	Salix sericea	Shrub	OBL	30.00
543	Viburnum cassinoides	Shrub	FACW	10.00
559	Viburnum recognitum	Shrub	FACW+	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic			
1-5	organic loam	10 YR 3/1	none	undecomposed veg
5-12	clay	N 61	none	Mn Conc., moist

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall: none in 2 weeks

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1262      DATE: 06/29/1993      INVESTIGATOR: CMH  
 COUNTY: Tucker      STATE: VA      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					85.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		90.00
124	Carex folliculata	Herb	NI		5.00
129	Carex lurida	Herb	OBL		20.00
133	Carex stipata	Herb	OBL		10.00
166	Eleocharis tenuis	Herb	FACW		20.00
184	Glyceria striata	Herb	OBL		15.00
237	Rubus hispidus	Herb	FACW		50.00
251	Solidago uliginosa	Herb	OBL		20.00
268	Typha latifolia	Herb	OBL		15.00
305	Carex scoparia	Herb	FACW		20.00
313	Agrostis perennans	Herb	FACU		90.00
453	Hypericum prolificum	Shrub	FACU		25.00
523	Salix sericea	Shrub	OBL		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: DkB      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic	10 YR 2/1		
1-6	clay	10 YR 5/1	none	fem,conc.
6-12	clay	5 Y 7/1	10 YR 7/8	(5%)fem,conc.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 2.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather:
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: June 2.24",
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met - hydric soil indicators present

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1263 DATE: 06/30/1993 INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker STATE: WV STREAM: trib. Pendleton WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: wetland along man-made drainage

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	90.00
117	Carex atlantica	Herb	FACW	60.00
184	Glyceria striata	Herb	OBL	50.00
185	Holcus lanatus	Herb	FACU	15.00
189	Impatiens capensis	Herb	FACW	70.00
237	Rubus hispidus	Herb	FACW	60.00
297	Carex gynandra	Herb	NI	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments	Hydric Soil? yes
0-4	organic muck	10 YR 2/1		saturated	
4-10	organic loam	10 YR 3/1		saturated	
10-14		5 Y 6/2		saturated	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: below aver. for June
<input type="checkbox"/> Other	Recent Rainfall: heavy rain last day

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1264 DATE: 06/30/1993 INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker STATE: WV STREAM: trib. Pendleton WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: man-made ditches in mine reclamation area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					80.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		50.00
117	Carex atlantica	Herb	FACW		50.00
180	Galium tinctorium	Herb	OBL		30.00
184	Glyceria striata	Herb	OBL		10.00
189	Impatiens capensis	Herb	FACW		25.00
235	Rhynchospora capitellata	Herb	OBL		70.00
237	Rubus hispidus	Herb	FACW		20.00
251	Solidago uliginosa	Herb	OBL		30.00
297	Carex gynandra	Herb	NI		10.00
					50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrB					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-3	organic		none	saturated	
3-10	org. sandy loam	10 YR 2/2	none	saturated	
10-below	sandy clay	5 GY 6/1	none	saturated	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1265A      DATE: 07/01/1993      INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: area appears to be old strip mine area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      86.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
117	Carex atlantica	Herb	FACW	75.00
184	Glyceria striata	Herb	OBL	15.00
237	Rubus hispidus	Herb	FACW	25.00
251	Solidago uliginosa	Herb	OBL	20.00
297	Carex gynandra	Herb	NI	30.00
523	Salix sericea	Shrub	OBL	15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErC      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	org.muck/mat.	10 YR 2/2		
3-5	sandy clay	10 YR 5/	none	Mn,Fe Conc.
5-12	sandy	2.5 YR 5/2	10 YR 5/8	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: below aver. for June
<input type="checkbox"/> Other	Recent Rainfall: rain in last 2 days

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met - hydric soil indicators present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1265B      DATE: 07/01/1993      INVESTIGATOR: CMH, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM/M1  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: area appears to be old strip mine area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					86.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
-----					
2	Sphagnum sp.	Bryo	NI	100.00	
117	Carex atlantica	Herb	FACW	75.00	
184	Glyceria striata	Herb	OBL	15.00	
237	Rubus hispidus	Herb	FACW	25.00	
251	Solidago uliginosa	Herb	OBL	20.00	
297	Carex gynandra	Herb	NI	30.00	
523	Salix sericea	Shrub	OBL	15.00	
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: Erc-Ernest      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-3	org.muck/matter	10 YR 3/2		
3-5	sandy clay	10 YR 5/	none	Mn,Fe Conc.
5-12	sandy	2.5 YR 5/2	10 YR 5/8	
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	1.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Floodplain		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Depressional		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: below monthly ave.	
		Recent Rainfall: rains w/in last 4day	
-----			

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met, hydric soil indicators present

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1266 DATE: 07/13/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: wetland area surrounded by reclaimed and existing strip mined

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  
 Code Scientific Name Stratum Status % Areal Cover

Code	Scientific Name	Stratum	Status	% Areal Cover
124	Carex folliculata	Herb	NI	50.00
189	Impatiens capensis	Herb	FACW	5.00
195	Juncus effusus	Herb	FACW+	20.00
227	Polygonum sagittatum	Herb	OBL	10.00
249	Solidago rugosa	Herb	FAC	10.00
251	Solidago uliginosa	Herb	OBL	
305	Carex scoparia	Herb	FACW	5.00
312	Glyceria canadensis	Herb	OBL	10.00
316	Calamagrostis canadensis	Herb	FACW	40.00
519	Salix fragilis	Shrub	FAC+	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At, LsA, LdA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic	7.5 YR 2/0		fibrous materia
2-10	silt	10 YR 4/1		ox.roots
10-14	sandy silt	10 YR 4/1		ox.roots
14-18	sandy silt	10 YR 5/2	10 YR 5/6 (30%)	pieces of coal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 4.0 (in.)  
 Depth to Free Water in Pit: 4.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks

☐ Drift Lines

☐ Sediment Deposit

☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12

☒ Water-Stained Leaves

☐ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recent Weather: sunny 80 degrees

Recent Rainfall: unknown

### Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met; tributary flows through the wetland



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1267B DATE: 07/13/1993 INVESTIGATOR: CMH, JMG, ABC, DK  
 COUNTY: Tucker STATE: WV STREAM: Pendleton Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: Mining wetland mitigation.

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
195	Juncus effusus	Herb	FACW+	90.00
221	Phalaris arundinacea	Herb	FACW+	20.00
285	Carex tribuloides	Herb	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: mined land Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Aerial Photographs	Recent Weather: clear hot
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? no Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: hydric soils presumably developing

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1268      DATE: 07/14/1993      INVESTIGATOR: CMH, JMG, ABC, DK  
 COUNTY: Tucker      STATE: WV      STREAM: Pendleton Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/PSS  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: wetland along Pendleton Creek floodplain

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					71.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
1	Polytrichum sp.	Bryo	NI		40.00
2	Sphagnum sp.	Bryo	NI		60.00
124	Carex folliculata	Herb	NI		10.00
195	Juncus effusus	Herb	FACW+		30.00
237	Rubus hispidus	Herb	FACW		20.00
251	Solidago uliginosa	Herb	OBL		15.00
305	Carex scoparia	Herb	FACW		5.00
312	Glyceria canadensis	Herb	OBL		30.00
314	Danthonia compressa	Herb	FACU		20.00
319	Carex emoryi	Herb	OBL		30.00
453	Hypericum prolificum	Shrub	FACU		25.00
526	Spiraea alba	Shrub	FACW+		20.00
543	Viburnum cassinoides	Shrub	FACW		15.00
559	Viburnum recognitum	Shrub	FACW+		20.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: At					Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
1-4	organic			undecomposed org	
4-6	org.silt loam	10 YR 3/1	10 YR 6/8 (40%)	ox.roots	
6/8	silty clay loam	10 YR 3/1	none		
8-12	clay	10 YR 6/1	none	Fe.conc.	
-----					

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 1.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: clear hot
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: none in recent weeks
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1270 DATE: 09/02/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status		% Areal Cover
110	Aster umbellatus	Herb	FACW		10.00
174	Eriophorum virginicum	Herb	OBL		5.00
268	Typha latifolia	Herb	OBL		25.00
297	Carex gynandra	Herb	NI		25.00
378	Tussilago farfara	Herb	FACU		10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: DmE					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-1	organic loam	2.5 Y 3/2		ox.root channels	
1-10	silty clay	5 Y 5/3		ox.root channels	
10-12	sandy clay	5 Y 5/3 (60%)	7.5YR 6/8 (40%)	ox.root channels	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: int.shws/heavy rain
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1271 DATE: 09/02/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	90.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
174	Eriophorum virginicum	Herb	OBL	5.00
182	Gentiana linearis	Herb	OBL	5.00
189	Impatiens capensis	Herb	FACW	5.00
195	Juncus effusus	Herb	FACW+	10.00
219	Osmunda cinnamomea	Herb	FACW	5.00
243	Scirpus atrovirens	Herb	OBL	50.00
251	Solidago uliginosa	Herb	OBL	40.00
270	Unidentifiable herb	Herb	NI	10.00
297	Carex gynandra	Herb	NI	50.00
401	Acer rubrum	Shrub	FAC	5.00
404	Alnus rugosa	Shrub	FACW+	5.00
452	Hypericum densiflorum	Shrub	FAC+	30.00
522	Salix nigra	Shrub	FACW+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErC Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-8 peat muck  
 8-10 depositional m. 10 YR 3/2  
 refusal

## Hydric Soil Indicators:

[X] Histosol [ ] Histic Epipedon  
 [ ] Sulfidic Material [ ] Aquic Moisture Regime  
 [ ] Gleyed [X] Low Chroma  
 [ ] mottles [ ] Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations: Wetland Hydrology Indicators:  
 Depth of Surface Water: 10.0 (in.) Primary Indicators:  
 Depth to Free Water in Pit: 0.0 (in.) [X] Inundated  
 Depth to Saturated Soil: 0.0 (in.) [X] Saturated in Upper 12  
 [ ] Water Marks  
 [ ] Drift Lines  
 Source/Site Characterization: [ ] Sediment Deposit  
 [ ] Seasonal High Water Table [ ] Drainage Patterns in Wetlands  
 [ ] Spring/Seep Secondary Indicators (2 or more req'd)  
 [ ] Floodplain [ ] Oxidized Root Channels/Upper 12  
 [ ] Backwater [ ] Water-Stained Leaves  
 [X] Depressional [ ] Local Soil Survey Data  
 [ ] FAC-Neutral Test  
 Recorded Data (Describe in Remarks): [ ] Other (Explain in Remarks)  
 [ ] Stream, Lake, or Tide Gauge Recent Weather: intermittent rain  
 [ ] Aerial Photographs Recent Rainfall:  
 [ ] Other

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1272      DATE: 09/02/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Beaver Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	20.00
174	Eriophorum virginicum	Herb	OBL	5.00
195	Juncus effusus	Herb	FACW+	15.00
243	Scirpus atrovirens	Herb	OBL	20.00
268	Typha latifolia	Herb	OBL	75.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	peat sphagnum	10 YR 5/1	10 YR 7/8 (20%)	ox.root channel
1-5	sandy clay	10 YR 5/1	10 YR 7/8 (80%)	ox.root channel
5-10	sandy clay	10 YR 5/1	10 YR 7/8 (80%)	ox.root channel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: intermittent showers
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1273      DATE: 09/02/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Beaver Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM/ML1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
2	Sphagnum sp.	Bryo	NI		60.00
129	Carex lurida	Herb	OBL		10.00
195	Juncus effusus	Herb	FACW+		50.00
199	Juncus subcaudatus	Herb	OBL		5.00
219	Osmunda cinnamomea	Herb	FACW		5.00
230	Pteridium aquilinum	Herb	FACU		5.00
237	Rubus hispidus	Herb	FACW		80.00
251	Solidago uliginosa	Herb	OBL		20.00
297	Carex gynandra	Herb	NI		25.00
452	Hypericum densiflorum	Shrub	FAC+		60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-1	organic peat	10 YR 3/3			
1-7	clay	5 Y 5/1		ox.root channel	
7-10	loam	7.5 YR 6/8		ox.root channel	
refusal					

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: intermittent showers
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: heavy rain at times
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1274 DATE: 09/02/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	90.00
153	Dichanthelium clandestinum	Herb	FAC+	10.00
195	Juncus effusus	Herb	FACW+	10.00
230	Pteridium aquilinum	Herb	FACU	5.00
237	Rubus hispidus	Herb	FACW	95.00
243	Scirpus atrovirens	Herb	OBL	10.00
251	Solidago uliginosa	Herb	OBL	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	peat			
3-5	loam	7.5 YR 3/2	7.5YR 5/6 (10%)	
5-12	dry clay	2.5 Y 5/2	7.5YR 6/6 (50%)	
refusal				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: intermittent showers
<input type="checkbox"/> Other	Recent Rainfall: heavy rain at times

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: seasonally saturated, all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1275 DATE: 09/02/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River

COWARDIN CLASSIFICATION: PEM1Bx

Do Normal Circumstances exist on the site? yes

Is the site significantly disturbed (Atypical Situation)? yes

Is the area a potential Problem Area? no

Remarks: surrounded by waste piles & slag, acidmine drainage present

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	95.00
110	Aster umbellatus	Herb	FACW	50.00
174	Eriophorum virginicum	Herb	OBL	50.00
195	Juncus effusus	Herb	FACW+	5.00
199	Juncus subcaudatus	Herb	OBL	90.00
237	Rubus hispidus	Herb	FACW	30.00
251	Solidago uliginosa	Herb	OBL	10.00
297	Carex gynandra	Herb	NI	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	peat sphagnum	7.5 YR 3/2		ox.root channel
1-8	silt loam slag	10 YR 5/1	10 YR 5/8	ox.root channel
8-12	silt slag	5 Y 2.5/1		sulfidic, ox.rt.

## Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol                     | <input type="checkbox"/> Histic Epipedon   |
| <input checked="" type="checkbox"/> Sulfidic Material | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed                       | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles           | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

- ☐ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines

### Source/Site Characterization:

- ☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

#### Secondary Indicators (2 or more req'd)

- ☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

- ☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: intermittent showers  
 Recent Rainfall: heavy at times

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes

Remarks: 3 parameters met, soils mapped as hydric by SCS, field visit indicates Sm soils



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1276      DATE: 09/02/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Beaver Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1Bx  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: site is a swale surrounded by slag/gob piles

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	90.00
110	Aster umbellatus	Herb	FACW	60.00
129	Carex lurida	Herb	OBL	25.00
174	Eriophorum virginicum	Herb	OBL	70.00
195	Juncus effusus	Herb	FACW+	5.00
199	Juncus subcaudatus	Herb	OBL	15.00
237	Rubus hispidus	Herb	FACW	70.00
251	Solidago uliginosa	Herb	OBL	80.00
297	Carex gynandra	Herb	NI	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	peat sphagnum			
3-12	coal slag	N-2		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      0.0 (in.)  
 Depth to Free Water in Pit:      0.0 (in.)  
 Depth to Saturated Soil:      0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: periods of rain  
 Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: 3 parameters met, Soils mapped as Lickdale, field visit indicates SM soils.

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1277 DATE: 09/02/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: soils apparently disturbed

Code	Scientific Name	Stratum	Status	90.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
110	Aster umbellatus	Herb	FACW	5.00
174	Eriophorum virginicum	Herb	OBL	5.00
195	Juncus effusus	Herb	FACW+	10.00
199	Juncus subcaudatus	Herb	OBL	10.00
219	Osmunda cinnamomea	Herb	FACW	10.00
230	Pteridium aquilinum	Herb	FACU	5.00
237	Rubus hispidus	Herb	FACW	80.00
251	Solidago uliginosa	Herb	OBL	90.00
268	Typha latifolia	Herb	OBL	10.00
306	Viburnum recognitum	Herb	FACW	10.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? yes Comments
0-3	peat			
3-5	silty clay	10 YR 4/1	5 YR 5/8 (10%)	ox.root channel
5-10	silty clay	10 YR 6/1	7.5YR 5/8 (30%)	ox.root channel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: periodic rain
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1278 DATE: 09/02/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: bisected by old rail road bed

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
129	Carex lurida	Herb	OBL	10.00
174	Eriophorum virginicum	Herb	OBL	40.00
195	Juncus effusus	Herb	FACW+	20.00
199	Juncus subcaudatus	Herb	OBL	30.00
237	Rubus hispidus	Herb	FACW	75.00
243	Scirpus atrovirens	Herb	OBL	10.00
249	Solidago rugosa	Herb	FAC	20.00
251	Solidago uliginosa	Herb	OBL	90.00
297	Carex gynandra	Herb	NI	75.00
304	Hypericum prolificum	Herb	FACU	15.00
306	Viburnum recognitum	Herb	FACW	30.00
433	Cornus stolonifera	Shrub	FACW+	25.00

Depth	Texture	Matrix Color	Mottle Color (%)	Hydric Soil? yes
0-1	peat silt	7.5 YR 3/2	none	
1-3	silt	10 YR 3/3	none	ox.root ch/org.
3-8	silty clay	5 Y 4/1	none	ox.root ch/org.
8-10	silty clay	7.5 YR 3/0	7.5YR 6/8 (20%)	ox.root channel

Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed             | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: periodic rain
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1279      DATE: 09/02/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Beaver Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					83.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		100.00
129	Carex lurida	Herb	OBL		5.00
174	Eriophorum virginicum	Herb	OBL		80.00
182	Gentiana linearis	Herb	OBL		5.00
195	Juncus effusus	Herb	FACW+		30.00
199	Juncus subcaudatus	Herb	OBL		75.00
237	Rubus hispidus	Herb	FACW		75.00
251	Solidago uliginosa	Herb	OBL		90.00
268	Typha latifolia	Herb	OBL		20.00
297	Carex gynandra	Herb	NI		95.00
433	Cornus stolonifera	Shrub	FACW+		10.00
453	Hypericum prolificum	Shrub	FACU		5.00
522	Salix nigra	Shrub	FACW+		5.00
538	Vaccinium angustifolium	Shrub	FACU		30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA      Hydric Soil? yes  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0-8      sphagnum peat  
 8-10      rock rubble  
 refusal

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: periodic rain
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: organic/peat, all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1280      DATE: 09/02/1993      INVESTIGATOR: EFA, DAK, WJZ  
 COUNTY: Tucker      STATE: WV      STREAM: Beaver Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO4E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				63.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
153	Dichanthelium clandestinum	Herb	FAC+	30.00
219	Osmunda cinnamomea	Herb	FACW	5.00
237	Rubus hispidus	Herb	FACW	95.00
251	Solidago uliginosa	Herb	OBL	50.00
377	Potentilla palustris	Herb	OBL	95.00
453	Hypericum prolificum	Shrub	FACU	5.00
538	Vaccinium angustifolium	Shrub	FACU	75.00
645	Pinus strobus	Tree	FACU	90.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: DkB      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-2	sphagnum			
2-10	silt loam	10 3/1	none	
10-12	silty clay	10 YR 6/2	none	ox.root channel
12-18	silty clay	10 YR 6/2	10 YR 7/8 (50%)	
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	12.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	12.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input type="checkbox"/> Sediment Deposit	
		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Floodplain		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Backwater		<input type="checkbox"/> Local Soil Survey Data	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> FAC-Neutral Test	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Weather: intermittent rain	
<input type="checkbox"/> Aerial Photographs		Recent Rainfall:	
<input type="checkbox"/> Other			
-----			

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1281A DATE: 10/13/1993 INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker STATE: WV STREAM: Lost Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: located near strip mine area/between Rt. 93 and field road

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
237	Rubus hispidus	Herb	FACW	40.00
452	Hypericum densiflorum	Shrub	FAC+	70.00
539	Vaccinium corymbosum	Shrub	FACW	30.00
541	Vaccinium myrtilloides	Shrub	FAC	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA-Lickdale Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	org. & silty clay	10 YR 2/1		oxidized roots
6-10	silty clay	10 YR 5/2	10 YR 48 (10%)	oxidized roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:  
 Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1281B DATE: 10/13/1993 INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker STATE: WV STREAM: Lost Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: located near strip mine area/adjacent to Rt.93 and fieldroad

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	10.00
174	Eriophorum virginicum	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	15.00
237	Rubus hispidus	Herb	FACW	30.00
268	Typha latifolia	Herb	OBL	25.00
312	Glyceria canadensis	Herb	OBL	10.00
452	Hypericum densiflorum	Shrub	FAC+	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA-Lickdale Hydric Soil?				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organics			
1-2	silty clay	10 YR 2/1		
2-5	clay	10 YR 6/2	10 YR 7/8 (25%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather:
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1282 DATE: 10/14/1993 INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: reclaimed strip mine area/dominated by pasture grasses

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  
 Code Scientific Name Stratum Status % Areal Cover

195	Juncus effusus	Herb	FACW+	5.00
268	Typha latifolia	Herb	OBL	95.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-1	organics			
1-6	silty clay	10 YR 6/2		
6	auger refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1283 DATE: 10/14/1993 INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: reclaimed strip mine area-dominated by pasture grasses

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
195	Juncus effusus	Herb	FACW+	50.00
244	Scirpus cyperinus	Herb	FACW+	30.00
268	Typha latifolia	Herb	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organics			
1-6	silty clay	10 YR 6/2	5.5YR 5/8 (10%)	
6"ref.				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather:
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall:
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1285 DATE: 10/20/1993 INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River

COWARDIN CLASSIFICATION: PEM

Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no

Remarks: ACID MINE DRAINAGE APPARENT FLOWING FROM PEM.ACROSS ACCESS ROAD.

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
1	Polytrichum sp.	Bryo	NI	20.00
2	Sphagnum sp.	Bryo	NI	30.00
174	Eriophorum virginicum	Herb	OBL	35.00
195	Juncus effusus	Herb	FACW+	10.00
297	Carex gynandra	Herb	NI	30.00
312	Glyceria canadensis	Herb	OBL	25.00
346	Juncus articulatus	Herb	FACW	10.00
404	Alnus rugosa	Shrub	FACW+	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-12"REF SANDY SILT MUCK 10 YR 2/1

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: RAIN
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: ALL 3 CRITERIA MET

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1286 DATE: 10/20/1993 INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	25.00
174	Eriophorum virginicum	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	15.00
297	Carex gynandra	Herb	NI	10.00
312	Glyceria canadensis	Herb	OBL	20.00
346	Juncus articulatus	Herb	FACW	10.00
452	Hypericum densiflorum	Shrub	FAC+	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3"	ORGANIC			
3-4"	CLAY	10 YR 3/2		
4-12"	CLAY	10 YR 7/1	10 yr 7/8 (10%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

#### Secondary Indicators (2 or more req'd)

☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: RAIN  
 Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: ALL 3 CRITERIA MET

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1287A DATE: 10/20/1993 INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: STRIP MINED AREA

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
2	Sphagnum sp.	Bryo	NI	20.00
195	Juncus effusus	Herb	FACW+	25.00
237	Rubus hispidus	Herb	FACW	10.00
244	Scirpus cyperinus	Herb	FACW+	10.00
268	Typha latifolia	Herb	OBL	10.00
312	Glyceria canadensis	Herb	OBL	10.00
452	Hypericum densiflorum	Shrub	FAC+	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1"	ORGANIC			
1-6"	SILTY CLAY	10 YR 6/1	10 YR 6/8 (5%)	
6-12"	ROCK, COAL FRAG			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: RAIN  
 Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: ALL 3 CRITERIA ARE MET

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1287B DATE: 10/20/1993 INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker STATE: WV STREAM: Beaver Creek WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: STRIP MINED AREA

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
2	Sphagnum sp.	Bryo	NI	20.00
195	Juncus effusus	Herb	FACW+	25.00
237	Rubus hispidus	Herb	FACW	10.00
244	Scirpus cyperinus	Herb	FACW+	10.00
268	Typha latifolia	Herb	OBL	10.00
312	Glyceria canadensis	Herb	OBL	10.00
452	Hypericum densiflorum	Shrub	FAC+	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1"	ORGANIC			
1-6"	SILTY CLAY	10 YR 6/1	10 YR 6/8 (5%)	
6-12"	ROCK, COAL FRAG			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: RAIN
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall:
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: ALL 3 CRITERIA MET

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1288      DATE: 10/20/1993      INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: Beaver Creek      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: STRIP MINED AREA

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					100.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		5.00
174	Eriophorum virginicum	Herb	OBL		10.00
195	Juncus effusus	Herb	FACW+		25.00
244	Scirpus cyperinus	Herb	FACW+		10.00
452	Hypericum densiflorum	Shrub	FAC+		25.00
559	Viburnum recognitum	Shrub	FACW+		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc      Hydric Soil? yes  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments

0-1"	ORGANIC			
1-12"	SILTY CLAY	10 YR 5/2	10 YR 6/8 (5%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      (in.)	Primary Indicators:
Depth to Free Water in Pit:      (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      2.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather:
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: ALL 3 CRITERIA MET

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1289A DATE: 10/12/1993 INVESTIGATOR:  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: depressional area bordered on all sides by large rocks

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	10.00
2	Sphagnum sp.	Bryo	NI	85.00
174	Eriophorum virginicum	Herb	OBL	60.00
195	Juncus effusus	Herb	FACW+	5.00
237	Rubus hispidus	Herb	FACW	25.00
312	Glyceria canadensis	Herb	OBL	10.00
539	Vaccinium corymbosum	Shrub	FACW	20.00
540	Vaccinium macrocarpon	Shrub	OBL	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA-Lickdale Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic			
2-5	clayey silt	10 YR 2/1		
5-8	silt	10 YR 4/2		
8"ref.				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1289B      DATE: 10/13/1993      INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: strip mined area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

1	Polytrichum sp.	Bryo	NI	15.00
237	Rubus hispidus	Herb	FACW	40.00
452	Hypericum densiflorum	Shrub	FAC+	25.00
541	Vaccinium myrtilloides	Shrub	FAC	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA-Lickdale      Hydric Soil? yes  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments

0-6 ref. silty clay      10 YR 3/2

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      0.0 (in.)  
 Depth to Free Water in Pit:      (in.)  
 Depth to Saturated Soil:      2.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:  
 Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1290      DATE: 10/20/1993      INVESTIGATOR: TJS, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSSIE  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: STRIP MINED AREA

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
195	Juncus effusus	Herb	FACW+	10.00
237	Rubus hispidus	Herb	FACW	20.00
452	Hypericum densiflorum	Shrub	FAC+	70.00
541	Vaccinium myrtilloides	Shrub	FAC	15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BSC      Hydric Soil? yes  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0-6"      SILTY CLAY      10 YR 3/1

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 6.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:

Recent Rainfall: HEAVY RAIN

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: ALL 3 CRITERIA MET

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1291 DATE: 10/14/1993 INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker STATE: WV STREAM: pond WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: reclaimed surface mined area

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
2	Sphagnum sp.	Bryo	NI	70.00
174	Eriophorum virginicum	Herb	OBL	20.00
195	Juncus effusus	Herb	FACW+	30.00
237	Rubus hispidus	Herb	FACW	40.00
244	Scirpus cyperinus	Herb	FACW+	30.00
250	Solidago sp.	Herb	NI	20.00
251	Solidago uliginosa	Herb	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LsA-Lickdale Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	sandy loam	10 YR 5/1	none	sat./disturbed
12+	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: overcast
	Recent Rainfall: 2 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1292      DATE: 03/24/1994      INVESTIGATOR: TJS, LDG  
 COUNTY:      STATE:      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?  
 Remarks: reclaimed strip mine

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	15.00
268	Typha latifolia	Herb	OBL	80.00
452	Hypericum densiflorum	Shrub	FAC+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name:      Hydric Soil?

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-10"	silt clay	10 YR 6/2	7.5 YR 6/6	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1299      DATE: 09/02/1993      INVESTIGATOR: MZ, JMD  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: shrubby zone in s.m.rec. area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
-----					
2	Sphagnum sp.	Bryo	NI	50.00	
227	Polygonum sagittatum	Herb	OBL	40.00	
237	Rubus hispidus	Herb	FACW	20.00	
269	Unidentifiable grass	Herb	NI	30.00	
452	Hypericum densiflorum	Shrub	FAC+	60.00	
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-6	organic			saturated
6-12	clay loam	10 YR 3/1	none	sat./ ox.roots
12-18	clay loam	10 YR 6/1	none	
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      (in.)	Primary Indicators:
Depth to Free Water in Pit:    0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather:
	Recent Rainfall:
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WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1301A      DATE: 06/08/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: reclaimed mineland - soils disturbed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					57.00
Code	Scientific Name	Stratum	Status		% Areal Cover
105	Anthoxanthum odoratum	Herb	FACU		20.00
119	Carex bromoides	Herb	FACW		20.00
195	Juncus effusus	Herb	FACW+		30.00
222	Poa palustris	Herb	FACW		20.00
268	Typha latifolia	Herb	OBL		50.00
347	Lespedeza sp.	Herb	NI		20.00
349	Lycopus americanus	Herb	OBL		20.00
358	Veronica scutellata	Herb	OBL		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm StripMine      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
2-6	gravelly silt	2.5 Y 6/2	10 YR 5/8	(10%)ox.roots
6-12	gravel clay loa	10 YR 5/1	7.5YR 4/4	(15%)ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

☐ Drift Lines

☐ Sediment Deposit

☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12

☐ Water-Stained Leaves

☐ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: overcast

Recent Rainfall: 1" last night

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met - even with disturbed soils

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1301B DATE: 06/08/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: reclaimed mineland - soils disturbed

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	30.00
268	Typha latifolia	Herb	OBL	50.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
2-6	gravelly silt	2.5 Y 6/2	10 YR 5/8	(10%) ox.roots
6-12	gravel clay loa	10 YR 5/1	7.5YR 4/4	(15%) ox.roots
12+	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: 1" last night

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met - even with disturbed soils

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1301C DATE: 06/08/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: reclaimed mineland - soils disturbed

Code	Scientific Name	Stratum	Status	57.00 % Areal Cover
195	Juncus effusus	Herb	FACW+	30.00
268	Typha latifolia	Herb	OBL	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm StripMine Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
2-6	gravelly silt	2.5 Y 6/2	10 YR 5/8 (10%)	ox.roots
6-12	gravel clayloam	10 YR 5/1	7.YR 4/4 (15%)	ox.roots
12+	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

#### Sediment Deposit

☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: overcast

Recent Rainfall: 1" last night

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met - even with disturbed soils

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1302A DATE: 06/08/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River

COWARDIN CLASSIFICATION: PEM1E

Do Normal Circumstances exist on the site? yes

Is the site significantly disturbed (Atypical Situation)? yes

Is the area a potential Problem Area? no

Remarks: depression between old mining road and hill side

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	20.00
180	Galium tinctorium	Herb	OBL	20.00
189	Impatiens capensis	Herb	FACW	30.00
222	Poa palustris	Herb	FACW	40.00
227	Polygonum sagittatum	Herb	OBL	20.00
237	Rubus hispidus	Herb	FACW	20.00
250	Solidago sp.	Herb	NI	50.00
297	Carex gynandra	Herb	NI	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm StripMine Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic			
2-8	gravel sandloam	2.5 Y 4/2	10 YR 5/8 (10%)	pieces of coal
8-12	sandy loam	10 YR 4/3	10 YR 5/8 (10%)	coal

## Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed             | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

- ☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

### Source/Site Characterization:

- ☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

#### Drift Lines

#### Sediment Deposit

#### Drainage Patterns in Wetlands

### Secondary Indicators (2 or more req'd)

- ☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

### Recorded Data (Describe in Remarks):

- ☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

#### FAC-Neutral Test

#### Other (Explain in Remarks)

Recent Weather: overcast

Recent Rainfall: 1"

WETLAND DETERMINATION: Hydric soils present? yes  
 Wetland Hydrology? yes

Hydrophytic Vegetation? yes  
 Wetland? yes

Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1302B DATE: 06/08/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: depression between old mining road and hill side

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  
 Code Scientific Name Stratum Status % Areal Cover

268 Typha latifolia Herb OBL 80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm StripMine Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-2 organic  
 2-8 gravel sandloam 2.5 Y 4/2 10 YR 5/8 (10%) peices of coal  
 8-12 sandy loam 10 YR 4/3 10 YR 5/8 (10%) coal

## Hydric Soil Indicators:

[ ] Histosol [ ] Histic Epipedon  
 [ ] Sulfidic Material [ ] Aquic Moisture Regime  
 [ ] Gleyed [X] Low Chroma  
 [X] mottles [ ] Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations: Wetland Hydrology Indicators:  
 Depth of Surface Water: 0.5 (in.) Primary Indicators:  
 Depth to Free Water in Pit: 0.0 (in.) [X] Inundated  
 Depth to Saturated Soil: 0.0 (in.) [X] Saturated in Upper 12  
 [ ] Water Marks  
 [ ] Drift Lines  
 [ ] Sediment Deposit  
 Source/Site Characterization: [ ] Drainage Patterns in Wetlands  
 [ ] Seasonal High Water Table Secondary Indicators (2 or more req'd)  
 [X] Spring/Seep [ ] Oxidized Root Channels/Upper 12  
 [ ] Floodplain [X] Water-Stained Leaves  
 [ ] Backwater [ ] Local Soil Survey Data  
 [X] Depressional [ ] FAC-Neutral Test  
 Recorded Data (Describe in Remarks): [ ] Other (Explain in Remarks)  
 [ ] Stream, Lake, or Tide Gauge Recent Weather: overcast  
 [ ] Aerial Photographs Recent Rainfall: 1"  
 [ ] Other

WETLAND DETERMINATION: Hydric soils present? Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1302C DATE: 06/08/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River

COWARDIN CLASSIFICATION: PEM1E

Do Normal Circumstances exist on the site? yes

Is the site significantly disturbed (Atypical Situation)? yes

Is the area a potential Problem Area? no

Remarks: depression between old mining road and hill side

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	20.00
180	Galium tinctorium	Herb	OBL	20.00
189	Impatiens capensis	Herb	FACW	30.00
222	Poa palustris	Herb	FACW	40.00
227	Polygonum sagittatum	Herb	OBL	20.00
237	Rubus hispidus	Herb	FACW	20.00
250	Solidago sp.	Herb	NI	50.00
297	Carex gynandra	Herb	NI	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm StripMine Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic			
2-8	gravel sandloam	2.5 Y 4/2	10 YR 5/8 (10%)	pieces of coal
8-12	sandy loam	10 YR 4/3	10 YR 5/8 (10%)	coal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: overcast  
 Recent Rainfall: 1"

WETLAND DETERMINATION: Hydric soils present? yes  
 Wetland Hydrology? yes

Hydrophytic Vegetation? yes  
 Wetland? yes

Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1303      DATE: 06/08/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: adjacent to minor access road - minimal disturbances

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      67.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

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1	Polytrichum sp.	Bryo	NI	30.00
124	Carex folliculata	Herb	NI	60.00
166	Eleocharis tenuis	Herb	FACW	30.00
237	Rubus hispidus	Herb	FACW	40.00
250	Solidago sp.	Herb	NI	20.00
269	Unidentifiable grass	Herb	NI	50.00

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SOIL PROFILE: (Minimum 18 inches ) Series Name: NoB      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	sandy silt	N5/	5 YR 5/8 (15%)	ox.roots
6-12	silty clay	10 YR 5/1	7.5YR 5/8 (10%)	

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Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: 1" last night

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WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1304      DATE: 06/08/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: wet area along minor access road - minimal disturbance

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				67.00
Code	Scientific Name	Stratum	Status	% Areal Cover
119	Carex bromoides	Herb	FACW	40.00
166	Eleocharis tenuis	Herb	FACW	50.00
250	Solidago sp.	Herb	NI	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BoB Nolo				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silty clay	10 YR 4/1	7.5YR 4/6	(15%)ox.roots
6-12	clay	7.5 YR 5/2	7.5YR 5/8	(25%)ox.roots
12+	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: 1" last night

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1305 DATE: 06/08/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: soils disturbed by heavy traffic

Code	Scientific Name	Stratum	Status	% Areal Cover
119	Carex bromoides	Herb	FACW	80.00
166	Eleocharis tenuis	Herb	FACW	40.00
227	Polygonum sagittatum	Herb	OBL	60.00
237	Rubus hispidus	Herb	FACW	40.00
243	Scirpus atrovirens	Herb	OBL	10.00
250	Solidago sp.	Herb	NI	30.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
2-4	sandy loam	10 YR 4/1	5 YR 5/8 (10%)	ox.roots
4-8	gravel sandsilt	7.5 YR 4/1	none	ox.roots
8+	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny
	Recent Rainfall: 1" last night

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1306 DATE: 06/09/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: soils significantly disturbed by surface mining

Code	Scientific Name	Stratum	Status	75.00 % Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
165	Eleocharis sp.	Herb	NI	6.00
189	Impatiens capensis	Herb	FACW	30.00
222	Poa palustris	Herb	FACW	30.00
229	Potentilla simplex	Herb	FACU	30.00
250	Solidago sp.	Herb	NI	30.00
274	Viola cucullata	Herb	FACW	40.00
522	Salix nigra	Shrub	FACW+	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm StripMined Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 2-6 silty clay 7.5 YR 7/1 7.5YR 5/8 (15%)ox.roots  
 6-12 clay 5 GY 5/1 7.5YR 5/8 (10%)ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 4.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny  
 Recent Rainfall: 1" 2 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1307A      DATE: 06/09/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Blackwater R.      WATERSHED: Cheat River

COWARDIN CLASSIFICATION: PSS/PEM

Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no

Remarks: new road to coal remediation site being built-changing hydrology

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      80.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	100.00
119	Carex bromoides	Herb	FACW	40.00
250	Solidago sp.	Herb	NI	30.00
452	Hypericum densiflorum	Shrub	FAC+	30.00
523	Salix sericea	Shrub	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ma      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	organic			
3-12	gravelly loam	N2.5/		ox.roots
12+	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: overcast
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: 1" 2 days ago
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1307B DATE: 06/09/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Blackwater RWATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS/PEM

Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: new road to coal remediation site being built-changing hydrology

Code	Scientific Name	Stratum	Status	80.00 % Areal Cover
1	Polytrichum sp.	Bryo	NI	100.00
119	Carex bromoides	Herb	FACW	40.00
250	Solidago sp.	Herb	NI	30.00
452	Hypericum densiflorum	Shrub	FAC+	30.00
523	Salix sericea	Shrub	OBL	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-3	organic			
3-12	gravelly loam	N 2.5/		ox.roots
12+	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: overcast
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: 1" 2 days ago
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1308      DATE: 06/09/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Blackwater      RWATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM/PSS  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: soils disturbed by deposition of coal mining spoil

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				83.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
192	Juncus brevicaudatus	Herb	OBL	50.00
195	Juncus effusus	Herb	FACW+	20.00
200	Juncus tenuis	Herb	FAC-	30.00
268	Typha latifolia	Herb	OBL	20.00
297	Carex gynandra	Herb	NI	20.00
453	Hypericum prolificum	Shrub	FACU	20.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ma				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-6	gravel coarse s N 2.5/		none	
6+	refusal			
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	1.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	(in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	(in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input type="checkbox"/> Floodplain		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: sunny hot	
		Recent Rainfall: 1" 2 days ago	
-----			

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1309 DATE: 06/10/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	20.00
195	Juncus effusus	Herb	FACW+	50.00
247	Senecio aureus	Herb	FACW	30.00
274	Viola cucullata	Herb	FACW	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-8	sandy silt	10 YR 4/1	5 YR 4/6 (15%)	ox.root
8-11	loam	2.5 Y 7/2	10 YR 6/8 (30%)	ox.root
11-13	silt	N 6/	7.5YR 6/8 (10%)	ox.root

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: partly cloudy
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: .5"
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1310      DATE: 06/10/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM/PSS  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: location between 45 degree slope and old rail line

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				83.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
195	Juncus effusus	Herb	FACW+	20.00
222	Poa palustris	Herb	FACW	20.00
247	Senecio aureus	Herb	FACW	40.00
250	Solidago sp.	Herb	NI	40.00
297	Carex gynandra	Herb	NI	20.00
523	Salix sericea	Shrub	OBL	30.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: DaE				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-3	organic			
3-10	gravel siltloam	10 YR 3/1		
10-12	gravelly silt	2.5 Y 7/2	10 YR 6/8 (30%)	
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: .5"
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1311 DATE: 06/10/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Blackwater RWATERSHED: Cheat River

COWARDIN CLASSIFICATION: PEM1E

Do Normal Circumstances exist on the site? no

Is the site significantly disturbed (Atypical Situation)? yes

Is the area a potential Problem Area? no

Remarks: numerous spoil piles from mining plus upper areas have been cut

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 83.00  
 Code Scientific Name Stratum Status % Areal Cover

1	Polytrichum sp.	Bryo	NI	30.00
165	Eleocharis sp.	Herb	NI	50.00
237	Rubus hispidus	Herb	FACW	50.00
247	Senecio aureus	Herb	FACW	20.00
250	Solidago sp.	Herb	NI	20.00
297	Carex gynandra	Herb	NI	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: DaE Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-2	organic			
2-6	loamy silt	10 R 3/1	5 YR 5/8 (25%)	ox.roots
6-12	loamy silt	10 YR 4/1	none	ox.roots]
12-16	fine sandy loam	2.5 Y 5/2	none	saturated

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

☐ Drift Lines

☐ Sediment Deposit

☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12

☐ Water-Stained Leaves

☐ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: partly cloudy

Recent Rainfall: .5" last night

WETLAND DETERMINATION: Hydric soils present? yes

Wetland Hydrology? yes

Hydrophytic Vegetation? yes

Wetland? yes

Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1312A DATE: 06/10/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM/PSS  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: many areas of dumped mine spoil - roadway retains water

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	100.00
105	Anthoxanthum odoratum	Herb	FACU	40.00
195	Juncus effusus	Herb	FACW+	20.00
297	Carex gynandra	Herb	NI	20.00
404	Alnus rugosa	Shrub	FACW+	20.00
453	Hypericum prolificum	Shrub	FACU	60.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments	Hydric Soil? no
0-2	organic				
2-7	sandy loam	5 G4 4/1		ox.roots	
7-12	gravel sandloam	N4/			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.5 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.5 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: .5" last night

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1312B      DATE: 06/10/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM/PSS  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: many areas of dumped mine spoil - roadway retains water

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      67.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
1	Polytrichum sp.	Bryo	NI	100.00
105	Anthoxanthum odoratum	Herb	FACU	40.00
195	Juncus effusus	Herb	FACW+	20.00
297	Carex gynandra	Herb	NI	20.00
404	Alnus rugosa	Shrub	FACW+	20.00
453	Hypericum prolificum	Shrub	FACU	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ma      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-2	organic			
2-7	sandy loam	5 G4 4/1		ox.roots
7-12	gravel sandloam	N4/		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.5 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.5 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: .5" last night

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1313      DATE: 06/10/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: N.F.BlackwaterWATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: floodplain fringe wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
119	Carex bromoides	Herb	FACW	20.00
153	Dichanthelium clandestinum	Herb	FAC+	60.00
297	Carex gynandra	Herb	NI	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-6	sand	10 YR 3/3	none	
6-12	sand	10 YR 3/2	none	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 4.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 2.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: .5" last night

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1320 DATE: 06/08/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1Ex  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area has been strip mined

Code	Scientific Name	Stratum	Status	% Areal Cover
111	Anthyrium felix-femina	Herb	FAC	80.00
133	Carex stipata	Herb	OBL	70.00
189	Impatiens capensis	Herb	FACW	30.00
219	Osmunda cinnamomea	Herb	FACW	20.00
249	Solidago rugosa	Herb	FAC	50.00
250	Solidago sp.	Herb	NI	
274	Viola cucullata	Herb	FACW	40.00
602	Acer rubrum	Tree	FAC	90.00
675	Hamamelis virginiana	Tree	FAC	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty sand clay	7.5 YR 5/0 N-S	none	limited to swale

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: major thunderstorm
<input type="checkbox"/> Other	Recent Rainfall: heavy last night

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland?  
 Remarks: all 3 criteria met; some buttressed roots



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1321A DATE: 03/09/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: Blackwater R. WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM/PSS1  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area has been strip mined

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00  
 Code Scientific Name Stratum Status % Areal Cover

164	Eleocharis rostellata	Herb	OBL	80.00
195	Juncus effusus	Herb	FACW+	20.00
249	Solidago rugosa	Herb	FAC	50.00
268	Typha latifolia	Herb	OBL	50.00
523	Salix sericea	Shrub	OBL	90.00
528	Spiraea tomentosa	Shrub	FACW	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0"-4" muck 10 YR 3/2 muck minetailing  
 4"-6" n-3 rubble/mine ref.  
 6" auger refusal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 10.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1321B DATE: 03/09/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: Blackwater R. WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1Gx/PEMGx  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area has been strip mined

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	50.00
169	Equisetum fluviatile	Herb	OBL	80.00
195	Juncus effusus	Herb	FACW+	20.00
241	Saxifraga pennsylvanica	Herb	OBL	70.00
268	Typha latifolia	Herb	OBL	50.00
523	Salix sericea	Shrub	OBL	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0"-4" muck 10 YR 3/2 muck/minetailing  
 4"-6" n-3 rubble&mine ref.  
 6" auger refusal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 10.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input checked="" type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1321C DATE: 03/09/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1Zx  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area has been strip mined

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	50.00
164	Eleocharis rostellata	Herb	OBL	80.00
169	Equisetum fluviatile	Herb	OBL	80.00
195	Juncus effusus	Herb	FACW+	20.00
241	Saxifraga pennsylvanica	Herb	OBL	70.00
249	Solidago rugosa	Herb	FAC	50.00
268	Typha latifolia	Herb	OBL	50.00
523	Salix sericea	Shrub	OBL	90.00
528	Spiraea tomentosa	Shrub	FACW	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	muck	10 YR 3/2		muck mine tailin
4-6		N-3		rubble mine ref.
6				auger refusal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 10.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather:
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall:
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: beaver lodges present in second open water area

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1321D      DATE: 03/09/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: Blackwater R.      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1G/PEM1Gx  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      yes  
 Remarks: area has been strip mined

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	50.00
169	Equisetum fluviatile	Herb	OBL	80.00
195	Juncus effusus	Herb	FACW+	20.00
241	Saxifraga pennsylvanica	Herb	OBL	70.00
268	Typha latifolia	Herb	OBL	50.00
523	Salix sericea	Shrub	OBL	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0"-4"	muck	10 YR 3/2		muck/minetailing
4"-6"		n-3		rubble&mine ref.
6"				auger refusal

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      10.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1322 DATE: 06/09/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: Blackwater R. WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area has been disturbed due to strip mining activity-not recent

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	90.00
164	Eleocharis rostellata	Herb	OBL	90.00
169	Equisetum fluviatile	Herb	OBL	25.00
195	Juncus effusus	Herb	FACW+	20.00
195	Juncus effusus	Herb	FACW+	80.00
251	Solidago uliginosa	Herb	OBL	40.00
355	Solidago odora	Herb	NI	70.00
523	Salix sericea	Shrub	OBL	20.00
527	Spiraea latifolia	Shrub	FAC+	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-7/8"	clay	10 YR 6/1		verticle streaks

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly sunny, humid
<input type="checkbox"/> Other	Recent Rainfall: heavy rain 2 day ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: area is located in depressional area among stripmine spoil piles 3 parameters m

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1323 DATE: 06/09/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFOlEx  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area has been disturbed due to strip mining activity

Code	Scientific Name	Stratum	Status	% Areal Cover
250	Solidago sp.	Herb	NI	90.00
337	Aster prenanthoides	Herb	FAC	60.00
361	Glyceria sp.	Herb	NI	50.00
602	Acer rubrum	Tree	FAC	20.00
649	Populus grandidentata	Tree	FACU	30.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	clay	2.5 Y 6/2	N/6 (30%)	ox.root channel
12	auger refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met; strip mine area

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1324      DATE: 06/09/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1ex  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      yes  
 Remarks: area has been disturbed due to strip mining activity

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				
Code	Scientific Name	Stratum	Status	% Areal Cover
269	Unidentifiable grass	Herb	NI	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	clay	10 YR 6/1	10 YR 6/8 (50%)	
12	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

☒ Drift Lines

☒ Sediment Deposit

☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: partly sunny humid  
 Recent Rainfall: heavy 2 nights ago

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; area is disturbed from mining

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1325A DATE: 06/09/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1F

Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area has been disturbed due to strip mining activity - not recent

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 67.00  
 Code Scientific Name Stratum Status % Areal Cover

169	Equisetum fluviatile	Herb	OBL	50.00
247	Senecio aureus	Herb	FACW	60.00
249	Solidago rugosa	Herb	FAC	10.00
250	Solidago sp.	Herb	NI	20.00
326	Viola incognita	Herb	FACW	30.00
337	Aster prenanthoides	Herb	FAC	30.00
342	Carex prasina	Herb	OBL	70.00
346	Juncus articulatus	Herb	FACW	50.00
523	Salix sericea	Shrub	OBL	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil?  
 Depth Texture Matrix Color Mottle Color(%) Comments

0-3	muck	N-3		coal rubble
3	auger refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly sunny th.stms
<input type="checkbox"/> Other	Recent Rainfall: heavy 2 nights ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BPJ-soil has been disturbed but sufficient to support hydrophytic vegetation



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1325B      DATE: 06/09/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: Blackwater R.      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F

Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      yes  
 Remarks: area has been disturbed due to strip mining activity, not recent

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
169	Equisetum fluviatile	Herb	OBL	50.00
247	Senecio aureus	Herb	FACW	60.00
249	Solidago rugosa	Herb	FAC	10.00
250	Solidago sp.	Herb	NI	20.00
326	Viola incognita	Herb	FACW	30.00
337	Aster prenanthoides	Herb	FAC	30.00
341	Carex jamesii	Herb	NI	70.00
344	Fragaria vesca	Herb	NI	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? nl				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0"-3"	muck	n-3		coal rubble
3"				auger refusal

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12"
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12"
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: partly sunny/tshwsPM
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: heavy rain 2 day ago
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: BPJ-soil has been disturbed but sufficient to support hydrophytic veg. 3 parameters

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1325C DATE: 06/09/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: Blackwater R. WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1F  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area has been disturbed due to strip mining activity, not recent

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
169	Equisetum fluviatile	Herb	OBL	50.00
247	Senecio aureus	Herb	FACW	60.00
249	Solidago rugosa	Herb	FAC	10.00
250	Solidago sp.	Herb	NI	20.00
326	Viola incognita	Herb	FACW	30.00
337	Aster prenanthoides	Herb	FAC	30.00
341	Carex jamesii	Herb	NI	70.00
344	Fragaria vesca	Herb	NI	50.00
523	Salix sericea	Shrub	OBL	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0"-3"	muck	n-3		coal rubble
3"				auger refusal

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: partly sunny/thshwPM
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: heavy rain 2 day ago
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BPJ-soil has been disturbed but sufficient to support hydrophytic veg. 3 parame

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1326A      DATE: 06/10/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS

Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      yes  
 Remarks: area has been disturbed due to strip mining activity - not recent

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					92.00
Code	Scientific Name	Stratum	Status		% Areal Cover
105	Anthoxanthum odoratum	Herb	FACU		80.00
132	Carex sp.	Herb	FACW		90.00
153	Dichanthelium clandestinum	Herb	FAC+		20.00
166	Eleocharis tenuis	Herb	FACW		30.00
178	Eupatorium perfoliatum	Herb	FACW+		20.00
189	Impatiens capensis	Herb	FACW		40.00
195	Juncus effusus	Herb	FACW+		20.00
247	Senecio aureus	Herb	FACW		70.00
249	Solidago rugosa	Herb	FAC		40.00
250	Solidago sp.	Herb	NI		90.00
268	Typha latifolia	Herb	OBL		20.00
269	Unidentifiable grass	Herb	NI		60.00
326	Viola incognita	Herb	FACW		30.00
357	Urtica dioica	Herb	FACU		40.00
523	Salix sericea	Shrub	OBL		40.00
528	Spiraea tomentosa	Shrub	FACW		40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0-12           N2           mine tailings  
 12      auger refusal

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 5.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☒ Backwater  
☒ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ Other (Explain in Remarks)

Recent Weather: partly sunny humid  
 Recent Rainfall: heavy thstm 3 dayago

WETLAND DETERMINATION: Hydric soils present?      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes

Remarks: wetland soils of coal debris & tailings - saturated to support hydrophytic vege

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1326C DATE: 06/10/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E

Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area has been disturbed due to strip mining activity - not recent

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 65.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
105	Anthoxanthum odoratum	Herb	FACU	90.00
132	Carex sp.	Herb	FACW	20.00
132	Carex sp.	Herb	FACW	90.00
153	Dichanthelium clandestinum	Herb	FAC+	20.00
166	Eleocharis tenuis	Herb	FACW	30.00
178	Eupatorium perfoliatum	Herb	FACW+	20.00
189	Impatiens capensis	Herb	FACW	40.00
195	Juncus effusus	Herb	FACW+	20.00
247	Senecio aureus	Herb	FACW	70.00
249	Solidago rugosa	Herb	FAC	40.00
250	Solidago sp.	Herb	NI	30.00
268	Typha latifolia	Herb	OBL	90.00
269	Unidentifiable grass	Herb	NI	60.00
357	Urtica dioica	Herb	FACU	40.00
520	Salix humilis	Shrub	FACU	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-12 N2 mine tailings  
 12 auger refusal

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 5.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly sunny humid
<input type="checkbox"/> Other	Recent Rainfall: th.stm 3 days ago

WETLAND DETERMINATION: Hydric soils present? Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: wetland soils consist of coal debris & tailings

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1326E      DATE: 06/10/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      yes  
 Remarks: area has been disturbed due to strip mining activity, not recent

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					65.00
Code	Scientific Name	Stratum	Status		% Areal Cover
105	Anthoxanthum odoratum	Herb	FACU		80.00
132	Carex sp.	Herb	FACW		90.00
153	Dichanthelium clandestinum	Herb	FAC+		20.00
166	Eleocharis tenuis	Herb	FACW		30.00
178	Eupatorium perfoliatum	Herb	FACW+		20.00
189	Impatiens capensis	Herb	FACW		40.00
195	Juncus effusus	Herb	FACW+		20.00
247	Senecio aureus	Herb	FACW		70.00
250	Solidago sp.	Herb	NI		90.00
268	Typha latifolia	Herb	OBL		20.00
269	Unidentifiable grass	Herb	NI		60.00
326	Viola incognita	Herb	FACW		30.00
349	Lycopus americanus	Herb	OBL		40.00
353	Solanum dulcamara	Herb	FAC		40.00
528	Spiraea tomentosa	Shrub	FACW		40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0"-12"           n-2           mine tailings  
 12"      auger refusal

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 5.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly sunny/humid
<input type="checkbox"/> Other	Recent Rainfall: thshws over 3 days

WETLAND DETERMINATION:      Hydric soils present?      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: wetland soils consist of coal debris & tailings

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1330A DATE: 06/23/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker STATE: WV STREAM: Middle Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: 2 swales associated with large system 1330

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	25.00
219	Osmunda cinnamomea	Herb	FACW	5.00
249	Solidago rugosa	Herb	FAC	5.00
250	Solidago sp.	Herb	NI	5.00
305	Carex scoparia	Herb	FACW	60.00
453	Hypericum prolificum	Shrub	FACU	50.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	muck	10 YR 3/2	none	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: -2.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: heavy rain on  
 Recent Rainfall: monday 80 degrees

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met; swales feed large wetland system 1330

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1330B      DATE: 06/23/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: Middle Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: 2 swales associated with large system 1330

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					67.00
Code	Scientific Name	Stratum	Status		% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+		25.00
205	Lycopodium clavatum	Herb	FAC		
219	Osmunda cinnamomea	Herb	FACW		5.00
249	Solidago rugosa	Herb	FAC		5.00
250	Solidago sp.	Herb	NI		5.00
453	Hypericum prolificum	Shrub	FACU		50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0"-12"	muck	10 YR 3/2	none	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: -2.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: heavy rain
<input type="checkbox"/> Other	Recent Rainfall: monday

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met, swales feed large wetland system 1330

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1331      DATE: 06/23/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: Middle Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM2E

Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: vernal pond with floating mat of leaf litter

Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
153	Dichanthelium clandestinum	Herb	FAC+	5.00
269	Unidentifiable grass	Herb	NI	100.00
275	Viola pallens	Herb	OBL	5.00
318	Anemone quinquefolia	Herb	FACU	25.00
365	Juncus biflorus	Herb	FACW	5.00
-----				

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
-----				
0-10	muck			leaf mat
0-10	silty-clay	10 YR 6/2	10 YR 6/8	
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input type="checkbox"/> Sediment Deposit	
		<input type="checkbox"/> Drainage Patterns in Wetlands	
		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Floodplain		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Backwater		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Local Soil Survey Data	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Aerial Photographs		Recent Weather:	
<input type="checkbox"/> Other		Recent Rainfall: rain 6/24	
-----			

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1332A      DATE: 06/23/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: Middle Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/ML  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      yes  
 Remarks: wetland fringe around strip mine pond

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				80.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
2	Sphagnum sp.	Bryo	NI	100.00
237	Rubus hispidus	Herb	FACW	10.00
453	Hypericum prolificum	Shrub	FACU	100.00
528	Spiraea tomentosa	Shrub	FACW	100.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-3	sphagnum			saturated
3-6	silty clay	2.5 Y 6/2 (70%)	2.5 Y 6/8 (30%)	shale/coal mix
6	auger refusal			
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	6.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	6.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input type="checkbox"/> Floodplain		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: 90s sunny	
		Recent Rainfall: none	
-----			

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; appears hydrology seasonally present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1332B DATE: 06/23/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker STATE: WV STREAM: Middle Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: shoreline of stripmine pond - previously submerged

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 50.00  
 Code Scientific Name Stratum Status % Areal Cover

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	100.00
195	Juncus effusus	Herb	FACW+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-6 N4 (90%) 2.5 Y 2/4 (10%) degraded shale  
 6 ox.root channel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: 90s sunny
	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: appears hydrology seasonally present-best professional judgement 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1332C DATE: 06/23/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker STATE: WV STREAM: Middle Run WATERSHED:  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
193	Juncus canadensis	Herb	OBL	10.00
269	Unidentifiable grass	Herb	NI	50.00
352	Scirpus atrocinctus	Herb	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silty clay	10 YR 3/3		rock/shale debri
6	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: 90s sunny
	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: appears hydrology is seasonally present - best professional judgement 3 criteri

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1333A DATE: 06/24/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker STATE: WV STREAM: Middle Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: portions of wetland impacted by strip mine activity

Code	Scientific Name	Stratum	Status	% Areal Cover
				86.00
2	Sphagnum sp.	Bryo	NI	40.00
153	Dichanthelium clandestinum	Herb	FAC+	90.00
195	Juncus effusus	Herb	FACW+	25.00
250	Solidago sp.	Herb	NI	10.00
297	Carex gynandra	Herb	NI	25.00
305	Carex scoparia	Herb	FACW	5.00
404	Alnus rugosa	Shrub	FACW+	5.00
522	Salix nigra	Shrub	FACW+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	sphagnum			
1-9	clay	10 YR 4/1 (50%)	10 YR 6/8 (50%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks

### Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

#### ☒ Drift Lines

#### ☒ Sediment Deposit

#### ☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

#### ☐ FAC-Neutral Test

#### ☐ Other (Explain in Remarks)

#### Recent Weather:

#### Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland?

Remarks: all 3 criteria met; drainage channels - beaver dammed drainage - along access r

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1333B      DATE: 06/24/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: Middle Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      yes  
 Remarks: stream channel disturbed by mining activities

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					83.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		10.00
153	Dichanthelium clandestinum	Herb	FAC+		25.00
195	Juncus effusus	Herb	FACW+		10.00
250	Solidago sp.	Herb	NI		10.00
297	Carex gynandra	Herb	NI		25.00
305	Carex scoparia	Herb	FACW		5.00
453	Hypericum prolificum	Shrub	FACU		40.00
522	Salix nigra	Shrub	FACW+		75.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-24	muck	N4		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit

Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:  
 Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; drainage channels & strip mine ponds

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1333C DATE: 06/23/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker STATE: WV STREAM: Middle Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: area hydrologically assoc. with 1333 AB

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	120.00
164	Eleocharis rostellata	Herb	OBL	30.00
195	Juncus effusus	Herb	FACW+	30.00
250	Solidago sp.	Herb	NI	20.00
260	Thalictrum dioicum	Herb	FAC	10.00
305	Carex scoparia	Herb	FACW	10.00
453	Hypericum prolificum	Shrub	FACU	10.00
542	Vaccinium oxycoccos	Shrub	OBL	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	sphagnym/peat			saturated
12	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? no Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met; soils - peat/sphagnum

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1334 DATE: 06/23/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker STATE: WV STREAM: Middle Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
250	Solidago sp.	Herb	NI	10.00
251	Solidago uliginosa	Herb	OBL	5.00
268	Typha latifolia	Herb	OBL	10.00
305	Carex scoparia	Herb	FACW	10.00
602	Acer rubrum	Tree	FAC	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-12 Sphagnum

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☒ Other (Explain in Remarks)

Recent Weather: hot  
 Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? no

Wetland Hydrology? yes

Remarks: all 3 criteria met; sphagnum/peat mat

Hydrophytic Vegetation? yes

Wetland? yes

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1335A      DATE: 07/07/1993      INVESTIGATOR: EFA, DMB, MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
118	Carex baileyi	Herb	OBL	20.00
161	Dryopteris spinulosa	Herb	FAC+	40.00
213	Milium effusum	Herb	NI	40.00
219	Osmunda cinnamomea	Herb	FACW	20.00
277	Viola spp.	Herb	FAC	30.00
608	Betula alleghaniensis	Tree	FAC	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	muck	2.5 Y 3/2	none	
6	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: -2.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: hot dry
<input type="checkbox"/> Other	Recent Rainfall: several days last wk

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1335B      DATE: 07/07/1993      INVESTIGATOR: EFA, DMB, MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	80.00
118	Carex baileyi	Herb	OBL	10.00
161	Dryopteris spinulosa	Herb	FAC+	60.00
213	Milium effusum	Herb	NI	10.00
219	Osmunda cinnamomea	Herb	FACW	20.00
277	Viola spp.	Herb	FAC	30.00
277	Viola spp.	Herb	FAC	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	muck	2.5 Y 3/2	none	
6	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      -2.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1335C      DATE: 07/07/1993      INVESTIGATOR: EFA, DMB, MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO3/4E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      50.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

501	Rhododendron maximum	Shrub	FAC	75.00
669	Tsuga canadensis	Tree	FACU	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc      Hydric Soil? yes  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0-6      muck      2.5 Y 5/2      none  
 6      auger refusal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: -2.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: hot dry

Recent Rainfall: several days last wk

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1336 DATE: 07/08/1993 INVESTIGATOR: EFA, MZ, ABC, DMB  
 COUNTY: Tucker STATE: WV STREAM: Long Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? yes  
 Remarks: strip mine bench-hydersons-disturbed soils-w/vert. streaks & mot

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	50.00
2	Sphagnum sp.	Bryo	NI	5.00
153	Dichanthellium clandestinum	Herb	FAC+	10.00
195	Juncus effusus	Herb	FACW+	5.00
237	Rubus hispidus	Herb	FACW	50.00
243	Scirpus atrovirens	Herb	OBL	30.00
250	Solidago sp.	Herb	NI	5.00
250	Solidago sp.	Herb	NI	20.00
269	Unidentifiable grass	Herb	NI	30.00
305	Carex scoparia	Herb	FACW	5.00
356	Sphenopholis obtusata	Herb	FAC	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-1	leaf litter			
1-4	sandy silt	2.5 Y 5/2	7.5YR 5/6 (30%)	ox.root channel
4-8	gravel sandloam	2.5 Y 4/2	5 YR 4/6 (25%)	ox.root channel
8	auger refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: -1.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1337      DATE: 07/08/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: Long Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      yes  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					86.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		75.00
169	Equisetum fluviatile	Herb	OBL		90.00
195	Juncus effusus	Herb	FACW+		10.00
243	Scirpus atrovirens	Herb	OBL		5.00
250	Solidago sp.	Herb	NI		40.00
250	Solidago sp.	Herb	NI		60.00
297	Carex gynandra	Herb	NI		50.00
305	Carex scoparia	Herb	FACW		5.00
352	Scirpus atrocinctus	Herb	FACW		10.00
453	Hypericum prolificum	Shrub	FACU		5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-6	sandy silt	10 YR 5/2			
6-12	sandy silt	10 YR 3/2	2.5 YR 4/8		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 3.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 3.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather:
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters present - aarea appears disturbed from mining activities

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1338      DATE: 07/08/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: Long Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1F/PEM  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      yes  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				83.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
195	Juncus effusus	Herb	FACW+	5.00
196	Juncus marginatus	Herb	FACW	5.00
199	Juncus subcaudatus	Herb	OBL	5.00
250	Solidago sp.	Herb	NI	5.00
297	Carex gynandra	Herb	NI	90.00
305	Carex scoparia	Herb	FACW	5.00
453	Hypericum prolificum	Shrub	FACU	15.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-6	muck/organic	N4		orange acid mine
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	3.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	3.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	3.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Depressional		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather:	
		Recent Rainfall:	
-----			

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1339A DATE: 07/08/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Long Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1Eb  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: depressionally back water area to the north side of Long Run

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	10.00
199	Juncus subcaudatus	Herb	OBL	65.00
243	Scirpus atrovirens	Herb	OBL	30.00
253	Sparganium chlorocarpum	Herb	OBL	10.00
297	Carex gynandra	Herb	NI	20.00
305	Carex scoparia	Herb	FACW	10.00
351	Potamogeton nodosus	Herb	OBL	20.00
352	Scirpus atrocinctus	Herb	FACW	5.00
355	Solidago odora	Herb	NI	20.00
453	Hypericum prolificum	Shrub	FACU	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic muck			
4-9	silt	N6/		ox.roots
9-16	silty clay	N3/		ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny hot 90's
<input type="checkbox"/> Other	Recent Rainfall: 6 days ago

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1339B DATE: 07/08/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Long Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PF02Eb  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 57.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	30.00
130	Carex projecta	Herb	FACW	25.00
222	Poa palustris	Herb	FACW	10.00
269	Unidentifiable grass	Herb	NI	10.00
275	Viola pallens	Herb	OBL	10.00
297	Carex gynandra	Herb	NI	10.00
669	Tsuga canadensis	Tree	FACU	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Surface MineHydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty sand	10 YR 7/1		ox.roots
3-8	silty sand	10 YR 6/1	10 YR 5/6 (20%)	ox.roots
8-12	silty sand	10 YR 3/1		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1339C DATE: 07/08/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Long Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO5Eb  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 50.00  
 Code Scientific Name Stratum Status % Areal Cover

1	Polytrichum sp.	Bryo	NI	90.00
297	Carex gynandra	Herb	NI	20.00
669	Tsuga canadensis	Tree	FACU	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Surface MineHydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	organic muck			
4-9	silt	N6/	none	ox.roots
9-16	silty clay	N3/	none	ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 2.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 2.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input checked="" type="checkbox"/> Water Marks
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny hot
	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? no  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: recently converted to wetland due to beaver activity, once was hemlock forest



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1339D DATE: 07/08/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Long Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1ab  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 57.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	80.00
196	Juncus marginatus	Herb	FACW	40.00
237	Rubus hispidus	Herb	FACW	30.00
271	Unidentifiable sedge	Herb	NI	40.00
297	Carex gynandra	Herb	NI	20.00
346	Juncus articulatus	Herb	FACW	20.00
453	Hypericum prolificum	Shrub	FACU	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Surface MineHydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty sand	10 YR 7/1		ox.roots
3-8	silty sand	10 YR 6/1	10 YR 5/6 (20%)	ox.roots
8-12	silty sand	10 YR 3/1		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: sunny hot  
 Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1339E DATE: 07/19/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Long Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	50.00 % Areal Cover
250	Solidago sp.	Herb	NI	30.00
297	Carex gynandra	Herb	NI	75.00
305	Carex scoparia	Herb	FACW	20.00
453	Hypericum prolificum	Shrub	FACU	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Surface MineHydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty fine sand	10 YR 7/1	none	ox.roots
3-8	silty fine sand	10 YR 6/1	10 YR 5/6 (20%)	ox.roots
8-12	silty fine sand	10 YR 3/1	none	N/A

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: rainy
<input type="checkbox"/> Other	Recent Rainfall: today

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1339F      DATE: 07/19/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Long Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: soils very disturbed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				40.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
1	Polytrichum sp.	Bryo	NI	100.00
3	Lichen	Bryo	NI	20.00
262	Thelypteris noveboracensis	Herb	FAC	20.00
453	Hypericum prolificum	Shrub	FACU	30.00
541	Vaccinium myrtilloides	Shrub	FAC	80.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Surface MineHydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-4	sand	7.5 YR 4/2	none	highly compacted
4-8	sand	10 YR 5/8	none	highly compacted
8-10	sand	7.5 YR 3/2	10 YR 5/8 (25%)	streaks 10YR 4/1
10-12	sand	10 YR 5/1	10 YR 6/8 (5%)	saturated
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 10.0 (in.)  
 Depth to Saturated Soil: 10.0 (in.)

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: cloudy  
 Recent Rainfall: today

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? no  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: based on presence of moss and saturation, 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1340 DATE: 07/08/1993 INVESTIGATOR: EFA, MZ, ABC, DMB  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: reclaimed strip mine

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	5.00
195	Juncus effusus	Herb	FACW+	5.00
237	Rubus hispidus	Herb	FACW	65.00
243	Scirpus atrovirens	Herb	OBL	90.00
250	Solidago sp.	Herb	NI	5.00
305	Carex scoparia	Herb	FACW	20.00
453	Hypericum prolificum	Shrub	FACU	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	sandy silt	2.5 Y 4/2	5 YR 4/6 (45%)	ox.root channel
4-8	silt	10 YR 4/2	7.5YR 5/6 (20%)	ox.root channel
8-14	clayey silt	2.5 Y 4/2	7.5YR 5/6 (15%)	ox.root channel
14	auger refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 14.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: hot dry  
 Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes  
 Wetland Hydrology? yes

Hydrophytic Vegetation? yes  
 Wetland? yes

Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1341      DATE: 07/08/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Long Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B

Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: rehabilitated surface mined area

Code	Scientific Name	Stratum	Status	% Areal Cover
237	Rubus hispidus	Herb	FACW	80.00
243	Scirpus atrovirens	Herb	OBL	5.00
250	Solidago sp.	Herb	NI	20.00
269	Unidentifiable grass	Herb	NI	30.00
305	Carex scoparia	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: VeD      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	sand	10 YR 3/1	none	ox.roots
1-8	sand	10 YR 2/1	7.5 YR 4/4 (5%)	ox.roots
8-10	gravel slitsand	10 YR 5/2	none	

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1342A DATE: 07/08/1993 INVESTIGATOR: EFA, MZ, ABC, DMB  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: area has been logged in recent past - likely altered vegetation

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	10.00
154	Dichanthelium acuminatum	Herb	FAC	20.00
161	Dryopteris spinulosa	Herb	FAC+	60.00
195	Juncus effusus	Herb	FACW+	40.00
237	Rubus hispidus	Herb	FACW	35.00
243	Scirpus atrovirens	Herb	OBL	30.00
262	Thelypteris noveboracensis	Herb	FAC	30.00
339	Bromus tectorum	Herb	NI	70.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrB Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-10	silty clay	10 YR 6/1	10 YR 6/8	(40%) ox root channel
10-12	clay	10 YR 5/8	10 YR 7/3	
12	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: hot dry
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: none
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: evidence of seasonal high water table or previous inundation-all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1342B DATE: 07/08/1993 INVESTIGATOR: EFA, MZ, ABC, DMB  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS3E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: adjacent area 1342A has been logged-but no apparent disturbance

Code	Scientific Name	Stratum	Status	% Areal Cover
501	Rhododendron maximum	Shrub	FAC	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrB Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	loamy sand	10 YR 2/1	none	
2-6	loamy sand	10 YR 4/1	none	streaks 10YR 2/1
6-7	sand	10 YR 8/1	none	fragipan
7	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 4.0 (in.)  
 Depth to Saturated Soil: 4.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny hot  
 Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1343      DATE: 07/09/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: Long Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1F/PSS  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: surface mined area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					60.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
195	Juncus effusus	Herb	FACW+	5.00	
243	Scirpus atrovirens	Herb	OBL	100.00	
269	Unidentifiable grass	Herb	NI	5.00	
305	Carex scoparia	Herb	FACW	80.00	
453	Hypericum prolificum	Shrub	FACU	5.00	

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	silty clay	10 YR 5/1	10 YR 6/8 (10%)	ox.root channel
2-6	silty clay	10 YR 3/1	10 YR 7/8 (10%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 3.0 (in.)  
 Depth to Free Water in Pit: 3.0 (in.)  
 Depth to Saturated Soil: 3.0 (in.)

Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☒ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters present



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1344      DATE: 07/20/1993      INVESTIGATOR: MZ, ABC, EFA  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1A/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: area logged-overstory eliminated and soils are compacted

Code	Scientific Name	Stratum	Status	75.00 % Areal Cover
1	Polytrichum sp.	Bryo	NI	40.00
161	Dryopteris spinulosa	Herb	FAC+	20.00
243	Scirpus atrovirens	Herb	OBL	20.00
305	Carex scoparia	Herb	FACW	20.00
339	Bromus tectorum	Herb	NI	50.00
401	Acer rubrum	Shrub	FAC	30.00
487	Prunus serotina	Shrub	FACU	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrB      Hydric Soil?

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silt	10 YR 4/1	none	
3-6	sandy silt	10 YR 6/1	none	
6-12	sandy silt	10 YR 6/1	7.5YR 6/8 (25%)	ox.roots
12	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: .3" yesterday

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1345      DATE: 07/20/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: former mined land

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	30.00
222	Poa palustris	Herb	FACW	20.00
243	Scirpus atrovirens	Herb	OBL	60.00
305	Carex scoparia	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Strip Mine      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	clayey silt	10 YR 6/1	10 YR 6/6	(20%) ox.roots
1-8	clayey silt	10 YR 4/1	10 YR 5/6	(15%) saturated
8-12	gravelly loam	10 YR 2/1	10 YR 3/3	(40%)
12	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      0.0 (in.)  
 Depth to Free Water in Pit:      (in.)  
 Depth to Saturated Soil:      8.0 (in.)

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

Secondary Indicators (2 or more req'd)

☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands  
☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)  
 Recent Weather: partly cloudy  
 Recent Rainfall: .3 yesterday

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1346      DATE: 07/20/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: strip mine bench/haul road

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
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				75.00
1	Polytrichum sp.	Bryo	NI	5.00
2	Sphagnum sp.	Bryo	NI	75.00
164	Eleocharis rostellata	Herb	OBL	60.00
243	Scirpus atrovirens	Herb	OBL	25.00
250	Solidago sp.	Herb	NI	75.00
277	Viola spp.	Herb	FAC	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
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0-8      silt coal muck

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      4.0 (in.)  
 Depth to Free Water in Pit:      0.0 (in.)  
 Depth to Saturated Soil:      0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

☐ Drift Lines

☒ Sediment Deposit

☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: partly sunny

Recent Rainfall: brief shower yester.

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1347      DATE: 07/20/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM/POW  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	30.00
230	Pteridium aquilinum	Herb	FACU	5.00
237	Rubus hispidus	Herb	FACW	20.00
243	Scirpus atrovirens	Herb	OBL	30.00
305	Carex scoparia	Herb	FACW	30.00
				5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	coal sand muck			
3-5	silty clay	5 Y 2.5/1		coal frags.
5-12	coal sand muck			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 5.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly sunny
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
                                  Wetland Hydrology? yes      Wetland? yes  
 Remarks:

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1348      DATE: 07/20/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: strip mine bench

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
1	Polytrichum sp.	Bryo	NI	20.00
195	Juncus effusus	Herb	FACW+	5.00
200	Juncus tenuis	Herb	FAC-	5.00
243	Scirpus atrovirens	Herb	OBL	80.00
269	Unidentifiable grass	Herb	NI	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	silty clay	5 Y 2.5/1		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly sunny
<input type="checkbox"/> Other	Recent Rainfall: brief shower, mon.

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes

Remarks:

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1349      DATE: 07/22/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1C  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: area has been farmed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
164	Eleocharis rostellata	Herb	OBL	25.00
176	Eupatoriadelphus maculatus	Herb	FACW	5.00
195	Juncus effusus	Herb	FACW+	30.00
243	Scirpus atrovirens	Herb	OBL	60.00
250	Solidago sp.	Herb	NI	5.00
269	Unidentifiable grass	Herb	NI	80.00
342	Carex prasina	Herb	OBL	15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BnB      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	muck	10 YR 2/1		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1351      DATE: 07/20/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: area of spoil piles from surface mining - soils mixed

Code	Percent Dominant Species that are OBL, FACW or FAC	100.00
Code	Scientific Name	% Areal Cover
1	Polytrichum sp.	50.00
3	Lichen	50.00
165	Eleocharis sp.	20.00
196	Juncus marginatus	20.00
297	Carex gynandra	50.00
348	Ludwigia alternifolia	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Surface MineHydric Soil? no  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0-10      gravel clayloam 5 Y 4/2      10 YR 4/6 (10%)ox.roots  
 10      refusal

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: partly cloudy
	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1352 DATE: 07/21/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Tub Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PF01A

Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: nice undisturbed forested fringe wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
161	Dryopteris spinulosa	Herb	FAC+	90.00
602	Acer rubrum	Tree	FAC	20.00
608	Betula alleghaniensis	Tree	FAC	50.00
651	Prunus serotina	Tree	FACU	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 4-6 sandy loam 10 YR 3/1 10 YR 6/6 (15%)ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: 2 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1353      DATE: 07/21/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: old roadway catches surface water-overgrown veg.-manmade soils

Code	Percent Dominant Species that are OBL, FACW or FAC	Scientific Name	Stratum	Status	% Areal Cover
161		Dryopteris spinulosa	Herb	FAC+	50.00
189		Impatiens capensis	Herb	FACW	20.00
195		Juncus effusus	Herb	FACW+	20.00
227		Polygonum sagittatum	Herb	OBL	50.00
269		Unidentifiable grass	Herb	NI	20.00
270		Unidentifiable herb	Herb	NI	5.00
313		Agrostis perennans	Herb	FACU	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErC					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-2	gravel sandloam	5 GY 4/1	2.5 Y 5/4 (30%)	saturated	
2-4	gravel sandloam	2.5 Y 5/2	2.5Y 2.5/1 (30%)	ox.roots	
4-8	gravel sandloam	7.5 YR 5/6	2.5Y 6/4 (10%)	ox.roots	
8	refusal				

## Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input type="checkbox"/> Aquic Moisture Regime   |
| <input checked="" type="checkbox"/> Gleyed  | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

## HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.3 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input checked="" type="checkbox"/> Sediment Deposit	
		<input type="checkbox"/> Drainage Patterns in Wetlands	
		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather: partly cloudy	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall:	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1354A      DATE: 07/21/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Big Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1A/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					83.00
Code	Scientific Name	Stratum	Status		% Areal Cover
1	Polytrichum sp.	Bryo	NI		100.00
195	Juncus effusus	Herb	FACW+		20.00
196	Juncus marginatus	Herb	FACW		30.00
237	Rubus hispidus	Herb	FACW		40.00
243	Scirpus atrovirens	Herb	OBL		20.00
352	Scirpus atrocinctus	Herb	FACW		40.00
453	Hypericum prolificum	Shrub	FACU		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-3	silt	5 YR 3/1	5 YR 6/1 (10%)	ox.roots	
3-6	clayey silt	10 YR 7/1	7.5YR 6/6 (20%)	ox.roots	
6-9	gravel claysilt	10 YR 5/1	10 YR 6/8 (40%)	ox.roots	
9-12	gravel claysilt	10 YR 4/1	10 YR 6/6 (10%)	ox.roots	

Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed             | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

- ☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Source/Site Characterization:

- ☒ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Secondary Indicators (2 or more req'd)

- ☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

Recorded Data (Describe in Remarks):

- ☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ Other (Explain in Remarks)  
 Recent Weather: cloudy  
 Recent Rainfall: 2 days ago

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1354B      DATE: 07/21/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Big Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO4A/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					56.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
1	Polytrichum sp.	Bryo	NI		100.00
161	Dryopteris spinulosa	Herb	FAC+		40.00
196	Juncus marginatus	Herb	FACW		20.00
237	Rubus hispidus	Herb	FACW		30.00
453	Hypericum prolificum	Shrub	FACU		40.00
602	Acer rubrum	Tree	FAC		10.00
608	Betula alleghaniensis	Tree	FAC		10.00
651	Prunus serotina	Tree	FACU		10.00
669	Tsuga canadensis	Tree	FACU		80.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-3	silt	5 YR 3/1	5 YR 6/1 (10%)	ox.roots-sat.	
3-6	calyey silt	10 YR 7/1	7.5YR 6/6 (20%)	ox.roots-sat.	
6-9	gravel claysilt	10 YR 5/1	10 YR 6/8 (40%)	ox.roots-sat.	
9-12	gravel claysilt	10 YR 4/1	10 YR 6/6 (10%)	ox.roots-sat.	
-----					

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: 2 days ago
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1354C DATE: 07/21/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Big Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 83.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	100.00
195	Juncus effusus	Herb	FACW+	20.00
196	Juncus marginatus	Herb	FACW	30.00
237	Rubus hispidus	Herb	FACW	40.00
243	Scirpus atrovirens	Herb	OBL	20.00
352	Scirpus atrocinctus	Herb	FACW	40.00
453	Hypericum prolificum	Shrub	FACU	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silt	5 YR 3/1	5 YR 6/1 (10%)	ox.roots
3-6	clayey silt	10 YR 7/1	7.5YR 6/6 (20%)	ox.roots
6-9	gravel claysilt	10 YR 5/1	10 YR 6/8 (40%)	ox.roots
9-12	gravel claysilt	10 YR 4/1	10 YR 6/6 (10%)	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: 2 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1354D      DATE: 07/21/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Big Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO4A/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

Code	Scientific Name	Stratum	Status	56.00 % Areal Cover
1	Polytrichum sp.	Bryo	NI	100.00
161	Dryopteris spinulosa	Herb	FAC+	40.00
196	Juncus marginatus	Herb	FACW	20.00
237	Rubus hispidus	Herb	FACW	30.00
453	Hypericum prolificum	Shrub	FACU	40.00
602	Acer rubrum	Tree	FAC	10.00
608	Betula alleghaniensis	Tree	FAC	10.00
651	Prunus serotina	Tree	FACU	10.00
669	Tsuga canadensis	Tree	FACU	80.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? yes Comments
0-3	silt	5 YR 3/1	5 YR 6/1	(10%)ox.roots sat.
3-6	clayey silt	10 YR 7/1	7.5YR 6/6	(20%)ox.roots sat.
6-9	gravel claysilt	10 YR 5/1	10 YR 6/8	(40%)ox.roots sat.
9-12	gravel claysilt	10 YR 4/1	10 YR 6/6	(10%)ox.roots sat.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: 2 days ago

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1354E      DATE: 07/21/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Big Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO4A/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      56.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	100.00
161	Dryopteris spinulosa	Herb	FAC+	40.00
196	Juncus marginatus	Herb	FACW	20.00
237	Rubus hispidus	Herb	FACW	30.00
453	Hypericum prolificum	Shrub	FACU	40.00
602	Acer rubrum	Tree	FAC	10.00
608	Betula alleghaniensis	Tree	FAC	10.00
651	Prunus serotina	Tree	FACU	10.00
669	Tsuga canadensis	Tree	FACU	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silt	5 YR 3/1	5 YR 6/1 (10%)	ox.roots sat.
3-6	clayey silt	10 YR 7/1	7.5YR 6/6 (20%)	ox.roots sat.
6-9	gravel claysilt	10 YR 5/1	10 YR 6/8 (40%)	ox.roots sat.
9-12	gravel claysilt	10 YR 4/1	10 YR 6/6 (10%)	ox.roots sat.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: cloudy
	Recent Rainfall: 2 days ago

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1354F      DATE: 10/13/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Big Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO5Eb  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: floodplain wetland with standing dead trees, beaver dam

Code	Percent Dominant Species that are OBL, FACW or FAC	Scientific Name	Stratum	Status	% Areal Cover
1		Polytrichum sp.	Bryo	NI	60.00
132		Carex sp.	Herb	FACW	20.00
153		Dichanthelium clandestinum	Herb	FAC+	10.00
169		Equisetum fluviatile	Herb	OBL	50.00
195		Juncus effusus	Herb	FACW+	30.00
237		Rubus hispidus	Herb	FACW	20.00
501		Rhododendron maximum	Shrub	FAC	20.00
534		Tsuga canadensis	Shrub	FACU	20.00
608		Betula alleghaniensis	Tree	FAC	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name:					Hydric Soil?
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-3	sandy loam	10 YR 2/1		ox.roots satura.	
3-6	sandy loam	10 YR 3/2		ox.roots	
6-7	sandy loam	10 YR 5/8		ox.roots	
7-12	sandy loam	2.5 Y 5/2			

Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol          | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material | <input checked="" type="checkbox"/> Aquic Moisture Regime                                      |
| <input type="checkbox"/> Gleyed            | <input checked="" type="checkbox"/> Low Chroma   |
| <input type="checkbox"/> mottles           | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: overcast
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: yesterday
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; trees and shrubs dead

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1354G      DATE: 10/13/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Big Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: cottongrass meadow along Big Run

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00  
 Code      Scientific Name      Stratum      Status      % Areal Cover

1	Polytrichum sp.	Bryo	NI	100.00
174	Eriophorum virginicum	Herb	OBL	20.00
195	Juncus effusus	Herb	FACW+	20.00
196	Juncus marginatus	Herb	FACW	30.00
243	Scirpus atrovirens	Herb	OBL	20.00
352	Scirpus atrocinctus	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name:      Hydric Soil?

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silt	5 YR 3/1	5 YR 6/1 (10%)	ox.roots, satur.
3-6	clayey silt	10 YR 7/1	7.5YR 6/6 (20%)	ox.roots
6-9	gravel claysilt	10 YR 5/1	10 YR 6/8 (40%)	ox.roots
9-12	gravel claysilt	10 YR 4/1	10 YR 6/6 (10%)	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more req'd)  
☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather:  
 Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1361      DATE: 07/21/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM2E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: ATV trails through area

Code	Scientific Name	Stratum	Status	75.00 % Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	10.00
189	Impatiens capensis	Herb	FACW	90.00
277	Viola spp.	Herb	FAC	90.00
343	Dennstaedtia punctilobula	Herb	NI	2.00
356	Sphenopholis obtusata	Herb	FAC	2.00
507	Rosa multiflora	Shrub	FACU	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name:      Hydric Soil?  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 -----  
 0-12           10 YR 5/2           10 YR 6/6 (10%)ox.root channel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1362A      DATE: 09/20/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Long Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	40.00
237	Rubus hispidus	Herb	FACW	60.00
244	Scirpus cyperinus	Herb	FACW+	20.00
249	Solidago rugosa	Herb	FAC	50.00
452	Hypericum densiflorum	Shrub	FAC+	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	sandy loam	10 YR 3/3	none	ox.roots
2-5	silty loam	10 YR 2/2	none	ox.roots
5-18	sand	10 YR 3/2	none	ox.roots

## Hydric Soil Indicators:

- |  |   |
|--|---|
| <input type="checkbox"/> Histosol          | <input type="checkbox"/> Histic Epipedon  |
| <input type="checkbox"/> Sulfidic Material | <input type="checkbox"/> Aquic Moisture Regime  |
| <input type="checkbox"/> Gleyed            | <input checked="" type="checkbox"/> Low Chroma  |
| <input type="checkbox"/> mottles           | <input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; BPJ indicates soil criteria is met - 37-6-2

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1362B      DATE: 09/20/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Long Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1A  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	40.00
237	Rubus hispidus	Herb	FACW	60.00
244	Scirpus cyperinus	Herb	FACW+	20.00
249	Solidago rugosa	Herb	FAC	50.00
452	Hypericum densiflorum	Shrub	FAC+	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	sandy loam	10 YR 3/3	none	ox.roots
2-5	silty loam	10 YR 2/2	none	ox.roots
5-18	sand	10 YR 3/2	none	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; BPJ indicates soil criteria is met - 37-6-2

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1363A      DATE: 09/20/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Long Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
110	Aster umbellatus	Herb	FACW	20.00
153	Dichanthelium clandestinum	Herb	FAC+	80.00
237	Rubus hispidus	Herb	FACW	40.00
249	Solidago rugosa	Herb	FAC	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	sand	10 YR 5/2	none	concretions-Mg
6-18	sand	10 YR 2/1		ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather:
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1363B DATE: 09/20/1993 INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker STATE: WV STREAM: Long Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
110	Aster umbellatus	Herb	FACW	20.00
153	Dichanthelium clandestinum	Herb	FAC+	80.00
237	Rubus hispidus	Herb	FACW	40.00
249	Solidago rugosa	Herb	FAC	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	sand	10 YR 5/2	none	concretions-MG
6-18	sand	10 YR 2/1		ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather:
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1364 DATE: 09/20/1993 INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker STATE: WV STREAM: Long Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
237	Rubus hispidus	Herb	FACW	80.00
244	Scirpus cyperinus	Herb	FACW+	10.00
452	Hypericum densiflorum	Shrub	FAC+	40.00
539	Vaccinium corymbosum	Shrub	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: VeC Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic/coal sl			
1-3	silty clay	10 YR 4/1	10YR 6/8 (10%)	MG concr, ox.root
3-7	silty clay	10 YR 5/1	10YR 6/6 (50%)	ox.roots
7-18	silty clay	10 YR 4/1	none	ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather:
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1365A      DATE: 09/21/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: high altitude bog with perched water table

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					67.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
1	Polytrichum sp.	Bryo	NI		100.00
2	Sphagnum sp.	Bryo	NI		20.00
174	Eriophorum virginicum	Herb	OBL		80.00
237	Rubus hispidus	Herb	FACW		40.00
315	Vaccinium myrtilloides	Herb	FAC		50.00
539	Vaccinium corymbosum	Shrub	FACW		20.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-1	organic peat	10 YR 2/1		saturated	
1-12	silty clay	10 YR 3/3		none ox.roots,satur.	
-----					

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:
-----	

WETLAND DETERMINATION:	Hydric soils present? yes	Hydrophytic Vegetation? yes
	Wetland Hydrology? yes	Wetland? yes
Remarks: all 3 criteria met		

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1365B DATE: 09/21/1993 INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1B/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: forested edge of perched wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					33.00
Code	Scientific Name	Stratum	Status		% Areal Cover
1	Polytrichum sp.	Bryo	NI		60.00
2	Sphagnum sp.	Bryo	NI		20.00
4	Lycopodium sp.	Bryo	NI		20.00
237	Rubus hispidus	Herb	FACW		40.00
538	Vaccinium angustifolium	Shrub	FACU		30.00
539	Vaccinium corymbosum	Shrub	FACW		20.00
608	Betula alleghaniensis	Tree	FAC		30.00
645	Pinus strobus	Tree	FACU		20.00
669	Tsuga canadensis	Tree	FACU		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic peat	10 YR 2/2		
1-3	silty loam	10 YR 3/2	none	ox.roots,satur.
3-12	sandy clay	10 YR 5/2	10 YR 6/8 (40%)	ox.roots,MG conc

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: cool rain
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: 0.3 last night
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BPJ indicates wetland, based on presence of Sphagnum & Polystrichum & saturatio



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1365C      DATE: 10/01/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: high altitude bog with perched water table

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					67.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
1	Polytrichum sp.	Bryo	NI		100.00
2	Sphagnum sp.	Bryo	NI		20.00
174	Eriophorum virginicum	Herb	OBL		80.00
237	Rubus hispidus	Herb	FACW		40.00
315	Vaccinium myrtilloides	Herb	FAC		20.00
539	Vaccinium corymbosum	Shrub	FACW		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA-Lickdale      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-1	organic peat	10 YR 2/1		saturated
1-12	silty clay	10 YR 3/3	none	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather:
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: I-66-4 DATE: 09/08/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Shenandoah STATE: VA STREAM: near Mulberry RWATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM 1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
100	Acorus calamus	Herb	OBL	90.00
195	Juncus effusus	Herb	FACW+	10.00
269	Unidentifiable grass	Herb	NI	100.00
340	Carex intumescens	Herb	FACW	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Endcav Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6 refusal	silty clay	2.5 Y 5/2	none	ox.root channel

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1365D DATE: 10/11/1993 INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: high altitude bog with perched water table

Code	Scientific Name	Stratum	Status	67.00 % Areal Cover
1	Polytrichum sp.	Bryo	NI	100.00
2	Sphagnum sp.	Bryo	NI	20.00
174	Eriophorum virginicum	Herb	OBL	80.00
237	Rubus hispidus	Herb	FACW	40.00
315	Vaccinium myrtilloides	Herb	FAC	50.00
539	Vaccinium corymbosum	Shrub	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA-Lickdale Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	organic peat	10 YR 2/1		saturated
1-12	silty clay	10 YR 3/3	none	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1370A DATE: 10/11/1993 INVESTIGATOR: MZ, DAK, TJS  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: appears to be old trail

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					86.00
Code	Scientific Name	Stratum	Status		% Areal Cover
1	Polytrichum sp.	Bryo	NI		60.00
2	Sphagnum sp.	Bryo	NI		40.00
174	Eriophorum virginicum	Herb	OBL		40.00
193	Juncus canadensis	Herb	OBL		10.00
195	Juncus effusus	Herb	FACW+		15.00
219	Osmunda cinnamomea	Herb	FACW		10.00
237	Rubus hispidus	Herb	FACW		15.00
462	Kalmia latifolia	Shrub	FACU		5.00
501	Rhododendron maximum	Shrub	FAC		5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)		Comments
0-12	peat	]			
12-13	sand	10 YR 4/1			saturated
13-16	silty clay	10 YR 5/2			saturated
16-24	silty clay	10 YR 3/3			ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	(in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input checked="" type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input type="checkbox"/> Floodplain		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: wet	
		Recent Rainfall:	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1370B      DATE: 10/11/1993      INVESTIGATOR: MZ, DAK, TJS  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1B/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: appears to be an old trail

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	80.00
219	Osmunda cinnamomea	Herb	FACW	50.00
462	Kalmia latifolia	Shrub	FACU	20.00
501	Rhododendron maximum	Shrub	FAC	100.00
602	Acer rubrum	Tree	FAC	30.00
669	Tsuga canadensis	Tree	FACU	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Vb      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	peat			
12-13	sand	10 YR 4/1		saturated
13-16	silty clay	10 YR 5/2		
16-24	silty clay	10 YR 3/3		ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: wet
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1370C DATE: 10/11/1993 INVESTIGATOR: MZ, DAK, TJS  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1B/ML  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: appears to be an old trail

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	80.00
219	Osmunda cinnamomea	Herb	FACW	50.00
462	Kalmia latifolia	Shrub	FACU	20.00
501	Rhododendron maximum	Shrub	FAC	100.00
602	Acer rubrum	Tree	FAC	30.00
669	Tsuga canadensis	Tree	FACU	50.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-12	peat			
12-13	sand	10 YR 4/1		saturated
12-16	silty clay	10 YR 5/2		
16-24	silty clay	10 YR 3/3		ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input checked="" type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: wet
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1371      DATE: 10/13/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: Big Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEMIC/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: floodplain first terrace

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					80.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
1	Polytrichum sp.	Bryo	NI		80.00
153	Dichanthelium clandestinum	Herb	FAC+		50.00
195	Juncus effusus	Herb	FACW+		10.00
244	Scirpus cyperinus	Herb	FACW+		20.00
262	Thelypteris noveboracensis	Herb	FAC		40.00
269	Unidentifiable grass	Herb	NI		20.00
308	Rumex acetosella	Herb	NI		15.00
387	Polygonum aviculare	Herb	FACU		15.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: BSC					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-1	peat	10 YR 3/4			
1-3	sandy loam	10 YR 4/3		ox.roots	
3-6	sandy loam	10 YR 3/1		ox.roots, satur.	
6-12	sandy clay	10 YR 4/2		ox.roots	
-----					

Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol          | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed            | <input checked="" type="checkbox"/> Low Chroma   |
| <input type="checkbox"/> mottles           | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	(in.)	Primary Indicators:	
Depth to Free Water in Pit:	(in.)	<input type="checkbox"/>	Inundated
Depth to Saturated Soil:	6.0 (in.)	<input checked="" type="checkbox"/>	Saturated in Upper 12
		<input type="checkbox"/>	Water Marks
Source/Site Characterization:		<input type="checkbox"/>	Drift Lines
<input type="checkbox"/>	Seasonal High Water Table	<input type="checkbox"/>	Sediment Deposit
<input type="checkbox"/>	Spring/Seep	<input type="checkbox"/>	Drainage Patterns in Wetlands
<input checked="" type="checkbox"/>	Floodplain	Secondary Indicators (2 or more req'd)	
<input type="checkbox"/>	Backwater	<input type="checkbox"/>	Oxidized Root Channels/Upper 12
<input type="checkbox"/>	Depressional	<input type="checkbox"/>	Water-Stained Leaves
		<input type="checkbox"/>	Local Soil Survey Data
Recorded Data (Describe in Remarks):		<input type="checkbox"/>	FAC-Neutral Test
<input type="checkbox"/>	Stream, Lake, or Tide Gauge	<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/>	Aerial Photographs	Recent Weather: rainy	
<input type="checkbox"/>	Other	Recent Rainfall: yesterday	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1372 DATE: 10/13/1993 INVESTIGATOR: MZ, DAK  
COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
COWARDIN CLASSIFICATION: PEM1B/ML  
Do Normal Circumstances exist on the site? yes  
Is the site significantly disturbed (Atypical Situation)? no  
Is the area a potential Problem Area? no  
Remarks: forested wetland, depressional

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	50.00
161	Dryopteris spinulosa	Herb	FAC+	70.00
501	Rhododendron maximum	Shrub	FAC	20.00
602	Acer rubrum	Tree	FAC	30.00
669	Tsuga canadensis	Tree	FACU	70.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bsc Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	peat			
1-3	silty loam	7.5 YR 2/0		ox.roots
3-6	silty clay	10 YR 5/1		ox.roots
6-12	silty clay	10 YR 5/8		10 YR 5/10x.roots, sat.

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: yesterday

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
Wetland Hydrology? yes Wetland? yes  
Remarks: vegetation is marginal, but BPJ suggests saturation for necessary duration



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1373A      DATE: 10/13/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: bog wetland emergent part

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
1	Polytrichum sp.	Bryo	NI	80.00
2	Sphagnum sp.	Bryo	NI	20.00
174	Eriophorum virginicum	Herb	OBL	60.00
192	Juncus brevicaudatus	Herb	OBL	80.00
195	Juncus effusus	Herb	FACW+	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA-Lickdale      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	peat			
18-24	sandy clay	5 Y 4/1		ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: yesterday

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1373B      DATE: 10/13/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO4B/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: bog wetland, forest part

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      75.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	10.00
219	Osmunda cinnamomea	Herb	FACW	20.00
501	Rhododendron maximum	Shrub	FAC	100.00
602	Acer rubrum	Tree	FAC	50.00
669	Tsuga canadensis	Tree	FACU	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: LdA-Lickdale      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	peat			
18-24	sandy clay	5 Y 4/1		ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: 2.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: rain  
 Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes

Wetland Hydrology? yes

Hydrophytic Vegetation? yes

Wetland? yes

Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1374      DATE: 10/13/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/ML  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: power line right of way depression

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	
174	Eriophorum virginicum	Herb	OBL	80.00
195	Juncus effusus	Herb	FACW+	20.00
198	Juncus sp.	Herb	NI	30.00
269	Unidentifiable grass	Herb	NI	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC-Brinkerton Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	peat			saturated
1-3	silty loam	10 YR 2/0	none	ox.roots
3-6	silty clay	10 YR 5/1	none	ox.roots
6-12	silty sand	10 YR 4/2	none	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: yesterday

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1410      DATE: 07/15/1993      INVESTIGATOR: CMH, DMK  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: small wetland along intermittent stream

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	30.00
189	Impatiens capensis	Herb	FACW	40.00
243	Scirpus atrovirens	Herb	OBL	25.00
273	Verbesina alternifolia	Herb	FAC	25.00
282	Leersia virginica	Herb	FACW	50.00
290	Panicum dichotomiflorum	Herb	FACW	10.00
405	Alnus serrulata	Shrub	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	sandy loam	10 YR 4/2	none	saturated
2-6	sandy loam	10 YR 3/2	none	
6-9	silt loam	10 YR 4/2	none	saturated
9-12	silt loam	10 YR 4/3	none	undecomposed

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: clear hot
<input type="checkbox"/> Other	Recent Rainfall: previous night

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1411 DATE: 07/15/1993 INVESTIGATOR: CMH, DMK  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: swale drainage - heavily used by cows in pasture

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 67.00  

Code	Scientific Name	Stratum	Status	% Areal Cover
166	Eleocharis tenuis	Herb	FACW	80.00
195	Juncus effusus	Herb	FACW+	15.00
227	Polygonum sagittatum	Herb	OBL	20.00
239	Sagittaria latifolia	Herb	OBL	20.00
269	Unidentifiable grass	Herb	NI	70.00
271	Unidentifiable sedge	Herb	NI	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: EnC Hydric Soil? nl  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: clear dry for 1month
<input type="checkbox"/> Other	Recent Rainfall: rain previous night

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: +hydric soil determination based on best professional judgement

## ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1412                      DATE: 07/15/1993                      INVESTIGATOR: JMG, ABC  
COUNTY: Tucker                      STATE: WV                      STREAM: unnamed                      WATERSHED: Cheat River  
COWARDIN CLASSIFICATION: PEM1C  
Do Normal Circumstances exist on the site?                      yes  
Is the site significantly disturbed (Atypical Situation)?                      no  
Is the area a potential Problem Area?                      no  
Remarks: the wetland is located within a cow pasture

Code	Scientific Name	Species that are OBL, FACW or FAC	Stratum	Status	% Areal Cover
VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00					

129	Carex lurida	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	10.00
243	Scirpus atrovirens	Herb	OBL	5.00
268	Typha latifolia	Herb	OBL	50.00
293	Leersia oryzoides	Herb	OBL	20.00
320	Vernonia noveboracensis	Herb	FACW	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: EnC Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	loam	10YR 5/1	10YR 5/1	
1-2	loam	10YR 5/1	10YR 5/1	
2-3	loam	10YR 5/1	10YR 5/1	
3-4	loam	10YR 5/1	10YR 5/1	
4-5	loam	10YR 5/1	10YR 5/1	
5-6	loam	10YR 5/1	10YR 5/1	
6-7	loam	10YR 5/1	10YR 5/1	
7-8	loam	10YR 5/1	10YR 5/1	
8-9	loam	10YR 5/1	10YR 5/1	
9-10	loam	10YR 5/1	10YR 5/1	
10-11	loam	10YR 5/1	10YR 5/1	
11-12	loam	10YR 5/1	10YR 5/1	
12-13	loam	10YR 5/1	10YR 5/1	
13-14	loam	10YR 5/1	10YR 5/1	
14-15	loam	10YR 5/1	10YR 5/1	
15-16	loam	10YR 5/1	10YR 5/1	
16-17	loam	10YR 5/1	10YR 5/1	
17-18	loam	10YR 5/1	10YR 5/1	
18-19	loam	10YR 5/1	10YR 5/1	
19-20	loam	10YR 5/1	10YR 5/1	
20-21	loam	10YR 5/1	10YR 5/1	
21-22	loam	10YR 5/1	10YR 5/1	
22-23	loam	10YR 5/1	10YR 5/1	
23-24	loam	10YR 5/1	10YR 5/1	
24-25	loam	10YR 5/1	10YR 5/1	
25-26	loam	10YR 5/1	10YR 5/1	
26-27	loam	10YR 5/1	10YR 5/1	
27-28	loam	10YR 5/1	10YR 5/1	
28-29	loam	10YR 5/1	10YR 5/1	
29-30	loam	10YR 5/1	10YR 5/1	
30-31	loam	10YR 5/1	10YR 5/1	
31-32	loam	10YR 5/1	10YR 5/1	
32-33	loam	10YR 5/1	10YR 5/1	
33-34	loam	10YR 5/1	10YR 5/1	
34-35	loam	10YR 5/1	10YR 5/1	
35-36	loam	10YR 5/1	10YR 5/1	
36-37	loam	10YR 5/1	10YR 5/1	
37-38	loam	10YR 5/1	10YR 5/1	
38-39	loam	10YR 5/1	10YR 5/1	
39-40	loam	10YR 5/1	10YR 5/1	
40-41	loam	10YR 5/1	10YR 5/1	
41-42	loam	10YR 5/1	10YR 5/1	
42-43	loam	10YR 5/1	10YR 5/1	
43-44	loam	10YR 5/1	10YR 5/1	
44-45	loam	10YR 5/1	10YR 5/1	
45-46	loam	10YR 5/1	10YR 5/1	
46-47	loam	10YR 5/1	10YR 5/1	
47-48	loam	10YR 5/1	10YR 5/1	
48-49	loam	10YR 5/1	10YR 5/1	
49-50	loam	10YR 5/1	10YR 5/1	
50-51	loam	10YR 5/1	10YR 5/1	
51-52	loam	10YR 5/1	10YR 5/1	
52-53	loam	10YR 5/1	10YR 5/1	
53-54	loam	10YR 5/1	10YR 5/1	
54-55	loam	10YR 5/1	10YR 5/1	
55-56	loam	10YR 5/1	10YR 5/1	
56-57	loam	10YR 5/1	10YR 5/1	
57-58	loam	10YR 5/1	10YR 5/1	
58-59	loam	10YR 5/1	10YR 5/1	
59-60	loam	10YR 5/1	10YR 5/1	
60-61	loam	10YR 5/1	10YR 5/1	
61-62	loam	10YR 5/1	10YR 5/1	
62-63	loam	10YR 5/1	10YR 5/1	
63-64	loam	10YR 5/1	10YR 5/1	
64-65	loam	10YR 5/1	10YR 5/1	
65-66	loam	10YR 5/1	10YR 5/1	
66-67	loam	10YR 5/1	10YR 5/1	
67-68	loam	10YR 5/1	10YR 5/1	

0-4	silt	2.5 Y 6/2	
4-10	silty clay	5 GY 5/1	Auager refusal

## Hydric Soil Indicators:

```
[ ] Histosol
[ ] Sulfidic Material
[X] Gleyed
[ ] mottles
[ ] Histic Epipedon
[X] Aquic Moisture Regime
[X] Low Chroma
[ ] Entisol (organic context, vertical
streaking, chroma 3, wet spodosol)
```

## HYDROLOGY:

Field Observations:

Depth of Surface Water: 6.0 (in.)  
 Depth to Free Water in Pit: 4.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

## Wetland Hydrology Indicators:

Primary Indicators:

[X] Inundated  
[X] Saturated in Upper 12

[ ] Water Marks

[ ] Drift Lines

[ ] Sediment De

[ ] Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

[X] Oxidized Root Channels/Upper 12

[X] Water-Stained Leaves

```
[ ] Local Soil Survey Data
```

[ ] FAC-Neutral Test

[ ] Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

[ ] Stream, Lake, or Tide Gauge

[ ] Aerial Photographs

☐ Other

Recent Weather: sunny

Recent Rainfall: 7/14

WETLAND DETERMINATION: Hydric soils present? yes

Wetland Hydrology? yes

Hydrophytic Vegetation? yes

Wetland? yes

Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1501A      DATE: 07/15/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E

Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: a tributary flows through wetland, located within a cow pasture

Code	Scientific Name	Stratum	Status	% Areal Cover
100	Acorus calamus	Herb	OBL	40.00
129	Carex lurida	Herb	OBL	10.00
269	Unidentifiable grass	Herb	NI	10.00
320	Vernonia noveboracensis	Herb	FACW	30.00
321	Eupatoriadelphus fistulosus	Herb	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1"	organic	10 YR 3/4		fiber
1-12"	sand	7.5YR 2/0		5 YR 3/4 (15%) ox.roots
12">	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny with clouds
	Recent Rainfall: 0.1" 7/14

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1501B DATE: 07/15/1993 INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River

COWARDIN CLASSIFICATION: PEM1E

Do Normal Circumstances exist on the site? yes

Is the site significantly disturbed (Atypical Situation)? no

Is the area a potential Problem Area? no

Remarks: a tributary flows through wetland, located within a cow pasture

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	30.00
227	Polygonum sagittatum	Herb	OBL	40.00
269	Unidentifiable grass	Herb	NI	10.00
321	Eupatoriadelphus fistulosus	Herb	FACW	20.00
405	Alnus serrulata	Shrub	OBL	100.00
482	Platanus occidentalis	Shrub	FACW	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Atkins siltloamHydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	silty sand	10 YR 3/2	7.5YR 4/4 (20%)	ox.roots
12>				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

- ☒ Inundated
- ☒ Saturated in Upper 12
- ☐ Water Marks
- ☐ Drift Lines
- ☐ Sediment Deposit
- ☐ Drainage Patterns in Wetlands

### Source/Site Characterization:

- ☐ Seasonal High Water Table
- ☒ Spring/Seep
- ☐ Floodplain
- ☐ Backwater
- ☐ Depressional

#### Secondary Indicators (2 or more req'd)

- ☒ Oxidized Root Channels/Upper 12
- ☐ Water-Stained Leaves
- ☐ Local Soil Survey Data
- ☐ FAC-Neutral Test
- ☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

- ☐ Stream, Lake, or Tide Gauge
- ☐ Aerial Photographs
- ☐ Other

Recent Weather: sunny with clouds  
 Recent Rainfall: 0.1" on 7/14/93

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes

Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1502      DATE: 07/15/1993      INVESTIGATOR: JMG, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: a tributary flows through the wetland, wetland is contour defined

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	30.00
139	Carex vulpinoidea	Herb	OBL	30.00
166	Eleocharis tenuis	Herb	FACW	30.00
227	Polygonum sagittatum	Herb	OBL	25.00
269	Unidentifiable grass	Herb	NI	20.00
320	Vernonia noveboracensis	Herb	FACW	30.00

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4"	silty clay loam	N 5/		ox.roots
4-8"	silty clay loam	5 Y 5/1		ox.roots
8-12"	sandy clay loam	5 Y 6/1		ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunn with clouds
<input type="checkbox"/> Other	Recent Rainfall: 0.1" 7/14

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1503 DATE: 08/03/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker STATE: WV STREAM: Pleasant Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1C  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	5.00
189	Impatiens capensis	Herb	FACW	70.00
269	Unidentifiable grass	Herb	NI	80.00
351	Potamogeton nodosus	Herb	OBL	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Alluvial Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	silt loam	10 YR 3/2	none	organic material
1-2	silt loam	10 YR 3/1	none	ox.root/mang cor
2-7	silt clay	5 GY 5/1	10 YR 4/6 (40%)	mottles decrease
7-10	dist.degr.shale			

## Hydric Soil Indicators:

<input type="checkbox"/> Histic Epipedon	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 10.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 10.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: scattered shws sunny
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: .20" August
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1504      DATE: 08/03/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Randolph      STATE: WV      STREAM:      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: recent logging roads caused water to collect

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	30.00
189	Impatiens capensis	Herb	FACW	40.00
243	Scirpus atrovirens	Herb	OBL	90.00
248	Euthamia graminifolia	Herb	FAC	5.00
349	Lycopus americanus	Herb	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: EnC      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-7	silt debris	5 Y 4/2	none	uncons debris
7	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: scattered shws sunny
<input type="checkbox"/> Other	Recent Rainfall: .20" August

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1505      DATE: 08/03/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Randolph      STATE: WV      STREAM:      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: prior conversion for pasture land

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	40.00
164	Eleocharis rostellata	Herb	OBL	75.00
243	Scirpus atrovirens	Herb	OBL	50.00
269	Unidentifiable grass	Herb	NI	40.00
349	Lycopus americanus	Herb	OBL	75.00
350	Polygonum hydropiper	Herb	OBL	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Py      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	silty clay	2.5 Y 5/0	10 YR 4/6	(30%)ox.root/mang con

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: scattered shws/sunny
<input type="checkbox"/> Other	Recent Rainfall: .20" August

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1506A      DATE: 08/24/1993      INVESTIGATOR: ABC, JMG  
 COUNTY: Randolph      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: tributary flows through the wetland area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	20.00
193	Juncus canadensis	Herb	OBL	5.00
195	Juncus effusus	Herb	FACW+	5.00
248	Euthamia graminifolia	Herb	FAC	15.00
249	Solidago rugosa	Herb	FAC	30.00
386	Oxypolis rigidier	Herb	OBL	25.00
405	Alnus serrulata	Shrub	OBL	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name:      Hydric Soil?				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1"	organic	2.5 Y 5/2	7.5YR 5/8	(5%)oxidized
1-12"	VF sand/silt	2.5 Y 5/2	10 YR 5/8	(10%)root channels

Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed             | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	12.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	12.0 (in.)	<input type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input type="checkbox"/> Sediment Deposit	
		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather: sunny 90's	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall:	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1506B DATE: 08/24/1993 INVESTIGATOR: ABC, JMG  
 COUNTY: Randolph STATE: WV STREAM: unnamed WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: a tributary flows through the wetland

Code	Scientific Name	Stratum	Status	% Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	15.00
178	Eupatorium perfoliatum	Herb	FACW+	15.00
189	Impatiens capensis	Herb	FACW	10.00
227	Polygonum sagittatum	Herb	OBL	10.00
282	Leersia virginica	Herb	FACW	20.00
385	Aster puniceus	Herb	OBL	30.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil?
0-4"	organic	10 YR 5/1		oxidized
4-12"	organic silt	10 YR 4/1		root channels

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 2.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny 90
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1506C      DATE: 08/24/1993      INVESTIGATOR: ABC, JMG  
 COUNTY: Randolph      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: tributary flows through the wetland area

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	15.00
178	Eupatorium perfoliatum	Herb	FACW+	15.00
189	Impatiens capensis	Herb	FACW	20.00
227	Polygonum sagittatum	Herb	OBL	10.00
282	Leersia virginica	Herb	FACW	20.00
385	Aster puniceus	Herb	OBL	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name:      Hydric Soil?

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4"	organic	10 YR 5/1		oxidized root
4-12	organic silt	10 YR 4/1		channels

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      2.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: sunny 90
	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1507A      DATE: 08/03/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Randolph      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: appears to be man-made ditch.

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	20.00
132	Carex sp.	Herb	FACW	80.00
153	Dichanthelium clandestinum	Herb	FAC+	5.00
176	Eupatoriadelphus maculatus	Herb	FACW	40.00
178	Eupatorium perfoliatum	Herb	FACW+	20.00
195	Juncus effusus	Herb	FACW+	10.00
237	Rubus hispidus	Herb	FACW	90.00
243	Scirpus atrovirens	Herb	OBL	50.00
248	Euthamia graminifolia	Herb	FAC	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Berks-Weikert      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	silt clay	10 YR 5/1	10 YR 5/8 (30%)	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 2.0 (in.)  
 Depth to Free Water in Pit: -1.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: scattered shws/sunny  
 Recent Rainfall: .20" August

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1507B      DATE: 08/04/1993      INVESTIGATOR: DEA, EFA  
 COUNTY: Randolph      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					77.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
2	Sphagnum sp.	Bryo	NI		5.00
129	Carex lurida	Herb	OBL		5.00
176	Eupatoriadelphus maculatus	Herb	FACW		40.00
189	Impatiens capensis	Herb	FACW		10.00
195	Juncus effusus	Herb	FACW+		5.00
237	Rubus hispidus	Herb	FACW		90.00
245	Scirpus validus	Herb	OBL		5.00
248	Euthamia graminifolia	Herb	FAC		15.00
269	Unidentifiable grass	Herb	NI		5.00
401	Acer rubrum	Shrub	FAC		5.00
404	Alnus rugosa	Shrub	FACW+		90.00
431	Cornus florida	Shrub	FACU-		10.00
453	Hypericum prolificum	Shrub	FACU		75.00
528	Spiraea tomentosa	Shrub	FACW		40.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: Berks-Weikert      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-18	silt loam	2.5 Y 5/2	none	ox.root channel
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 8.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: scatter shws/sunny
<input type="checkbox"/> Other	Recent Rainfall: .20" August
-----	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1507C DATE: 08/04/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Randolph STATE: WV STREAM: unnamed WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E/POW  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 75.00  
 Code Scientific Name Stratum Status % Areal Cover

129	Carex lurida	Herb	OBL	10.00
164	Eleocharis rostellata	Herb	OBL	90.00
197	Juncus scirpoides	Herb	FACW	5.00
347	Lespedeza sp.	Herb	NI	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Berks-Weidert Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	silt loam	10 YR 5/8	none	
2-4	silty clay	2.5 Y 6/2	none	vertical streak
4"	auger refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: scattered shws/sunny
	Recent Rainfall: .20" August

WETLAND DETERMINATION: Hydric soils present? Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1510      DATE: 08/02/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1A/PFO  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					67.00
Code	Scientific Name	Stratum	Status		% Areal Cover
132	Carex sp.	Herb	FACW		75.00
189	Impatiens capensis	Herb	FACW		90.00
227	Polygonum sagittatum	Herb	OBL		90.00
288	Pilea pumila	Herb	FACW		90.00
349	Lycopus americanus	Herb	OBL		5.00
350	Polygonum hydropiper	Herb	OBL		50.00
353	Solanum dulcamara	Herb	FAC		50.00
357	Urtica dioica	Herb	FACU		75.00
610	Betula nigra	Tree	FACW		60.00
636	Liriodendron tulipifera	Tree	FACU		20.00
639	Ostrya virginiana	Tree	FACU-		10.00
669	Tsuga canadensis	Tree	FACU		25.00
675	Hamamelis virginiana	Tree	FAC		5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Aluvial      Hydric Soil? no  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-10	silt loam	10 YR 4/1		
10-12	silt loam	5 Y 4/1		gleyed

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: scattered shws/sunny
<input type="checkbox"/> Other	Recent Rainfall: .20" August

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; periodic flooding-heavy deer browse

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1511 DATE: 08/03/1993 INVESTIGATOR: DAE, EFA  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: area is mowed as pasture

Code	Scientific Name	Stratum	Status	% Areal Cover
100	Acorus calamus	Herb	OBL	90.00
269	Unidentifiable grass	Herb	NI	100.00
336	Arctium minus	Herb	NI	10.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-2	silt loam	10 YR 2/2	none	
2-8	sandy silt	5 Y 4/1	none	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: scattered shws/sunny
<input type="checkbox"/> Other	Recent Rainfall: .20" august

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1602 DATE: 08/05/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Randolph STATE: WV STREAM: WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	88.00 % Areal Cover
126	Carex hystericina	Herb	OBL	75.00
129	Carex lurida	Herb	OBL	90.00
189	Impatiens capensis	Herb	FACW	5.00
219	Osmunda cinnamomea	Herb	FACW	90.00
243	Scirpus atrovirens	Herb	OBL	50.00
305	Carex scoparia	Herb	FACW	5.00
340	Carex intumescens	Herb	FACW	2.00
431	Cornus florida	Shrub	FACU-	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pn Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	silt loam	10 YR 4/2	7.5YR 4/6 (40%)	
2-18	silt clay	2.5 Y 5/0	none	org. material

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: scattered shs/sunny
<input type="checkbox"/> Other	Recent Rainfall: 0.20 " Aug.

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1603 DATE: 08/05/1993 INVESTIGATOR: DAE, EFA  
 COUNTY: Randolph STATE: WV STREAM: WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E/PEM  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	30.00
176	Eupatoriadelphus maculatus	Herb	FACW	30.00
189	Impatiens capensis	Herb	FACW	40.00
404	Alnus rugosa	Shrub	FACW+	60.00
522	Salix nigra	Shrub	FACW+	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Atkins Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	silt loam	10 YR 4/2	no	organic material
2-5	silt loam	10 YR 5/2	no	organic
5-12	sandy silt	10 YR 5/1	no	ox.root channel
12	auger refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: scattered shs/sunny
	Recent Rainfall: 0.20" Aug.

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1604 DATE: 08/17/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph STATE: WV STREAM: WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
132	Carex sp.	Herb	FACW	5.00
189	Impatiens capensis	Herb	FACW	80.00
243	Scirpus atrovirens	Herb	OBL	10.00
251	Solidago uliginosa	Herb	OBL	75.00
277	Viola spp.	Herb	FAC	5.00
277	Viola spp.	Herb	FAC	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pn Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silt muck	5 Y 3/1	none	organic
4-12	silty clay	5 Y 4/1	none	gleyed
12	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: rain/heavy
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1605 DATE: 08/17/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph STATE: WV STREAM: unnamed WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM2E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	2.00
189	Impatiens capensis	Herb	FACW	5.00
219	Osmunda cinnamomea	Herb	FACW	20.00
250	Solidago sp.	Herb	NI	2.00
277	Viola spp.	Herb	FAC	80.00
345	Hydrocotyle americana	Herb	OBL	20.00
349	Lycopus americanus	Herb	OBL	5.00
433	Cornus stolonifera	Shrub	FACW+	
673	Carya glabra	Tree	FACU	

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkF Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	organic			
2-8		5 Y 4/1	7.5YR 4/4 (10%)	
8-		7/5YR 6/8	5 Y 4/2 (5%)	

## Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed             | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

## HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	4.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input checked="" type="checkbox"/> Sediment Deposit	
		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather: rain	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall:	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1607      DATE: 08/17/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: recently clearcut

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	50.00
153	Dichanthelium clandestinum	Herb	FAC+	80.00
189	Impatiens capensis	Herb	FACW	50.00
195	Juncus effusus	Herb	FACW+	10.00
227	Polygonum sagittatum	Herb	OBL	95.00
243	Scirpus atrovirens	Herb	OBL	30.00
244	Scirpus cyperinus	Herb	FACW+	50.00
250	Solidago sp.	Herb	NI	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: EnC      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	muck	10 YR 3/2		Mn concretions

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      2.0 (in.)  
 Depth to Free Water in Pit:      0.0 (in.)  
 Depth to Saturated Soil:      0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: rain  
 Recent Rainfall:

WETLAND DETERMINATION:	Hydric soils present? yes	Hydrophytic Vegetation? yes
	Wetland Hydrology? yes	Wetland? yes
Remarks: all 3 criteria met		

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1608 DATE: 08/17/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph STATE: WV STREAM: unnamed WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: clearcut timber, leaching pond for sewage/manure

Code	Scientific Name	Stratum	Status	% Areal Cover
164	Eleocharis rostellata	Herb	OBL	90.00
189	Impatiens capensis	Herb	FACW	10.00
227	Polygonum sagittatum	Herb	OBL	90.00
243	Scirpus atrovirens	Herb	OBL	10.00
269	Unidentifiable grass	Herb	NI	75.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no
0-4	sandy silt	7.5 YR 4/4		ox.root channel
4-12	clay	5 Y 4/2		ox.root channel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 5.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: rain today
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1609 DATE: 08/17/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph STATE: WV STREAM: unnamed WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: portion of vegetation mowed

Code	Scientific Name	Stratum	Status	88.00 % Areal Cover
129	Carex lurida	Herb	OBL	90.00
195	Juncus effusus	Herb	FACW+	5.00
217	Onoclea sensibilis	Herb	FACW	5.00
237	Rubus hispidus	Herb	FACW	60.00
244	Scirpus cyperinus	Herb	FACW+	15.00
248	Euthamia graminifolia	Herb	FAC	50.00
269	Unidentifiable grass	Herb	NI	90.00
277	Viola spp.	Herb	FAC	90.00
348	Ludwigia alternifolia	Herb	FACW	10.00
453	Hypericum prolificum	Shrub	FACU	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: WeD Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-5 sandy silt 2.5 Y 6/2 7.5YR 5/8 (20%)ox.root channel  
 5-18 clay 2.5 Y 6/2 7.5YR 5/8 (5%)ox.root channel

## Hydric Soil Indicators:

☐ Histosol ☐ Histic Epipedon  
☐ Sulfidic Material ☐ Aquic Moisture Regime  
☐ Gleyed ☒ Low Chroma  
☒ mottles ☐ Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 3.0 (in.)  
 Depth to Saturated Soil: 3.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☒ Drift Lines  
☐ Sediment Deposit

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1610 DATE: 08/17/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph STATE: WV STREAM: Leading Creek WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	5.00
189	Impatiens capensis	Herb	FACW	5.00
217	Onoclea sensibilis	Herb	FACW	90.00
227	Polygonum sagittatum	Herb	OBL	5.00
237	Rubus hispidus	Herb	FACW	100.00
345	Hydrocotyle americana	Herb	OBL	100.00
401	Acer rubrum	Shrub	FAC	100.00
404	Alnus rugosa	Shrub	FACW+	20.00
453	Hypericum prolificum	Shrub	FACU	95.00
				5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: WeD Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-18 silty clay 2.5 Y 4/2 none sulfidic

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: rain today
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1611      DATE: 08/18/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					100.00
Code	Scientific Name	Stratum	Status		% Areal Cover
<hr/>					
129	Carex lurida	Herb	OBL		50.00
153	Dichanthelium clandestinum	Herb	FAC+		30.00
189	Impatiens capensis	Herb	FACW		80.00
195	Juncus effusus	Herb	FACW+		40.00
203	Lobelia cardinalis	Herb	FACW+		5.00
212	Mentha spicata	Herb	FACW+		5.00
243	Scirpus atrovirens	Herb	OBL		20.00
250	Solidago sp.	Herb	NI		15.00
269	Unidentifiable grass	Herb	NI		90.00
333	Polygonum persicaria	Herb	FACW		75.00
<hr/>					

SOIL PROFILE: (Minimum 18 inches ) Series Name: MoB      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
<hr/>				
0-6	silt loam	2.5 Y 4/2	none	ox.root channel
6-18	silt loam	5 Y 3/2	none	faint sulfidic
<hr/>				

Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol                     | <input type="checkbox"/> Histic Epipedon   |
| <input checked="" type="checkbox"/> Sulfidic Material | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed                       | <input checked="" type="checkbox"/> Low Chroma   |
| <input type="checkbox"/> mottles                      | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: hot sunny
<input type="checkbox"/> Other	Recent Rainfall: earlier in week
<hr/>	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1612 DATE: 08/18/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph STATE: WV STREAM: Leading Creek WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: old stream channel now a swale

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	80.00
133	Carex stipata	Herb	OBL	70.00
147	Cuscuta gronovii	Herb	UPL	5.00
178	Eupatorium perfoliatum	Herb	FACW+	10.00
180	Galium tinctorium	Herb	OBL	25.00
189	Impatiens capensis	Herb	FACW	50.00
195	Juncus effusus	Herb	FACW+	15.00
227	Polygonum sagittatum	Herb	OBL	75.00
269	Unidentifiable grass	Herb	NI	90.00
320	Vernonia noveboracensis	Herb	FACW	90.00
345	Hydrocotyle americana	Herb	OBL	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: MoB Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-1 silt loam 10 YR 3/2 none organic  
 1-18 silt loam 5 Y 4/2 7.5YR 4/4 (30%) ox.root channel

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: hot sunny
<input type="checkbox"/> Other	Recent Rainfall: earlier in week

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1613      DATE: 08/18/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					100.00
Code	Scientific Name	Stratum	Status		% Areal Cover
129	Carex lurida	Herb	OBL		50.00
153	Dichanthelium clandestinum	Herb	FAC+		30.00
189	Impatiens capensis	Herb	FACW		80.00
195	Juncus effusus	Herb	FACW+		40.00
203	Lobelia cardinalis	Herb	FACW+		5.00
212	Mentha spicata	Herb	FACW+		5.00
243	Scirpus atrovirens	Herb	OBL		20.00
250	Solidago sp.	Herb	NI		15.00
269	Unidentifiable grass	Herb	NI		90.00
333	Polygonum persicaria	Herb	FACW		75.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: MoB					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-6	silt loam	2.5 Y 4/2	none	ox.root channel	
6-18	silt loam	5 Y 3/2	none	faint sulfidic	

Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol                     | <input type="checkbox"/> Histic Epipedon   |
| <input checked="" type="checkbox"/> Sulfidic Material | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed                       | <input checked="" type="checkbox"/> Low Chroma   |
| <input type="checkbox"/> mottles                      | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: hot sunny
<input type="checkbox"/> Other	Recent Rainfall: earlier in week

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1621 DATE: 08/17/1993 INVESTIGATOR: MZ, DAE  
 COUNTY: Randolph STATE: WV STREAM: Claylick Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: overgrown pasture

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 63.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	80.00
153	Dichanthelium clandestinum	Herb	FAC+	30.00
217	Onoclea sensibilis	Herb	FACW	20.00
225	Polygonum lapathifolium	Herb	FACW	20.00
227	Polygonum sagittatum	Herb	OBL	30.00
279	Asclepias syriaca	Herb	NI	30.00
350	Polygonum hydropiper	Herb	OBL	20.00
370	Calystegia sepium	Herb	FAC-	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	silty clay	10 YR 5/1	none	many ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 18.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy, rainy
<input type="checkbox"/> Other	Recent Rainfall: Aug 1.89"/normal 4.2"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1623      DATE: 08/17/1993      INVESTIGATOR: MZ, DAE  
 COUNTY: Randolph      STATE: WV      STREAM: near Leading Cr      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM/PSS1  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: intermittent channel with small floodplain wetland

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					89.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
214	Mimulus ringens	Herb	OBL		20.00
226	Polygonum pensylvanicum	Herb	FACW		30.00
227	Polygonum sagittatum	Herb	OBL		40.00
244	Scirpus cyperinus	Herb	FACW+		70.00
258	Symplocarpus foetidus	Herb	OBL		30.00
297	Carex gynandra	Herb	NI		40.00
320	Vernonia noveboracensis	Herb	FACW		30.00
433	Cornus stolonifera	Shrub	FACW+		50.00
559	Viburnum recognitum	Shrub	FACW+		20.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: At				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-18	clayey silt	10 YR 5/1	none	ox.roots
-----				

Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol          | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed            | <input checked="" type="checkbox"/> Low Chroma   |
| <input type="checkbox"/> mottles           | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: scattered shws/sunny
<input type="checkbox"/> Other	Recent Rainfall: Aug 1.89"/normal 4.2
-----	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1624 DATE: 08/17/1993 INVESTIGATOR: MZ, DAE  
 COUNTY: Randolph STATE: WV STREAM: near Leading CrWATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: open field areas next to corn field

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
214	Mimulus ringens	Herb	OBL	40.00
227	Polygonum sagittatum	Herb	OBL	40.00
244	Scirpus cyperinus	Herb	FACW+	10.00
285	Carex tribuloides	Herb	FACW	20.00
293	Leersia oryzoides	Herb	OBL	90.00
320	Vernonia noveboracensis	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-9	silty clay	7.5 YR 4/0	7.5YR 5/4 (30%)	ox.roots
9-	silty sandy	10 YR 5/1	7.5YR 4/4 (40%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: cloudy
	Recent Rainfall: Aug 1.89"/normal 4.2

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1625 DATE: 08/18/1993 INVESTIGATOR: MZ, DAE  
 COUNTY: Randolph STATE: WV STREAM: Pearcy Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	50.00
178	Eupatorium perfoliatum	Herb	FACW+	30.00
189	Impatiens capensis	Herb	FACW	20.00
273	Verbesina alternifolia	Herb	FAC	50.00
320	Vernonia noveboracensis	Herb	FACW	20.00
372	Erigeron canadensis	Herb	NI	20.00
404	Alnus rugosa	Shrub	FACW+	40.00
522	Salix nigra	Shrub	FACW+	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	silty clay	10 YR 5/1	none	ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: 12.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: cloudy  
 Recent Rainfall: Aug 1.89"/normal 4.2

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1626 DATE: 08/18/1993 INVESTIGATOR: MZ, DAE  
 COUNTY: Randolph STATE: WV STREAM: Pearcy Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					83.00
Code	Scientific Name	Stratum	Status		% Areal Cover
217	Onoclea sensibilis	Herb	FACW		20.00
247	Senecio aureus	Herb	FACW		30.00
258	Symplocarpus foetidus	Herb	OBL		50.00
261	Thalictrum pubescens	Herb	FACW+		20.00
270	Unidentifiable herb	Herb	NI		30.00
433	Cornus stolonifera	Shrub	FACW+		20.00
464	Lindera benzoin	Shrub	FACW		20.00
473	Nyssa sylvatica	Shrub	FAC		20.00
487	Prunus serotina	Shrub	FACU		20.00
602	Acer rubrum	Tree	FAC		30.00
613	Carpinus caroliniana	Tree	FAC		20.00
616	Carya ovata	Tree	FACU-		30.00
635	Liquidambar styraciflua	Tree	FAC		30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-9 silty clay 10 YR 4/1 none ox.roots  
 9-12 silty clay 10 YR 4/1 7.5YR 4/4 (30%)saturated

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 9.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: Aug 1.89"/normal 4.2

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1627B      DATE: 08/18/1993      INVESTIGATOR: MZ, DAE  
 COUNTY: Randolph      STATE: WV      STREAM: Leading Creek      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: pasture areas not significantly disturbed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					100.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
132	Carex sp.	Herb	FACW	40.00	
176	Eupatoriadelphus maculatus	Herb	FACW	40.00	
189	Impatiens capensis	Herb	FACW	20.00	
273	Verbesina alternifolia	Herb	FAC	30.00	
320	Vernonia noveboracensis	Herb	FACW	30.00	

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkF				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12"	silty clay	10 YR 5/1	10 YR 6/6 (10%)	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 12.0 (in.)  
 Depth to Saturated Soil: 8.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ Other (Explain in Remarks)  
 Recent Weather: partly cloudy  
 Recent Rainfall: Aug 1.89", norm. 4.2"

WETLAND DETERMINATION: Hydric soils present? yes

Wetland Hydrology? yes

Hydrophytic Vegetation? yes

Wetland? yes

Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1627C DATE: 08/18/1993 INVESTIGATOR: MZ, DAE  
 COUNTY: Randolph STATE: WV STREAM: Leading Creek WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture areas not significantly disturbed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	40.00
176	Eupatoriadelphus maculatus	Herb	FACW	40.00
189	Impatiens capensis	Herb	FACW	20.00
273	Verbesina alternifolia	Herb	FAC	30.00
320	Vernonia noveboracensis	Herb	FACW	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkF Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12"	silty clay	10 YR 5/1	10 YR 6/6 (10%)	ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 8.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: Aug 1.89", norm. 4.2"

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1627D      DATE: 08/18/1993      INVESTIGATOR: MZ, DAE  
 COUNTY: Randolph      STATE: WV      STREAM: near Leading CrWATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PFO/PSS1  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					88.00
Code	Scientific Name	Stratum	Status		% Areal Cover
132	Carex sp.	Herb	FACW		30.00
189	Impatiens capensis	Herb	FACW		20.00
217	Onoclea sensibilis	Herb	FACW		20.00
227	Polygonum sagittatum	Herb	OBL		20.00
354	Solidago juncea	Herb	NI		30.00
404	Alnus rugosa	Shrub	FACW+		40.00
559	Viburnum recognitum	Shrub	FACW+		40.00
602	Acer rubrum	Tree	FAC		30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkF      Hydric Soil?  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0-12      silty clay      10 YR 5/1      10YR 6/6 (10%)ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: 12.0 (in.)  
 Depth to Saturated Soil: 8.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: scattered shws/sunny  
 Recent Rainfall: Aug 1.89"/normal 4.2

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes

Remarks:

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1628      DATE: 08/18/1993      INVESTIGATOR: MZ, DAE  
 COUNTY: Randolph      STATE: WV      STREAM: Leading Creek      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM2E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: adjacent logging has not disturbed this area significantly

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
225	Polygonum lapathifolium	Herb	FACW	50.00
375	Peltandra virginica	Herb	OBL	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkF				Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-5	silty clay	10 YR 5/1	10 YR 7/6 (10%)	ox.roots/ sat.
5-18	silty clay	10 YR 5/1	10 YR 6/6 (10%)	concretioius

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: 0.5 in yesterday

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1630 DATE: 09/21/1993 INVESTIGATOR: MZ, DAK  
 COUNTY: Randolph STATE: WV STREAM: WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture-mowed regularly

Code	Scientific Name	Stratum	Status	50.00 % Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	20.00
217	Onoclea sensibilis	Herb	FACW	60.00
270	Unidentifiable herb	Herb	NI	20.00
273	Verbesina alternifolia	Herb	FAC	20.00
379	Anemonella thalictroides	Herb	NI	20.00
383	Setaria faberii	Herb	NI	30.00
384	Viola septentrionalis	Herb	FACU	80.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-4	silty loam	2.5 Y 5/3	none	ox.roots
4-12	silty loam	5 Y 5/3	10 YR 6/8 (30%)	ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 18.0 (in.)  
 Depth to Saturated Soil: 18.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: cool, cloudy  
 Recent Rainfall: 0.5 inch

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; although soils do not meet chroma criteria, hydric soil prese

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1631 DATE: 09/21/1993 INVESTIGATOR: MZ, DAK  
 COUNTY: Randolph STATE: WV STREAM: WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1A  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: pasture-mowed regularly

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	20.00
270	Unidentifiable herb	Herb	NI	20.00
273	Verbesina alternifolia	Herb	FAC	20.00
379	Anemonella thalictroides	Herb	NI	20.00
383	Setaria faberii	Herb	NI	30.00
384	Viola septentrionalis	Herb	FACU	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silty loam	2.5 Y 5/3	none	ox.roots
4-12	silty loam	5 Y 5/3	10 YR 6/8	(30%) ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 10.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 10.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cool, cloudy
<input type="checkbox"/> Other	Recent Rainfall: 0.5 in

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met; although soils don't meet chroma criteria, hydric soils prese

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1632      DATE: 09/21/1993      INVESTIGATOR: MZ, DAK  
 COUNTY: Randolph      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: very wet shrub zone next to POW

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
189	Impatiens capensis	Herb	FACW	30.00
227	Polygonum sagittatum	Herb	OBL	40.00
262	Thelypteris noveboracensis	Herb	FAC	40.00
269	Unidentifiable grass	Herb	NI	20.00
380	Aster nemoralis	Herb	FACW+	20.00
405	Alnus serrulata	Shrub	OBL	50.00
522	Salix nigra	Shrub	FACW+	30.00
544	Viburnum dentatum	Shrub	FAC	30.00
608	Betula alleghaniensis	Tree	FAC	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph      Hydric Soil? no  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0-      silty clay      5 Y 4/1      10 YR 5/8ox. roots, satur.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      0.0 (in.)  
 Depth to Free Water in Pit:      0.0 (in.)  
 Depth to Saturated Soil:      0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1650A DATE: 11/01/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Randolph STATE: WV STREAM: Claylick Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	20.00
244	Scirpus cyperinus	Herb	FACW+	60.00
297	Carex gynandra	Herb	NI	20.00
526	Spiraea alba	Shrub	FACW+	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	ORGANIC			
2-6	SILTY CLAY	N4		OX.ROOTS
6-10	SILTY CLAY	2.5 Y 4/2		OX.ROOTS

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.5 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ Other (Explain in Remarks)  
 Recent Weather: SNOW  
 Recent Rainfall: 4"SNOW

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: ALL 3 CRITERIA MET

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1650B      DATE: 11/01/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Randolph      STATE: WV      STREAM: Claylick Run      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PFO1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					75.00
Code	Scientific Name	Stratum	Status		% Areal Cover
132	Carex sp.	Herb	FACW		10.00
269	Unidentifiable grass	Herb	NI		20.00
433	Cornus stolonifera	Shrub	FACW+		10.00
539	Vaccinium corymbosum	Shrub	FACW		20.00
613	Carpinus caroliniana	Tree	FAC		80.00
661	Quercus rubra	Tree	FACU		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph					Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)		Comments
0-1	CLAYEY SILT	10 YR 4/3			OX.ROOTS
1-2	CLAYEY SILT	10 YR 4/2	10 YR 3/60		OX.ROOTS
2-8	SILT	10 YR 4/3			MG CONCRETIONS

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 11.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: SNOW  
 Recent Rainfall: 4" SNOW

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: ALL 3 CRITERIA MET

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1651A DATE: 11/01/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Randolph STATE: WV STREAM: Claylick Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSSIE  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 67.00  
 Code Scientific Name Stratum Status % Areal Cover

250	Solidago sp.	Herb	NI	20.00
269	Unidentifiable grass	Herb	NI	20.00
524	Sambucus canadensis	Shrub	FACW	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-3 CLAYEY SILT 10 YR 5/3 ORGANIC  
 3-8 CLAYEY SILT 10 YR 5/2 7.5YR 4/6 (25%) OX.ROOTS  
 8-12 CLAYEY SILT 10 YR 5/2 7.5YR 5/8 (25%) MG CONCRETIONS

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: 6.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☒ Other (Explain in Remarks)

Recent Weather: SNOW

Recent Rainfall: 4" SNOW

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: ALL 3 CRITERIA MET

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1651B DATE: 11/01/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Randolph STATE: WV STREAM: Claylick Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
250	Solidago sp.	Herb	NI	20.00
269	Unidentifiable grass	Herb	NI	20.00
388	Rudbeckia triloba	Herb	FACU	20.00
524	Sambucus canadensis	Shrub	FACW	60.00
814	Ampelopsis arborea	Vine	FACW	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? nl	Comments
0-3	clayey silt	10 YR 5/3			organic matter
3-8	clayey silt	10 YR 5/2	7.5YR 4/6 (25%)		ox.roots
8-12	clayey silt	10 YR 5/2	7.5YR 5/8 (25%)		concr.mg

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: snow
	Recent Rainfall: 4" snow

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1651C DATE: 11/01/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Randolph STATE: WV STREAM: Claylick Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
250	Solidago sp.	Herb	NI	20.00
269	Unidentifiable grass	Herb	NI	20.00
388	Rudbeckia triloba	Herb	FACU	20.00
524	Sambucus canadensis	Shrub	FACW	60.00
814	Ampelopsis arborea	Vine	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	clayey silt	10 YR 5/3		organic matter
3-8	clayey silt	10 YR 5/2	7.5YR 4/6 (25%)	ox.roots
8-12	clayey silt	10 YR 5/2	7.5YR 5/8 (25%)	concr.mg

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input checked="" type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: snow
	Recent Rainfall: 4" snow

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1652A DATE: 02/22/1994 INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph STATE: WV STREAM: Lazy Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: area divided into 3 vegetation classifications

Code	Scientific Name	Stratum	Status	% Areal Cover
4	Lycopodium sp.	Bryo	NI	80.00
132	Carex sp.	Herb	FACW	50.00
153	Dichanthelium clandestinum	Herb	FAC+	10.00
237	Rubus hispidus	Herb	FACW	90.00
250	Solidago sp.	Herb	NI	25.00
269	Unidentifiable grass	Herb	NI	100.00
320	Vernonia noveboracensis	Herb	FACW	5.00
391	Andropogon virginicus	Herb	FACU	10.00
507	Rosa multiflora	Shrub	FACU	75.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: EnC Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silty clay/org	2.5 Y 5/2		ox.root channel
4-18	silty clay	5 Gy 5/1	10 YR 5/6 (10%)	ox.root channel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: recent flood/receded

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: this data sheet is PEM portion of 1652; all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1652B      DATE: 02/22/1994      INVESTIGATOR: DAK, EFA  
 COUNTY: Randolph      STATE: WV      STREAM: Lazy Run      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E/PEM  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: area divided into 3 veg classif.

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	5.00
269	Unidentifiable grass	Herb	NI	95.00
404	Alnus rugosa	Shrub	FACW+	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: EnC      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	silty-clay	2.5 Y 5/2	10 YR 5/6	(20%)ox.root channel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Drift Lines	
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input checked="" type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: sunny	
		Recent Rainfall: recent flood/receded	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1652C      DATE: 02/22/1994      INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph      STATE: WV      STREAM: Lazy Run      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E/PFO  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: area has been divided into a,b,c c/o different cowardin classif.

Code	Scientific Name	Stratum	Status	75.00 % Areal Cover
5	Polystichum acrostichoides	Bryo	FACU-	5.00
237	Rubus hispidus	Herb	FACW	90.00
401	Acer rubrum	Shrub	FAC	5.00
404	Alnus rugosa	Shrub	FACW+	50.00
651	Prunus serotina	Tree	FACU	15.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-12	silty clay	2.5 Y 5/2		saturated
12	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: recent flood/receded

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1653 DATE: 02/22/1994 INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph STATE: WV STREAM: Lazy Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1F/PSS  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: stream channel alteration by landowner photos-16,15,14

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	5.00
195	Juncus effusus	Herb	FACW+	5.00
250	Solidago sp.	Herb	NI	90.00
269	Unidentifiable grass	Herb	NI	100.00
320	Vernonia noveboracensis	Herb	FACW	10.00
404	Alnus rugosa	Shrub	FACW+	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: EnC Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silty clay	2.5 Y 4/3	10 YR 4/6 (25%)	ox.root channel
6-12	silty clay	2.5 YR 5/0	10 YR 4/6 (30%)	no ox.root ch.

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 12.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny
	Recent Rainfall: recent flood/receded

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met; old ox bow; cut off from active stream channel

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1654      DATE: 02/22/1994      INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph      STATE: WV      STREAM:      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1F  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: heavy silt load/erosion from paddock upslope.

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      66.00

Code	Scientific Name	Stratum	Status	% Areal Cover
106	Apocynum cannabinum	Herb	FACU	20.00
132	Carex sp.	Herb	FACW	50.00
153	Dichanthelium clandestinum	Herb	FAC+	30.00
176	Eupatoriadelphus maculatus	Herb	FACW	50.00
195	Juncus effusus	Herb	FACW+	50.00
237	Rubus hispidus	Herb	FACW	90.00
250	Solidago sp.	Herb	NI	75.00
269	Unidentifiable grass	Herb	NI	90.00
320	Vernonia noveboracensis	Herb	FACW	50.00
391	Andropogon virginicus	Herb	FACU	20.00
507	Rosa multiflora	Shrub	FACU	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	silt/clay org	2.5 Y 5/2	10 YR 6/8 (5%)	
2-18	silt loam	2.5 Y 5/2	10 YR 6/8 (5%)	no org. debris

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: recent flood/heavy

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1655 DATE: 02/23/1994 INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph STATE: WV STREAM: WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E

Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: heavily eroded swale upslope deposits much sediment into wetland

Code	Scientific Name	Stratum	Status	40.00 % Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	30.00
198	Juncus sp.	Herb	NI	5.00
250	Solidago sp.	Herb	NI	10.00
269	Unidentifiable grass	Herb	NI	75.00
271	Unidentifiable sedge	Herb	NI	30.00
304	Hypericum prolificum	Herb	FACU	75.00
404	Alnus rugosa	Shrub	FACW+	95.00
416	Betula lenta	Shrub	FACU	5.00
507	Rosa multiflora	Shrub	FACU	10.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-3	silt loam	10 YR 4/4	10 YR 6/8 (30%)	ox.root channel
3-8	silt loam	2.5 Y 4/3	10 YR 5/8 (20%)	
8-11	silt clay	2.5 Y 4/0	10 YR 5/8 (20%)	

## Hydric Soil Indicators:

[ ] Histosol [ ] Histic Epipedon  
 [ ] Sulfidic Material [ ] Aquic Moisture Regime  
 [ ] Gleyed [X] Low Chroma  
 [X] mottles [ ] Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations: Wetland Hydrology Indicators:  
 Depth of Surface Water: 18.0 (in.) Primary Indicators:  
 Depth to Free Water in Pit: 0.0 (in.) [X] Inundated  
 Depth to Saturated Soil: 0.0 (in.) [X] Saturated in Upper 12  
 [X] Water Marks  
 [X] Drift Lines  
 [X] Sediment Deposit  
 [X] Drainage Patterns in Wetlands  
 Source/Site Characterization: Secondary Indicators (2 or more req'd)  
 [ ] Seasonal High Water Table [X] Oxidized Root Channels/Upper 12  
 [X] Spring/Seep [ ] Water-Stained Leaves  
 [ ] Floodplain [ ] Local Soil Survey Data  
 [ ] Backwater [ ] FAC-Neutral Test  
 [ ] Depressional [ ] Other (Explain in Remarks)  
 Recorded Data (Describe in Remarks):  
 [ ] Stream, Lake, or Tide Gauge Recent Weather: sunny  
 [ ] Aerial Photographs Recent Rainfall: flooding snow melt  
 [ ] Other

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1656      DATE: 02/22/1994      INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph      STATE: WV      STREAM:      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					80.00
Code	Scientific Name	Stratum	Status		% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+		30.00
195	Juncus effusus	Herb	FACW+		50.00
237	Rubus hispidus	Herb	FACW		75.00
250	Solidago sp.	Herb	NI		75.00
269	Unidentifiable grass	Herb	NI		90.00
271	Unidentifiable sedge	Herb	NI		30.00
304	Hypericum prolificum	Herb	FACU		25.00
502	Rhododendron periclymenoides	Shrub	FAC		5.00
507	Rosa multiflora	Shrub	FACU		5.00
544	Viburnum dentatum	Shrub	FAC		5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkF					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-4	silt loam	2.5 Y 3/2	10 YR 6/8 (30%)	ox.roots	
4-12	silt clay	2.5 Y 4/2	10 YR 5/8 (30%)	ox.roots concr.	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: sunny
	Recent Rainfall: flooding/snow melt

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1657 DATE: 02/23/1994 INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph STATE: WV STREAM: Leading Creek WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: adjacent to Leading Creek

Code	Scientific Name	Stratum	Status	% Areal Cover
433	Cornus stolonifera	Shrub	FACW+	15.00
446	Fraxinus pennsylvanica	Shrub	FACW	10.00
562	Crataegus sp.	Shrub	NI	10.00
602	Acer rubrum	Tree	FAC	60.00
651	Prunus serotina	Tree	FACU	5.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? nl Comments
0-12"	silt loam	10 YR 5/6	none	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input checked="" type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? no Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: numerous hydrology indicator lead to BPJ that the site is a wetland



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1659      DATE: 02/23/1994      INVESTIGATOR: EFA, DAK  
 COUNTY: Randolph      STATE: WV      STREAM: Leading Creek      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1E/PFO  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: floodwaters prohibit onsite delineation. return later to finish

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      80.00

Code	Scientific Name	Stratum	Status	% Areal Cover
269	Unidentifiable grass	Herb	NI	30.00
270	Unidentifiable herb	Herb	NI	75.00
271	Unidentifiable sedge	Herb	NI	25.00
277	Viola spp.	Herb	FAC	20.00
404	Alnus rugosa	Shrub	FACW+	40.00
420	Carpinus caroliniana	Shrub	FAC	30.00
433	Cornus stolonifera	Shrub	FACW+	30.00
562	Crataegus sp.	Shrub	NI	5.00
651	Prunus serotina	Tree	FACU	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silty clay	10 YR 4/1	10 YR 4/3 (30%)	ox.rt. ch.;sat
6-18	silty clay	10 YR 4/3		no ox.rt.ch.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: heavy rain/snow 32
<input type="checkbox"/> Other	Recent Rainfall: flooding

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; near sta.630 line 16-F

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 1660 DATE: 04/20/1994 INVESTIGATOR: MZ  
 COUNTY: Randolph STATE: WV STREAM: WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC  
 Code Scientific Name Stratum Status % Areal Cover

SOIL PROFILE: (Minimum 18 inches ) Series Name: Hydric Soil?  
 Depth Texture Matrix Color Mottle Color(%) Comments

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? Hydrophytic Vegetation?  
 Wetland Hydrology? Wetland?

Remarks:

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2101A      DATE: 12/03/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Frederick    STATE: VA    STREAM: Cedar Creek    WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PFO1G  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: road fill introduced

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					86.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
108	Arisaema stewardsonii	Herb	FACW		5.00
195	Juncus effusus	Herb	FACW+		5.00
217	Onoclea sensibilis	Herb	FACW		5.00
404	Alnus rugosa	Shrub	FACW+		20.00
507	Rosa multiflora	Shrub	FACU		5.00
522	Salix nigra	Shrub	FACW+		50.00
646	Platanus occidentalis	Tree	FACW		95.00
803	Lonicera japonica	Vine	FAC-		75.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: Craigsville      Hydric Soil? no  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-18	silty sand	10 YR 3/2		sat in pots
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      18.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cold 30 degrees
<input type="checkbox"/> Other	Recent Rainfall: none
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; beaver damming water in backwater area; saturated in spots; ba

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2101B DATE: 12/03/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Frederick STATE: VA STREAM: Cedar Creek WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PFO1G  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: road fill introduced

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	5.00
227	Polygonum sagittatum	Herb	OBL	25.00
464	Lindera benzoin	Shrub	FACW	10.00
522	Salix nigra	Shrub	FACW+	30.00
646	Platanus occidentalis	Tree	FACW	90.00
803	Lonicera japonica	Vine	FAC-	75.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Craigsville Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	silty sand	10 YR 2/2		depth to sat.

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 8.0 (in.)  
 Depth to Saturated Soil: 8.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

### Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☒ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: cold 30  
 Recent Rainfall: non

WETLAND DETERMINATION: Hydric soils present? yes

Wetland Hydrology? yes

Hydrophytic Vegetation? yes

Wetland? yes

Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2102                      DATE: 12/03/1993                      INVESTIGATOR: DAK, EFA  
 COUNTY: Shenandoah STATE: VA STREAM: unnamed                      WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1E/PSS1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					100.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
<hr/>					
109	Asclepias incarnata	Herb	OBL	10.00	
129	Carex lurida	Herb	OBL	15.00	
153	Dichanthelium clandestinum	Herb	FAC+	75.00	
177	Eupatoriadelphus purpureus	Herb	FAC	25.00	
178	Eupatorium perfoliatum	Herb	FACW+	25.00	
195	Juncus effusus	Herb	FACW+	75.00	
214	Mimulus ringens	Herb	OBL	25.00	
242	Scirpus americanus	Herb	OBL	10.00	
250	Solidago sp.	Herb	NI	50.00	
269	Unidentifiable grass	Herb	NI	90.00	
348	Ludwigia alternifolia	Herb	FACW	5.00	
665	Salix nigra	Tree	FACW+	25.00	

SOIL PROFILE: (Minimum 18 inches ) Series Name: Gainesboro-BerkHydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
<hr/>				
0-2	silt	7.5 YR 4/4		
2-6	silt	10 YR 5/2		ox.roots
6-12	silt	10 YR 6/1		10 YR 5/6 (5%)ox.roots
refusal				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 6.0 (in.)  
 Depth to Free Water in Pit: 4.0 (in.)  
 Depth to Saturated Soil: 4.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: cold 30  
 Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes

Wetland Hydrology? yes

Hydrophytic Vegetation? yes

Wetland? yes

Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2103 DATE: 12/04/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Shenandoah STATE: VA STREAM: Zanes Run WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	10.00
268	Typha latifolia	Herb	OBL	25.00
269	Unidentifiable grass	Herb	NI	20.00
271	Unidentifiable sedge	Herb	NI	10.00
803	Lonicera japonica	Vine	FAC-	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Fred. & Popli. Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	muck	10 YR 4/2		
refusal				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cold 30
<input type="checkbox"/> Other	Recent Rainfall: heavy rain

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2250A DATE: 11/10/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Frederick STATE: VA STREAM: WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PSS1F  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: well head/pipe has been installed into spring

Code	Scientific Name	Stratum	Status	75.00 % Areal Cover
147	Cuscuta gronovii	Herb	UPL	15.00
227	Polygonum sagittatum	Herb	OBL	40.00
392	Silene cucubalus	Herb	NI	20.00
404	Alnus rugosa	Shrub	FACW+	50.00
464	Lindera benzoin	Shrub	FACW	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Weikert-Berks Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-5 sandy silt 10 YR 5/1  
 refusal

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: clear sunny
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: none
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2250B DATE: 11/10/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Frederick STATE: VA STREAM: WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PSS1F  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: well head/pipe has been installed into spring

Code	Scientific Name	Stratum	Status	% Areal Cover
147	Cuscuta gronovii	Herb	UPL	15.00
227	Polygonum sagittatum	Herb	OBL	40.00
392	Silene cucubalus	Herb	NI	20.00
404	Alnus rugosa	Shrub	FACW+	50.00
464	Lindera benzoin	Shrub	FACW	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Weikert-Berks Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-5 refusal	sandy silt	10 YR 5/1		

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: clear sunny
	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2301 DATE: 11/09/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Hardy STATE: WV STREAM: WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E/PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 150.00

Code	Scientific Name	Stratum	Status	% Areal Cover
189	Impatiens capensis	Herb	FACW	5.00
195	Juncus effusus	Herb	FACW+	80.00
268	Typha latifolia	Herb	OBL	100.00
404	Alnus rugosa	Shrub	FACW+	5.00
426	Cephalanthus occidentalis	Shrub	OBL	5.00
507	Rosa multiflora	Shrub	FACU	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ln Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	silty clay	10 YR 6/2	7.5 YR 5/6ox.roots	
12	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 3.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cold <35
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: recieves run-off from road, fields. all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2302 DATE: 11/09/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: grid of ditches draining pasture water collects in ponds.

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 80.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	5.00
195	Juncus effusus	Herb	FACW+	100.00
237	Rubus hispidus	Herb	FACW	75.00
244	Scirpus cyperinus	Herb	FACW+	30.00
320	Vernonia noveboracensis	Herb	FACW	75.00
391	Andropogon virginicus	Herb	FACU	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Purdy Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	clay	10 YR 3/1		

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: -3.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: -3.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input checked="" type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input checked="" type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: cold
	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: possibly prior converted wetland (ditches) all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2303      DATE: 11/09/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Hardy      STATE: WV      STREAM: unnamed      WATERSHED: Cacapon River  
 COWARDIN CLASSIFICATION: PEM1F/PSS1F  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
142	Cirsium sp.	Herb	NI	25.00
168	Epilobium hirsutum	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	5.00
212	Mentha spicata	Herb	FACW+	20.00
227	Polygonum sagittatum	Herb	OBL	100.00
250	Solidago sp.	Herb	NI	25.00
269	Unidentifiable grass	Herb	NI	50.00
426	Cephalanthus occidentalis	Shrub	OBL	5.00
519	Salix fragilis	Shrub	FAC+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: AgB      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	sily clay	10 YR 4/2	7.5 YR 5/8	saturated
8	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: part of larger system extending outside property out-fill, all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2601      DATE: 01/11/1994      INVESTIGATOR: MZ, DAK  
 COUNTY: Hardy      STATE: WV      STREAM:      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: shrubby floodplain area adjacent to WV 55

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					50.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
1	Polytrichum sp.	Bryo	NI		60.00
156	Dipsacus sylvestris	Herb	NI		20.00
249	Solidago rugosa	Herb	FAC		40.00
507	Rosa multiflora	Shrub	FACU		80.00
803	Lonicera japonica	Vine	FAC-		20.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrF Berks				Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-8	clay loam	10 YR 5/3	none	
8-12+	gravelly clay	10 YR 5/2	7.5YR 5/6 (10%)	ox.roots satur.
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	8.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	(in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input checked="" type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: partly cloudy	
		Recent Rainfall: 2" snow	
-----			

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2602      DATE: 01/11/1994      INVESTIGATOR: MZ, DAK  
 COUNTY: Hardy      STATE: WV      STREAM:      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: ditch around farm field drains to creek

Code	Scientific Name	Stratum	Status	67.00 % Areal Cover
132	Carex sp.	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	20.00
268	Typha latifolia	Herb	OBL	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: NA      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
not taken	flooded			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 6.0 (in.)  
 Depth to Free Water in Pit: (in.)  
 Depth to Saturated Soil: (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☐ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: partly cloudy  
 Recent Rainfall: 2" snow

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2603      DATE: 02/08/1994      INVESTIGATOR: EFA, DAK  
 COUNTY: Hardy      STATE: WV      STREAM:      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: area used as pasture, heavily grazed

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
164	Eleocharis rostellata	Herb	OBL	
195	Juncus effusus	Herb	FACW+	10.00
228	Polygonum sp.	Herb	NI	75.00
250	Solidago sp.	Herb	NI	25.00
269	Unidentifiable grass	Herb	NI	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Me      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	ice			
2-12	silt loam	10 YR 3/1		ox.roots
12-16	silt loam	10 YR 3/1	10YR 5/8 (40%)	ox.roots
16-20	silty clay	10 YR 6/2	10YR 5/8 (40%)	

Hydric Soil Indicators:

<input checked="" type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: freezing rain
	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met;

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2604      DATE: 02/08/1994      INVESTIGATOR: EFA, DAK  
 COUNTY: Hardy      STATE: WV      STREAM:      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: area used as pasture, heavily grazed

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
195	Juncus effusus	Herb	FACW+	50.00
228	Polygonum sp.	Herb	NI	15.00
269	Unidentifiable grass	Herb	NI	100.00
349	Lycopus americanus	Herb	OBL	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Me      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color (%)	Comments
0-2	ice			
2-12	silt loam	10 YR 3/1		faint ox.root ch
12-16	silt loam	10 YR 3/1	10YR 5/8 (40%)	faint ox.root ch
16-20	silty clay	10 YR 6/1	10YR 5/8 (40%)	ox.root ch.

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: rain/sleet
<input type="checkbox"/> Other	Recent Rainfall: heavy/freezing rain

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2605      DATE: 02/08/1994      INVESTIGATOR: EFA, DAK  
 COUNTY: Hardy      STATE: WV      STREAM:      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E/POWUB  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      yes  
 Remarks: heavily grazed field

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
195	Juncus effusus	Herb	FACW+	25.00
198	Juncus sp.	Herb	NI	50.00
228	Polygonum sp.	Herb	NI	25.00
269	Unidentifiable grass	Herb	NI	100.00
320	Vernonia noveboracensis	Herb	FACW	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Mc      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	ice			
2-12	silt loam	10 YR 3/1		ox.root ch
12-16	silt loam	10 YR 3/1	10YR 5/8 (40%)	ox.root ch
16-20	silt clay	10 YR 6/1	10YR 5/8 (40%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input checked="" type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present?      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met; heavily grazed pasture with multiple vegetation drainage sw



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2701A DATE: 12/03/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Frederick STATE: VA STREAM: Cedar Creek WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: road fill introduced

Code	Scientific Name	Stratum	Status	86.00 % Areal Cover
108	Arisaema stewardsonii	Herb	FACW	5.00
195	Juncus effusus	Herb	FACW+	5.00
217	Onoclea sensibilis	Herb	FACW	5.00
404	Alnus rugosa	Shrub	FACW+	20.00
507	Rosa multiflora	Shrub	FACU	5.00
522	Salix nigra	Shrub	FACW+	50.00
646	Platanus occidentalis	Tree	FACW	95.00
803	Lonicera japonica	Vine	FAC-	75.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Craigsville Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	silty sand	10 YR 3/2		sat. in spots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 18.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☒ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: cold 30  
 Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes

Remarks: beaver damming water in backwater area, soils sat. in spots, high bank is dry

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2701B      DATE: 11/09/1993      INVESTIGATOR: EFA, DMB  
 COUNTY: Hardy      STATE: WV      STREAM: unnamed      WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?  
 Remarks: pasture, sections are heavily grazed, pond built in former stream

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	25.00
250	Solidago sp.	Herb	NI	50.00
269	Unidentifiable grass	Herb	NI	95.00
305	Carex scoparia	Herb	FACW	25.00
309	Scirpus rubrotinctus	Herb	OBL	25.00
320	Vernonia noveboracensis	Herb	FACW	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Me      Hydric Soil? yes				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty clay	10 YR 5/2 (95%)	10 YR 6/8 (5%)	ox.root channel
3-12	silt	10 YR 6/2 (50%)	10 YR 6/6	
refusal				

Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed             | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 3.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 3.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: warm, sunny
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2702A DATE: 11/10/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: driveway & ditch constructed to direct water into 2702B

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	25.00
195	Juncus effusus	Herb	FACW+	90.00
269	Unidentifiable grass	Herb	NI	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkB Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silty clay	10 YR 4/2		
4-18	silty clay	10 YR 6/1 (50%)	10 YR 6/8Mn conc.	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 3.0 (in.)  
 Depth to Saturated Soil: 3.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☒ Drift Lines  
☐ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

### Source/Site Characterization:

☒ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: warm overcast  
 Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2702B DATE: 11/10/1993 INVESTIGATOR: EFA, DMB  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: South Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1F/PSS1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	25.00
195	Juncus effusus	Herb	FACW+	90.00
244	Scirpus cyperinus	Herb	FACW+	25.00
269	Unidentifiable grass	Herb	NI	90.00
320	Vernonia noveboracensis	Herb	FACW	60.00
404	Alnus rugosa	Shrub	FACW+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CkB Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silty clay	10 YR 4/2		
4-18	silty clay	10 YR 6/1 (50%)	10 YR 6/8Mn conc.	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 3.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 3.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: warm overcast
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2801 DATE: 11/28/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Grant STATE: WV STREAM: unnamed WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: heavily grazed pasture

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
195	Juncus effusus	Herb	FACW+	50.00
222	Poa palustris	Herb	FACW	20.00
250	Solidago sp.	Herb	NI	20.00
269	Unidentifiable grass	Herb	NI	80.00
320	Vernonia noveboracensis	Herb	FACW	15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrC, Du Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	silty loam	2.5 Y 4/3		saturated
1-6	silty clay	2.5 Y 5/2		ox.root channel
6-18	silty clay	5 Y 5/1		ox.root channel

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: 5-8" rain
<input type="checkbox"/> Other	Recent Rainfall: cold 40

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2802                      DATE: 11/29/1993                      INVESTIGATOR: EFA, DAK  
 COUNTY: Grant                      STATE: WV                      STREAM:                      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E/POWUBx  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					66.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
158	Dryopteris goldiana	Herb	FAC+		50.00
269	Unidentifiable grass	Herb	NI		90.00
271	Unidentifiable sedge	Herb	NI		75.00
371	Dulichium arundinaceum	Herb	OBL		5.00
507	Rosa multiflora	Shrub	FACU		5.00
512	Rubus strigosus	Shrub	NI		5.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrF					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-4	silty clay	5 B 4/1		ox.root channel	
4-18	silty clay	5 Y 5/1		ox.root channel	
-----					

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:                      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:                      (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:                      18.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: 3-8"
-----	

WETLAND DETERMINATION:    Hydric soils present? yes                      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes                      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2803      DATE: 11/29/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: rocky, intermittent stream channel, heavily grazed pasture

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC	50.00
Code      Scientific Name      Stratum      Status      % Areal Cover	
195      Juncus effusus      Herb      FACW+	50.00
269      Unidentifiable grass      Herb      NI	80.00
271      Unidentifiable sedge      Herb      NI	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: TvB      Hydric Soil? no

Depth      Texture      Matrix Color      Mottle Color(%)      Comments	
0-4      silty muck      2.5 Y 4/0	ox.root channel
refusal	Mn concr

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: cloudy cold 30
<input type="checkbox"/> Aerial Photographs	Recent Rainfall: 3-8" several day ago
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2804      DATE: 11/30/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Grant      STATE: WV      STREAM: unnamed      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: mowed pasture

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	90.00
269	Unidentifiable grass	Herb	NI	75.00
271	Unidentifiable sedge	Herb	NI	75.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: TvR      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8"	silt loam	2.5 Y 5/2		refusal

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 8.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: rain
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? no      Hydrophytic Vegetation? yes  
 Remarks: all 3 criteria met      Wetland Hydrology? yes      Wetland? yes



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2901      DATE: 12/01/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Grant      STATE: WV      STREAM:      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PSS1F/PEM1F  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: spring/seep

Code	Scientific Name	Stratum	Status	75.00 % Areal Cover
227	Polygonum sagittatum	Herb	OBL	20.00
269	Unidentifiable grass	Herb	NI	5.00
270	Unidentifiable herb	Herb	NI	10.00
271	Unidentifiable sedge	Herb	NI	5.00
322	Cardamine rotundifolia	Herb	OBL	25.00
328	Lindera benzoin	Herb	FACW	25.00
378	Tussilago farfara	Herb	FACU	75.00
397	Chelone sp.	Herb	NI	15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pb      Hydric Soil? nl  

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	sandy muck	2.5 Y 3/2		
3-6	silty clay	2.5 Y 5/0	10 YR 4/4 (50%)Mn Concr.	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: 3-8" days earlier

WETLAND DETERMINATION:      Hydric soils present?      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2902      DATE: 11/30/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Grant      STATE: WV      STREAM:      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E/PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks:

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
227	Polygonum sagittatum	Herb	OBL	10.00
243	Scirpus atrovirens	Herb	OBL	10.00
269	Unidentifiable grass	Herb	NI	90.00
271	Unidentifiable sedge	Herb	NI	15.00
280	Alisma subcordatum	Herb	OBL	50.00
380	Aster nemoralis	Herb	FACW+	25.00
522	Salix nigra	Shrub	FACW+	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pu      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	silt loam	2.5 Y 4/3		gravel
6-12	silt loam	2.5 Y 3/2		ox.root channel
refusal				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 4.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: cloudy
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: 3-8" days earlier
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 2903      DATE: 11/30/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Grant      STATE: WV      STREAM:      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E/PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: road fill has been introduced

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
180	Galium tinctorium	Herb	OBL	10.00
269	Unidentifiable grass	Herb	NI	90.00
348	Ludwigia alternifolia	Herb	FACW	10.00
349	Lycopus americanus	Herb	OBL	60.00
396	Bidens tripartita	Herb	OBL	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Pu      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silt muck	10 YR 3/2		gravel/shale fra
4-8	clay	5 GY 4/1		1/4"

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: heavy rain days ago

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3001 DATE: 12/02/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Grant STATE: WV STREAM: Abram Creek WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E/PSSIE  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: broad floodplain, acid mine drainage in areas

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					89.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		25.00
153	Dichanthelium clandestinum	Herb	FAC+		30.00
161	Dryopteris spinulosa	Herb	FAC+		30.00
178	Eupatorium perfoliatum	Herb	FACW+		10.00
195	Juncus effusus	Herb	FACW+		5.00
227	Polygonum sagittatum	Herb	OBL		25.00
237	Rubus hispidus	Herb	FACW		80.00
250	Solidago sp.	Herb	NI		50.00
269	Unidentifiable grass	Herb	NI		80.00
329	Betula lenta	Herb	FACU		20.00
464	Lindera benzoin	Shrub	FACW		30.00
501	Rhododendron maximum	Shrub	FAC		15.00
677	Magnolia acuminata	Tree	NI		10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ByB					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-1	silt	10 YR 3/1		saturated	
1-3	silt	7.5 YR 5/8			
3-8	sandy silt	10 YR 6/2	7.5YR 5/8 (5%)		

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 6.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☒ Drift Lines  
☒ Sediment Deposit  
☒ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

### Source/Site Characterization:

☐ Seasonal High Water Table  
☒ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)  
 Recent Weather: 20 - 30 degrees  
 Recent Rainfall: heavy days earlier

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3003      DATE: 12/02/1993      INVESTIGATOR: EFA, DAK  
 COUNTY: Grant      STATE: WV      STREAM:      WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: reclaimed strip mine area, acid mine drainage

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	10.00
195	Juncus effusus	Herb	FACW+	30.00
268	Typha latifolia	Herb	OBL	50.00
269	Unidentifiable grass	Herb	NI	90.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: CeB      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4 refusal	clay	10 YR 6/3	10 YR 6/6 (5%)	1 1/2" gravel/debri

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input checked="" type="checkbox"/> Water Marks	
<input type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Drift Lines	
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input type="checkbox"/> Floodplain		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: cold 20 degrees	
		Recent Rainfall: last wknd/5 days ago	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: acid mine drainage apparently filtered or retained by wetland, clearer than gro

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3004 DATE: 12/02/1993 INVESTIGATOR: EFA, DAK  
 COUNTY: Grant STATE: WV STREAM: WATERSHED: North Br. Potomac River  
 COWARDIN CLASSIFICATION: PEM1E/PSS1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: old field area

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	50.00
161	Dryopteris spinulosa	Herb	FAC+	30.00
195	Juncus effusus	Herb	FACW+	10.00
227	Polygonum sagittatum	Herb	OBL	15.00
237	Rubus hispidus	Herb	FACW	90.00
250	Solidago sp.	Herb	NI	75.00
269	Unidentifiable grass	Herb	NI	90.00
271	Unidentifiable sedge	Herb	NI	25.00
559	Viburnum recognitum	Shrub	FACW+	30.00
809	Smilax rotundifolia	Vine	FAC	5.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-1	organic/peat			
1-4	silty-clay	2.5 Y 4/2		ox.root channel
4-12	silty-clay	2.5 Y 4/2		10 YR 6/8 (50%)ox.root channel

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cold 20 degrees
<input type="checkbox"/> Other	Recent Rainfall: last wk/5 days ago

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

## ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3301                      DATE: 10/25/1993                      INVESTIGATOR: ABC, EFA  
COUNTY: Tucker                      STATE: WV                      STREAM:                      WATERSHED: Cheat River  
COWARDIN CLASSIFICATION: PEM1E/PSS1E  
Do Normal Circumstances exist on the site?                      no  
Is the site significantly disturbed (Atypical Situation)?                      yes  
Is the area a potential Problem Area?                      no  
Remarks: low area between Rt.93 & abandoned RR (strip mined)

Code	Scientific Name	Stratum	Status	% Areal Cover
VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				80.00

2	Sphagnum sp.	Bryo	NI	5.00
153	Dichanthelium clandestinum	Herb	FAC+	15.00
195	Juncus effusus	Herb	FACW+	10.00
237	Rubus hispidus	Herb	FACW	80.00
250	Solidago sp.	Herb	NI	25.00
251	Solidago uliginosa	Herb	OBL	30.00
453	Hypericum prolificum	Shrub	FACU	25.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-10	CL	10YR 5/1	10YR 5/1		
10-20	CL	10YR 5/1	10YR 5/1		
20-30	CL	10YR 5/1	10YR 5/1		
30-40	CL	10YR 5/1	10YR 5/1		
40-50	CL	10YR 5/1	10YR 5/1		
50-60	CL	10YR 5/1	10YR 5/1		
60-70	CL	10YR 5/1	10YR 5/1		
70-80	CL	10YR 5/1	10YR 5/1		
80-90	CL	10YR 5/1	10YR 5/1		
90-100	CL	10YR 5/1	10YR 5/1		

0-8	silty clay	10 YR 6/1	7.5 YR 6/8
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### Hydric Soil Indicators:

```
[ ] Histosol
[X] Sulfidic Material
[ ] Gleyed
[X] mottles
[ ] Histic Epipedon
[ ] Aquic Moisture Regime
[X] Low Chroma
[ ] Entisol (organic context, vertical
streaking, chroma 3, wet spodosol)
```

## HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/>	Inundated
Depth to Saturated Soil:	0.0 (in.)	<input type="checkbox"/>	Saturated in Upper 12
		<input type="checkbox"/>	Water Marks
Source/Site Characterization:		<input type="checkbox"/>	Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/>	Sediment Deposit
<input type="checkbox"/> Spring/Seep		<input type="checkbox"/>	Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Backwater		<input type="checkbox"/>	Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/>	Water-Stained Leaves
		<input type="checkbox"/>	Local Soil Survey Data
Recorded Data (Describe in Remarks):		<input type="checkbox"/>	FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/>	Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs		Recent Weather: clear, sunny	
<input type="checkbox"/> Other		Recent Rainfall: last week heavy rain	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
Wetland Hydrology? yes      Wetland? yes  
Remarks: near road in swale water depth 6-12"; all 3 parameters present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3302      DATE: 10/25/1993      INVESTIGATOR: ABC, EFA  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: RR access to coke ovens

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	10.00
178	Eupatorium perfoliatum	Herb	FACW+	10.00
269	Unidentifiable grass	Herb	NI	100.00
404	Alnus rugosa	Shrub	FACW+	75.00
522	Salix nigra	Shrub	FACW+	100.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? no Comments
0-8	vegetation mat	-not peat		
8-12+	slag/muck	Nz		;grass

Hydric Soil Indicators:

<input checked="" type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      3.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather:
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: acid mine drainage visible; all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3303      DATE: 10/26/1993      INVESTIGATOR: ABC, EFA  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: possible fill in portion of wetland, not recent

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	50.00
178	Eupatorium perfoliatum	Herb	FACW+	15.00
195	Juncus effusus	Herb	FACW+	20.00
227	Polygonum sagittatum	Herb	OBL	100.00
244	Scirpus cyperinus	Herb	FACW+	75.00
250	Solidago sp.	Herb	NI	50.00
269	Unidentifiable grass	Herb	NI	100.00
404	Alnus rugosa	Shrub	FACW+	50.00
519	Salix fragilis	Shrub	FAC+	75.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: DaB      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	muck	N2		
6	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny clear
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: 3 parameters present

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3304 DATE: 10/26/1993 INVESTIGATOR: ABC, EFA  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: water treatment station for nursing home has introduced fill

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 67.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	100.00
129	Carex lurida	Herb	OBL	75.00
153	Dichanthelium clandestinum	Herb	FAC+	10.00
195	Juncus effusus	Herb	FACW+	25.00
237	Rubus hispidus	Herb	FACW	100.00
251	Solidago uliginosa	Herb	OBL	75.00
268	Typha latifolia	Herb	OBL	5.00
269	Unidentifiable grass	Herb	NI	75.00
304	Hypericum prolificum	Herb	FACU	15.00
645	Pinus strobus	Tree	FACU	10.00
650	Populus tremula	Tree	FACU	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: DkB Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	sphagnum			
6-12	muck	N2		cool slag/

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: clear, sunny
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: 3 parameters present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3304A      DATE: 10/26/1993      INVESTIGATOR: ABC, EFA  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: water treatment station for nursing home has introduced fill

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					67.00
Code	Scientific Name	Stratum	Status		% Areal Cover
<hr/>					
2	Sphagnum sp.	Bryo	NI		100.00
129	Carex lurida	Herb	OBL		75.00
153	Dichanthelium clandestinum	Herb	FAC+		10.00
195	Juncus effusus	Herb	FACW+		25.00
237	Rubus hispidus	Herb	FACW		100.00
251	Solidago uliginosa	Herb	OBL		75.00
268	Typha latifolia	Herb	OBL		5.00
269	Unidentifiable grass	Herb	NI		75.00
304	Hypericum prolificum	Herb	FACU		15.00
645	Pinus strobus	Tree	FACU		10.00
650	Populus tremula	Tree	FACU		10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: DkB      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
<hr/>				
0-6	sphagnum			
6-12	muck	N2		cool slag/silty

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: clear;sunny
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: 3 parameters present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3305      DATE: 10/26/1993      INVESTIGATOR: EFA, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Snyder Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					83.00
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
4	Lycopodium sp.	Bryo	NI		10.00
100	Acorus calamus	Herb	OBL		10.00
129	Carex lurida	Herb	OBL		10.00
153	Dichanthelium clandestinum	Herb	FAC+		20.00
195	Juncus effusus	Herb	FACW+		20.00
243	Scirpus atrovirens	Herb	OBL		15.00
251	Solidago uliginosa	Herb	OBL		10.00
304	Hypericum prolificum	Herb	FACU		15.00
380	Aster nemoralis	Herb	FACW+		20.00
522	Salix nigra	Shrub	FACW+		100.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: At					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-2	organic				
2-8	SiS	10 YR 3/1	10 YR 5/6 (5%)	ox.roots	
8-12+	silt loam	10 YR 3/2	10 YR 4/6 (8%)	ox.roots	
-----					

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 5.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: light
-----	

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 properties established

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3306      DATE: 10/26/1993      INVESTIGATOR: EFA, ABC  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E/PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: strip mine bench, upland inclusions, very disturbed area

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	25.00
129	Carex lurida	Herb	OBL	5.00
153	Dichanthelium clandestinum	Herb	FAC+	5.00
195	Juncus effusus	Herb	FACW+	25.00
243	Scirpus atrovirens	Herb	OBL	95.00
250	Solidago sp.	Herb	NI	75.00
268	Typha latifolia	Herb	OBL	5.00
269	Unidentifiable grass	Herb	NI	75.00
277	Viola spp.	Herb	FAC	75.00
380	Aster nemoralis	Herb	FACW+	75.00
519	Salix fragilis	Shrub	FAC+	5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	muck	5 Y 5/1		ox.root channel
3-12	loam	5 Y 5/1	10 YR 5/6 (30%)	
12	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
Source/Site Characterization:	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Seasonal High Water Table	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Backwater	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> FAC-Neutral Test
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Weather: brief showers
<input type="checkbox"/> Aerial Photographs	Recent Rainfall:
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: acid mine drainage in ditch along road' 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3307B DATE: 10/27/1994 INVESTIGATOR: EFA, ABC  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1Eb  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	10.00
153	Dichanthelium clandestinum	Herb	FAC+	10.00
219	Osmunda cinnamomea	Herb	FACW	15.00
250	Solidago sp.	Herb	NI	15.00
380	Aster nemoralis	Herb	FACW+	10.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? yes
0-3	peat			
3-4	silty clay	10 YR 4/2		
4-6	silty clay	10 YR 4/2	10 YR 6/8 (50%)w/gravel	
6-9	clay	5 Y 5/1	10 YR 6/8 (50%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 24.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 8.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: light rain
	Recent Rainfall: <1"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3307C      DATE: 10/27/1993      INVESTIGATOR: EFA, ABC  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1Eb  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      60.00

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	10.00
153	Dichanthelium clandestinum	Herb	FAC+	10.00
219	Osmunda cinnamomea	Herb	FACW	15.00
250	Solidago sp.	Herb	NI	15.00
380	Aster nemoralis	Herb	FACW+	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrB      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	peat			
3-4	silty clay	10 YR 4/2		
4-6	silty clay	10 YR 4/2	10 YR 6/8 (50%)w/gravel	
6-9	clay	5 Y 5/1	10 YR 6/8 (50%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 24.0 (in.)  
 Depth to Free Water in Pit: 12.0 (in.)  
 Depth to Saturated Soil: 8.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☒ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks

☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: light rain  
 Recent Rainfall: <1"

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3307D      DATE: 10/27/1993      INVESTIGATOR: EFA, ABC  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1Eb  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					67.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
-----					
499	Rhododendron canadense	Shrub	OBL	10.00	
608	Betula alleghaniensis	Tree	FAC	10.00	
669	Tsuga canadensis	Tree	FACU	20.00	
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrB					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-3	peat				
3-4	silty clay	10 YR 4/2			
4-6	silty clay	10 YR 4/2	10 YR 6/8 (50%)w/gravel		
6-9	clay	5 Y 5/1	10 YR 6/8 (50%)		
-----					

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	24.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	12.0 (in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	8.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
		<input checked="" type="checkbox"/> Water Marks	
Source/Site Characterization:		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Spring/Seep		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Floodplain		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Backwater		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input checked="" type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Water-Stained Leaves	
		<input type="checkbox"/> Local Soil Survey Data	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Aerial Photographs		Recent Weather: light rain	
<input type="checkbox"/> Other		Recent Rainfall: <1"	
-----			

WETLAND DETERMINATION:	Hydric soils present? yes	Hydrophytic Vegetation? yes
	Wetland Hydrology? yes	Wetland? yes
Remarks: all 3 criteria met		



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3308      DATE: 10/27/1993      INVESTIGATOR: EFA, ABC  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: 2 perennial streams feeding strip mine borrow pond

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	20.00
129	Carex lurida	Herb	OBL	30.00
174	Eriophorum virginicum	Herb	OBL	10.00
195	Juncus effusus	Herb	FACW+	15.00
199	Juncus subcaudatus	Herb	OBL	90.00
237	Rubus hispidus	Herb	FACW	5.00
268	Typha latifolia	Herb	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BrB/Sm      Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3"	peat			
3-6"	peat & siltloam	10 YR 4/1		ox.roots
6-8"	silt loam	10 YR 4/1		ox.roots
8-10"	silty clay	10 YR 5/1	10 YR 5/6 (10%)	ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: showers
<input type="checkbox"/> Other	Recent Rainfall: <1" rain

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3309      DATE: 10/28/1993      INVESTIGATOR: EFA, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Long Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM/PFO/ML  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: bog wetland which has been strip mined in past

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					67.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		90.00
174	Eriophorum virginicum	Herb	OBL		90.00
195	Juncus effusus	Herb	FACW+		10.00
199	Juncus subcaudatus	Herb	OBL		50.00
237	Rubus hispidus	Herb	FACW		50.00
251	Solidago uliginosa	Herb	OBL		90.00
453	Hypericum prolificum	Shrub	FACU		10.00
503	Rhododendron viscosum	Shrub	OBL		50.00
669	Tsuga canadensis	Tree	FACU		60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	peat			
6-9	muck	N2		
9-12	clay	10 YR 4/1	10 YR 5/8 (50%)	

## Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input type="checkbox"/> Aquic Moisture Regime   |
| <input checked="" type="checkbox"/> Gleyed  | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

## HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	5.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input type="checkbox"/> Sediment Deposit	
		<input type="checkbox"/> Drainage Patterns in Wetlands	
		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input checked="" type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather: showers	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall: <1"	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3310      DATE: 10/28/1993      INVESTIGATOR: EFA, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Long Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: swale/depressional area along Rt.219

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
129	Carex lurida	Herb	OBL	5.00
195	Juncus effusus	Herb	FACW+	25.00
199	Juncus subcaudatus	Herb	OBL	10.00
243	Scirpus atrovirens	Herb	OBL	10.00
268	Typha latifolia	Herb	OBL	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Sm      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8"	muck	N2		
8"	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3311 DATE: 10/28/1993 INVESTIGATOR: EFA, ABC  
 COUNTY: Tucker STATE: WV STREAM: Slip Hill MillWATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO4F/PEM1F  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	100.00 % Areal Cover
2	Sphagnum sp.	Bryo	NI	30.00
219	Osmunda cinnamomea	Herb	FACW	5.00
268	Typha latifolia	Herb	OBL	15.00
503	Rhododendron viscosum	Shrub	OBL	60.00
608	Betula alleghaniensis	Tree	FAC	10.00
669	Tsuga canadensis	Tree	FACU	80.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BsC/Sm Hydric Soil? yes

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	peat/organic			
3-6	silty clay	7.5 YR 4/2	7.5YR 5/6 (20%)	
6-12	silty clay	10 YR 6/2	10 YR 6/8 (50%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 3.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input checked="" type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3312      DATE: 11/01/1993      INVESTIGATOR: EFA, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Roaring Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1H  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: farm pond with small PEM area (manmade pond)

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				
Code	Scientific Name	Stratum	Status	% Areal Cover
268	Typha latifolia	Herb	OBL	100.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: DaF      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-------	---------	--------------	-----------------	----------

0-6"	water			
-6to-18"	muck	N2		

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 6.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: scattered showers
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3401 DATE: 11/03/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	50.00 % Areal Cover
116	Caltha palustris	Herb	OBL	30.00
275	Viola pallens	Herb	OBL	80.00
317	Solidago altissima	Herb	FACU	60.00
507	Rosa multiflora	Shrub	FACU	20.00
636	Liriodendron tulipifera	Tree	FACU	30.00
814	Ampelopsis arborea	Vine	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Al Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	sandy loam	10 YR 3/3		
6-12	silt	10 YR 7/1	10 YR 5/8 (45%)	concretions

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 14.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy, cold
<input type="checkbox"/> Other	Recent Rainfall: 6" snow

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BPJ suggests more wetland plants seen during growing season

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3402 DATE: 11/03/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	20.00
224	Polygonum cuspidatum	Herb	FACU-	20.00
269	Unidentifiable grass	Herb	NI	100.00
273	Verbesina alternifolia	Herb	FAC	20.00
404	Alnus rugosa	Shrub	FACW+	30.00
506	Robinia pseudoacacia	Shrub	FACU-	20.00
646	Platanus occidentalis	Tree	FACW	10.00
665	Salix nigra	Tree	FACW+	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Al Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-14 sand 10 YR 3/3 10 YR 4/6 (25%)ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy cold
<input type="checkbox"/> Other	Recent Rainfall: 4" snow

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks:

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3403A      DATE: 11/03/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site?      no  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: mowed drainage swale

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	40.00
269	Unidentifiable grass	Herb	NI	60.00
270	Unidentifiable herb	Herb	NI	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	sandy organic	10 YR 3/2		
1-5	sand	10 YR 3/3	10 YR 4/6 (20%)	saturated
5-9	sand	10 YR 4/1	5 YR 4/6 (35%)	
9-12	sand	N 2/		fragipan

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 4.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 1.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: BPJ suggests vegetation would be hydrophytic when undisturbed



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3403B DATE: 11/03/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Hardy STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: mowed drainage swale

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	40.00
269	Unidentifiable grass	Herb	NI	60.00
270	Unidentifiable herb	Herb	NI	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-1	sandy organic	10 YR 3/2		
1-5	sand	10 YR 3/3	10 YR 4/6 (20%)	saturated
5-9	sand	10 YR 4/1	5 YR 4/6 (35%)	
9-12	sand	N 2/		fragipan

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: 4.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 1.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BPJ suggests vegetation would be hydrophytic when undisturbed

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3404 DATE: 11/03/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 88.00

Code	Scientific Name	Stratum	Status	% Areal Cover
118	Carex baileyi	Herb	OBL	20.00
153	Dichanthelium clandestinum	Herb	FAC+	10.00
176	Eupatoriadelphus maculatus	Herb	FACW	20.00
178	Eupatorium perfoliatum	Herb	FACW+	10.00
195	Juncus effusus	Herb	FACW+	10.00
224	Polygonum cuspidatum	Herb	FACU-	20.00
243	Scirpus atrovirens	Herb	OBL	20.00
269	Unidentifiable grass	Herb	NI	80.00
389	Aster simplex	Herb	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	sand	10 YR 3/2	10 YR 3/4	(25%)ox.roots/sat.
10+	auger refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: 4" snow

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3405A DATE: 11/03/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: heavily grazed pasture, plants unidentifiable, soil disturbed

Code	Scientific Name	Stratum	Status	% Areal Cover
269	Unidentifiable grass	Herb	NI	80.00
320	Vernonia noveboracensis	Herb	FACW	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: GcD Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	loam	10 YR 2/1		
2-10	loam	10 YR 2/1	5 YR 4/6 (10%)	ox.roots
10-12	gravelly loam	10 YR 4/1	10 YR 4/6 (30%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 8.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cloudy
<input type="checkbox"/> Other	Recent Rainfall: 6" snow

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BPI suggests plants hydrophytic when undisturbed

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3405B DATE: 11/03/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: unnamed WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1B

Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: lightly grazed pasture/forest

Code	Scientific Name	Stratum	Status	% Areal Cover
269	Unidentifiable grass	Herb	NI	80.00
602	Acer rubrum	Tree	FAC	60.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: GcD Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-2	loam	10 YR 2/1		
2-10	loam	10 YR 2/1	5 YR 4/6 (10%)	ox.roots
10-12	gravelly loam	10 YR 4/1	10 YR 4/6 (30%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 8.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: cloudy
	Recent Rainfall: 6" snow

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BPJ suggests vegetation hydrophytic when undisturbed

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3406 DATE: 11/03/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	40.00
251	Solidago uliginosa	Herb	OBL	20.00
269	Unidentifiable grass	Herb	NI	60.00
404	Alnus rugosa	Shrub	FACW+	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: GcF Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-5	gravelly loam	5 Y 4/1	7.5YR 6/8 (25%)	saturated
5-12	clay loam	5 Y 5/1	2.5Y 5/4 (40%)	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.5 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3407      DATE: 11/03/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: former farm pond (drained)

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      75.00

Code	Scientific Name	Stratum	Status	% Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	20.00
251	Solidago uliginosa	Herb	OBL	50.00
269	Unidentifiable grass	Herb	NI	80.00
273	Verbesina alternifolia	Herb	FAC	30.00
507	Rosa multiflora	Shrub	FACU	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: ErC      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	clayey silt	N 4/		
3-8	silty clay	5 GY 6/1	7.5YR 6/8 (15%)	ox.roots/sat.
8-12	silt	5 Y 4/1		fibrous

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 5.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: cloudy, cold
	Recent Rainfall: 6" snow

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3408      DATE: 11/03/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM: Haddix Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1E  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					71.00
Code	Scientific Name	Stratum	Status		% Areal Cover
<hr/>					
132	Carex sp.	Herb	FACW		60.00
269	Unidentifiable grass	Herb	NI		40.00
384	Viola septentrionalis	Herb	FACU		40.00
404	Alnus rugosa	Shrub	FACW+		40.00
501	Rhododendron maximum	Shrub	FAC		20.00
602	Acer rubrum	Tree	FAC		20.00
608	Betula alleghaniensis	Tree	FAC		20.00
636	Liriodendron tulipifera	Tree	FACU		60.00
646	Platanus occidentalis	Tree	FACW		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Alluvial      Hydric Soil? nl  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 -----  
 0-14      gravelly silt      10 YR 3/1      10 YR 4/6 (25%)sat/ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water:      (in.)  
 Depth to Free Water in Pit:      (in.)  
 Depth to Saturated Soil:      0.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☒ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

Recent Weather: cloudy  
 Recent Rainfall: 6" snow

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3409 DATE: 11/04/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Haddix Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1B/PEM  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: soils disturbed, much gravel fill, winter conditions

Code	Scientific Name	Stratum	Status	% Areal Cover
2	Sphagnum sp.	Bryo	NI	50.00
250	Solidago sp.	Herb	NI	80.00
275	Viola pallens	Herb	OBL	30.00
404	Alnus rugosa	Shrub	FACW+	20.00
507	Rosa multiflora	Shrub	FACU	40.00
572	Rhus typhina	Shrub	NI	20.00
646	Platanus occidentalis	Tree	FACW	20.00
814	Ampelopsis arborea	Vine	FACW	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Alluvial Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-8	clayey silt	5 YR 4/3	10YR 5/6 (5%)	coal pieces
8-12	clayey silt	2.5 Y 4/3	2.5 Y 5/6 (15%)	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
Recorded Data (Describe in Remarks):	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Other	Recent Weather: partly cloudy
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: BPJ suggests site saturated during growing season



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3410      DATE: 11/04/1993      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker      STATE: WV      STREAM:      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1B/PEM  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      86.00

Code	Scientific Name	Stratum	Status	% Areal Cover
109	Asclepias incarnata	Herb	OBL	10.00
129	Carex lurida	Herb	OBL	30.00
176	Eupatoriadelphus maculatus	Herb	FACW	10.00
250	Solidago sp.	Herb	NI	40.00
269	Unidentifiable grass	Herb	NI	60.00
320	Vernonia noveboracensis	Herb	FACW	10.00
401	Acer rubrum	Shrub	FAC	20.00
507	Rosa multiflora	Shrub	FACU	30.00
814	Ampelopsis arborea	Vine	FACW	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Alluvial      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6	sandy silt	5 Y 4/1		ox.roots
6+	auger refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 18.0 (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3411                      DATE: 11/04/1993                      INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker                      STATE: WV                      STREAM:                      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1E  
 Do Normal Circumstances exist on the site?                      yes  
 Is the site significantly disturbed (Atypical Situation)?                      no  
 Is the area a potential Problem Area?                      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC    100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
176	Eupatoriadelphus maculatus	Herb	FACW	10.00
227	Polygonum sagittatum	Herb	OBL	30.00
269	Unidentifiable grass	Herb	NI	50.00
293	Leersia oryzoides	Herb	OBL	80.00
320	Vernonia noveboracensis	Herb	FACW	10.00
522	Salix nigra	Shrub	FACW+	40.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bc                      Hydric Soil? nl				
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4	silt	5 Y 4/1		fibrous matter
4-12	silt	5 B 4/1	5 YR 5/8ox.roots	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.5 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	(in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	(in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input type="checkbox"/> Floodplain		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
		<input type="checkbox"/> Water-Stained Leaves	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Other		Recent Weather: partly cloudy	
		Recent Rainfall: 6" snow	

WETLAND DETERMINATION:	Hydric soils present? yes	Hydrophytic Vegetation? yes
	Wetland Hydrology? yes	Wetland? yes
Remarks: all 3 criteria met		

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3412 DATE: 11/04/1993 INVESTIGATOR: MZ, ABC  
 COUNTY: Tucker STATE: WV STREAM: Haddix Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1E/PSS  
 Do Normal Circumstances exist on the site? no  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: newly created wetland, water diversion unknown cause

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	20.00
153	Dichanthelium clandestinum	Herb	FAC+	10.00
167	Epilobium coloratum	Herb	OBL	20.00
176	Eupatoriadelphus maculatus	Herb	FACW	10.00
195	Juncus effusus	Herb	FACW+	10.00
269	Unidentifiable grass	Herb	NI	40.00
320	Vernonia noveboracensis	Herb	FACW	10.00
390	Lysimachia ciliata	Herb	FACW	30.00
404	Alnus rugosa	Shrub	FACW+	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Alluvial Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
none	flooded			
taken				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input checked="" type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: (in.)	<input checked="" type="checkbox"/> Inundated
Depth to Saturated Soil: (in.)	<input type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
Source/Site Characterization:	<input checked="" type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Spring/Seep	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Depressional	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: partly cloudy
<input type="checkbox"/> Other	Recent Rainfall: 6" snow

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3501 DATE: 11/08/1993 INVESTIGATOR: ABC, WER  
 COUNTY: Tucker STATE: WV STREAM: trib.Haddix Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: mowed field next to US 219

Code	Scientific Name	Stratum	Status	71.00 % Areal Cover
195	Juncus effusus	Herb	FACW+	20.00
217	Onoclea sensibilis	Herb	FACW	15.00
249	Solidago rugosa	Herb	FAC	20.00
269	Unidentifiable grass	Herb	NI	20.00
293	Leersia oryzoides	Herb	OBL	10.00
321	Eupatoriadelphus fistulosus	Herb	FACW	10.00
389	Aster simplex	Herb	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph Hydric Soil? nl  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-6" clay silt 5 Gy 5/1 ox.roots  
 6-12+ clay silt 5 Gy 6/1 5 YR 5/8 (20%)ox.roots

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input checked="" type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: cold sunny
	Recent Rainfall: <1"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3502 DATE: 11/08/1993 INVESTIGATOR: ABC, WER  
 COUNTY: Tucker STATE: WV STREAM: Haddix Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PFO1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					43.00
Code	Scientific Name	Stratum	Status		% Areal Cover
2	Sphagnum sp.	Bryo	NI		10.00
116	Caltha palustris	Herb	OBL		15.00
153	Dichanthelium clandestinum	Herb	FAC+		20.00
249	Solidago rugosa	Herb	FAC		20.00
317	Solidago altissima	Herb	FACU		10.00
395	Aster vimineus	Herb	FAC		20.00
399	Solidago canadensis	Herb	FACU		5.00
507	Rosa multiflora	Shrub	FACU		10.00
562	Crataegus sp.	Shrub	NI		10.00
572	Rhus typhina	Shrub	NI		10.00
602	Acer rubrum	Tree	FAC		10.00
636	Liriodendron tulipifera	Tree	FACU		10.00
652	Prunus virginiana	Tree	FAC		10.00
674	Crataegus sp.	Tree	NI		15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At					Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-6"	silt	10 YR 3/1		ox.roots	
6-10"	silt	10 YR 5/1	10 YR 5/6 (25%)		
10"	refusal				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	10.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input checked="" type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input type="checkbox"/> Sediment Deposit	
		<input type="checkbox"/> Drainage Patterns in Wetlands	
		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather: cold	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall: <1"	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3503 DATE: 11/09/1993 INVESTIGATOR: ABC, WER  
COUNTY: Tucker STATE: WV STREAM: Haddix Run WATERSHED: Cheat River  
COWARDIN CLASSIFICATION: PEM1B  
Do Normal Circumstances exist on the site? yes  
Is the site significantly disturbed (Atypical Situation)? no  
Is the area a potential Problem Area? no  
Remarks: along U.S. 219

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 67.00

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	30.00
177	Eupatoriadelphus purpureus	Herb	FAC	20.00
195	Juncus effusus	Herb	FACW+	15.00
279	Asclepias syriaca	Herb	NI	10.00
317	Solidago altissima	Herb	FACU	10.00
320	Vernonia noveboracensis	Herb	FACW	30.00
405	Alnus serrulata	Shrub	OBL	20.00
636	Liriodendron tulipifera	Tree	FACU	10.00
814	Ampelopsis arborea	Vine	FACW	15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-6"	silt	10 YR 4/1	10 YR 6/8 (30%)	ox.roots
too wet				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 6.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cold
<input type="checkbox"/> Other	Recent Rainfall: <1"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
Wetland Hydrology? yes Wetland? yes  
Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3504      DATE: 11/08/1993      INVESTIGATOR: ABC, WER  
 COUNTY: Tucker      STATE: WV      STREAM: trib.Haddix Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: trib into Haddix Run along U.S.219

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					73.00
Code	Scientific Name	Stratum	Status		% Areal Cover
116	Caltha palustris	Herb	OBL		15.00
153	Dichanthelium clandestinum	Herb	FAC+		20.00
268	Typha latifolia	Herb	OBL		10.00
269	Unidentifiable grass	Herb	NI		15.00
320	Vernonia noveboracensis	Herb	FACW		20.00
321	Eupatoriadelphus fistulosus	Herb	FACW		15.00
497	Quercus rubra	Shrub	FACU		10.00
519	Salix fragilis	Shrub	FAC+		15.00
522	Salix nigra	Shrub	FACW+		10.00
676	Castanea dentata	Tree	NI		10.00
901	Solidago patula	Herb	OBL		10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At					Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)		Comments
0-5"	silt	5 Gy 4/1	7.5YR 5/6	(15%)	
5-10"	gravelly silt	10 YR 4/1	7.5YR 4/6	(20%)	
10"	refusal				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 10.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 8.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: cold
<input type="checkbox"/> Other	Recent Rainfall: <1"

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3505A DATE: 11/09/1993 INVESTIGATOR: ABC, WER  
 COUNTY: Tucker STATE: WV STREAM: Haddix Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: depressionnal with fill in some areas

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					64.00
Code	Scientific Name	Stratum	Status		% Areal Cover
249	Solidago rugosa	Herb	FAC		20.00
268	Typha latifolia	Herb	OBL		15.00
269	Unidentifiable grass	Herb	NI		10.00
321	Eupatoriadelphus fistulosus	Herb	FACW		15.00
401	Acer rubrum	Shrub	FAC		15.00
405	Alnus serrulata	Shrub	OBL		20.00
507	Rosa multiflora	Shrub	FACU		10.00
522	Salix nigra	Shrub	FACW+		20.00
602	Acer rubrum	Tree	FAC		10.00
637	Malus sylvestris	Tree	UPL		5.00
651	Prunus serotina	Tree	FACU		5.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bc					Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-4"	silt	10 YR 3/1	10 YR 5/8	(15%) ox.roots	
4-10"	sandy silt	10 YR 4/1	10 YR 4/6	(10%) ox.roots	
10"	refusal				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 4.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressionnal	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny
	Recent Rainfall: <1"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks:



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3505B DATE: 11/09/1993 INVESTIGATOR: ABC, WER  
 COUNTY: Tucker STATE: WV STREAM: Haddix Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PSS1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 70.00

Code	Scientific Name	Stratum	Status	% Areal Cover
1	Polytrichum sp.	Bryo	NI	10.00
106	Apocynum cannabinum	Herb	FACU	10.00
116	Caltha palustris	Herb	OBL	15.00
129	Carex lurida	Herb	OBL	15.00
153	Dichanthelium clandestinum	Herb	FAC+	20.00
195	Juncus effusus	Herb	FACW+	15.00
217	Onoclea sensibilis	Herb	FACW	10.00
249	Solidago rugosa	Herb	FAC	15.00
269	Unidentifiable grass	Herb	NI	20.00
321	Eupatoriadelphus fistulosus	Herb	FACW	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bc Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-5"	silt	10 YR 4/1	10 YR 5/8 (10%)	ox.roots
>5"	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 4.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12

☐ Water Marks  
☐ Drift Lines

☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves

☐ Local Soil Survey Data

☐ FAC-Neutral Test

☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny

Recent Rainfall: <1"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3506      DATE: 11/09/1993      INVESTIGATOR: ABC, WER  
 COUNTY: Tucker      STATE: WV      STREAM: Haddix Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      78.00

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	15.00
168	Epilobium hirsutum	Herb	FACW	10.00
178	Eupatorium perfoliatum	Herb	FACW+	20.00
195	Juncus effusus	Herb	FACW+	10.00
249	Solidago rugosa	Herb	FAC	15.00
269	Unidentifiable grass	Herb	NI	20.00
507	Rosa multiflora	Shrub	FACU	10.00
602	Acer rubrum	Tree	FAC	10.00
901	Solidago patula	Herb	OBL	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Bc      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3"	silt	10 YR 3/1		
3-5"	silt	10 YR 5/1		10 YR 6/8ox.roots
5-7"	silt	10 YR 3/1		
7"	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 7.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 5.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: <1"

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3507 DATE: 11/09/1993 INVESTIGATOR: ABC, WER  
 COUNTY: Tucker STATE: WV STREAM: Haddix Run WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
106	Apocynum cannabinum	Herb	FACU	
116	Caltha palustris	Herb	OBL	
153	Dichanthelium clandestinum	Herb	FAC+	
178	Eupatorium perfoliatum	Herb	FACW+	
269	Unidentifiable grass	Herb	NI	
321	Eupatoriadelphus fistulosus	Herb	FACW	
507	Rosa multiflora	Shrub	FACU	
637	Malus sylvestris	Tree	UPL	
652	Prunus virginiana	Tree	FAC	

SOIL PROFILE: (Minimum 18 inches ) Series Name: At Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3"	silt	2.5 Y 3/2		ox.roots
3-6"	silt	2.5 Y 4/1	2.5Y 4/4 (40%)	
6-8"	gravel siltloam	2.5 Y 4/2	10 YR 4/6 (10%)	
8"	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 8.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: <1"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3508      DATE: 11/09/1993      INVESTIGATOR: ABC, WER  
 COUNTY: Tucker      STATE: WV      STREAM: Haddix Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC      80.00

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	
178	Eupatorium perfoliatum	Herb	FACW+	
195	Juncus effusus	Herb	FACW+	
244	Scirpus cyperinus	Herb	FACW+	
249	Solidago rugosa	Herb	FAC	
321	Eupatoriadelphus fistulosus	Herb	FACW	
432	Cornus foemina	Shrub	FAC	
451	Hamamelis virginiana	Shrub	FAC-	
507	Rosa multiflora	Shrub	FACU	
639	Ostrya virginiana	Tree	FACU-	

SOIL PROFILE: (Minimum 18 inches ) Series Name: At      Hydric Soil? nl

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-5"	loam	10 YR 3/2	10 YR 4/6 (20%)	
5"	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 5.0 (in.)  
 Depth to Saturated Soil: 5.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny

Recent Rainfall: <1"

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3509      DATE: 11/10/1993      INVESTIGATOR: ABC, WER  
 COUNTY: Tucker      STATE: WV      STREAM: Haddix Run      WATERSHED: Cheat River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					62.00
Code	Scientific Name	Stratum	Status		% Areal Cover
<hr/>					
1	Polytrichum sp.	Bryo	NI		15.00
116	Caltha palustris	Herb	OBL		15.00
129	Carex lurida	Herb	OBL		10.00
153	Dichanthelium clandestinum	Herb	FAC+		20.00
195	Juncus effusus	Herb	FACW+		15.00
237	Rubus hispidus	Herb	FACW		15.00
268	Typha latifolia	Herb	OBL		10.00
269	Unidentifiable grass	Herb	NI		20.00
474	Ostrya virginiana	Shrub	FACU-		10.00
522	Salix nigra	Shrub	FACW+		15.00
602	Acer rubrum	Tree	FAC		20.00
639	Ostrya virginiana	Tree	FACU-		5.00
656	Quercus alba	Tree	FACU		10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At				Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
<hr/>				
0-6"	silt	10 YR 3/1	5 YR 4/6 (20%)	
6"	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 5.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 3.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny
<input type="checkbox"/> Other	Recent Rainfall: <1"

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3510      DATE: 11/10/1993      INVESTIGATOR: ABC, WER  
 COUNTY: Tucker      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: head waters of an unnamed stream

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				78.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
116	<i>Caltha palustris</i>	Herb	OBL	20.00
153	<i>Dichanthelium clandestinum</i>	Herb	FAC+	20.00
342	<i>Carex prasina</i>	Herb	OBL	60.00
432	<i>Cornus foemina</i>	Shrub	FAC	10.00
451	<i>Hamamelis virginiana</i>	Shrub	FAC-	25.00
498	<i>Rhododendron arborescens</i>	Shrub	FAC	10.00
608	<i>Betula alleghaniensis</i>	Tree	FAC	20.00
636	<i>Liriodendron tulipifera</i>	Tree	FACU	10.00
656	<i>Quercus alba</i>	Tree	FACU	10.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: BeF				Hydric Soil? nl
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
4"	sandy loam	5 Gy 4/1		
too wet				
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input checked="" type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	1.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input type="checkbox"/> Sediment Deposit	
		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
Source/Site Characterization:		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather:	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall:	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			
-----			

WETLAND DETERMINATION:	Hydric soils present? yes	Hydrophytic Vegetation? yes
	Wetland Hydrology? yes	Wetland? yes
Remarks: all 3 criteria met		

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3511 DATE: 11/09/1993 INVESTIGATOR: ABC, WER  
 COUNTY: Randolph STATE: WV STREAM: unnamed WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PFO1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					64.00
Code	Scientific Name	Stratum	Status		% Areal Cover
110	Aster umbellatus	Herb	FACW		20.00
153	Dichanthelium clandestinum	Herb	FAC+		35.00
158	Dryopteris goldiana	Herb	FAC+		10.00
249	Solidago rugosa	Herb	FAC		20.00
297	Carex gynandra	Herb	NI		20.00
430	Cornus amomum	Shrub	FACW		20.00
610	Betula nigra	Tree	FACW		20.00
636	Liriodendron tulipifera	Tree	FACU		10.00
656	Quercus alba	Tree	FACU		10.00
661	Quercus rubra	Tree	FACU		10.00
809	Smilax rotundifolia	Vine	FAC		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BeF					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-1"	organic				
1-4"	silt loam	2.5 Y 3/1	2.5 Y 6/3	(20%)ox.roots	
4-8"	silt loam	2.5 Y 4/2	2.5 Y 6/3	(20%)Mg concr.	
8"	refusal				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 8.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 5.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: sunny w/frost
<input type="checkbox"/> Other	Recent Rainfall: <1"

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3512 DATE: 11/10/1993 INVESTIGATOR: ABC, WER  
 COUNTY: Randolph STATE: WV STREAM: unnamed WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
153	Dichanthelium clandestinum	Herb	FAC+	50.00
249	Solidago rugosa	Herb	FAC	15.00
269	Unidentifiable grass	Herb	NI	20.00
453	Hypericum prolificum	Shrub	FACU	10.00
507	Rosa multiflora	Shrub	FACU	10.00
901	Solidago patula	Herb	OBL	15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkD Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-4"	silt	2.5 Y 4/2		ox.roots
4-8"	gravelly silt	2.5 Y 3/2	2.5 Y 5/3 (10%)	
8-12"	sandy silt	2.5 Y 4/2	10 YR 5/8 (15%)	
12"	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 2.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: sunny  
 Recent Rainfall: <1"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3513      DATE: 11/10/1993      INVESTIGATOR: ABC, WER  
 COUNTY: Randolph      STATE: WV      STREAM: Leading Creek      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					62.50
Code	Scientific Name	Stratum	Status		% Areal Cover
-----					
195	Juncus effusus	Herb	FACW+		20.00
249	Solidago rugosa	Herb	FAC		20.00
269	Unidentifiable grass	Herb	NI		40.00
320	Vernonia noveboracensis	Herb	FACW		10.00
333	Polygonum persicaria	Herb	FACW		15.00
394	Aster patens	Herb	NI		10.00
432	Cornus foemina	Shrub	FAC		20.00
507	Rosa multiflora	Shrub	FACU		5.00
-----					

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
-----					
0-10"	sandy silt	5 Y 5/2	5 YR 5/6	(20%)ox.roots	
10-12"	sandy silt	5 Y 5/1	2.5YR 4/8	(30%)ox.roots	
12"	refusal				
-----					

Hydric Soil Indicators:

- |   |  |
|---|--|
| <input type="checkbox"/> Histosol           | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material  | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed             | <input checked="" type="checkbox"/> Low Chroma   |
| <input checked="" type="checkbox"/> mottles | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	10.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	10.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
Source/Site Characterization:		<input type="checkbox"/> Water Marks	
<input type="checkbox"/> Seasonal High Water Table		<input type="checkbox"/> Drift Lines	
<input type="checkbox"/> Spring/Seep		<input type="checkbox"/> Sediment Deposit	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Drainage Patterns in Wetlands	
<input type="checkbox"/> Backwater		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Depressional		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
Recorded Data (Describe in Remarks):		<input type="checkbox"/> Water-Stained Leaves	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Aerial Photographs		<input type="checkbox"/> FAC-Neutral Test	
<input type="checkbox"/> Other		<input type="checkbox"/> Other (Explain in Remarks)	
		Recent Weather: morning frost	
		Recent Rainfall: <1"	
-----			

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3514 DATE: 11/11/1993 INVESTIGATOR: ABC, WER  
 COUNTY: Randolph STATE: WV STREAM: unnamed WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 67.00

Code	Scientific Name	Stratum	Status	% Areal Cover
116	Caltha palustris	Herb	OBL	30.00
195	Juncus effusus	Herb	FACW+	15.00
269	Unidentifiable grass	Herb	NI	20.00
405	Alnus serrulata	Shrub	OBL	50.00
634	Larix laricina	Tree	FACW	10.00
814	Ampelopsis arborea	Vine	FACW	15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: BkC Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3"	silt	7.5 YR 5/1	2.5YR 4/8 (20%)	
5"	silt	10 YR 5/1	10 YR 6/8 (20%)	
5"	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 1.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather: sunny
	Recent Rainfall: <1"

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3515      DATE: 11/17/1993      INVESTIGATOR: ABC, DMB  
 COUNTY: Randolph      STATE: WV      STREAM:      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PSS1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					67.00
Code	Scientific Name	Stratum	Status		% Areal Cover
<hr/>					
2	Sphagnum sp.	Bryo	NI		15.00
119	Carex bromoides	Herb	FACW		10.00
129	Carex lurida	Herb	OBL		10.00
177	Eupatoriadelphus purpureus	Herb	FAC		10.00
178	Eupatorium perfoliatum	Herb	FACW+		10.00
237	Rubus hispidus	Herb	FACW		40.00
244	Scirpus cyperinus	Herb	FACW+		10.00
249	Solidago rugosa	Herb	FAC		15.00
268	Typha latifolia	Herb	OBL		15.00
269	Unidentifiable grass	Herb	NI		10.00
405	Alnus serrulata	Shrub	OBL		50.00
453	Hypericum prolificum	Shrub	FACU		20.00
453	Hypericum prolificum	Shrub	FACU		30.00
522	Salix nigra	Shrub	FACW+		15.00
602	Acer rubrum	Tree	FAC		10.00
639	Ostrya virginiana	Tree	FACU-		15.00
674	Crataegus sp.	Tree	NI		15.00
902	Vernonia gigantea	Herb	FAC		15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At      Hydric Soil? yes  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 -----  
 0-18"      silty clay      10 YR 5/1      10 YR 5/8ox.roots

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input checked="" type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: <1"

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3516      DATE: 11/10/1993      INVESTIGATOR: ABC, WER  
 COUNTY: Randolph      STATE: WV      STREAM: Leading Creek      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: pasture area-wetland was a former oxbow

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				75.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
195	Juncus effusus	Herb	FACW+	10.00
269	Unidentifiable grass	Herb	NI	30.00
320	Vernonia noveboracensis	Herb	FACW	30.00
900	Solidago gigantea	Herb	FACW	30.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: Tg				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-4"	silt	10 YR 3/1	10 YR 4/6 (10%)	ox.roots
4-12"	sandy silt	10 YR 4/2	10 YR 5/8 (10%)	
12"	refusal			
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 12.0 (in.)  
 Depth to Saturated Soil: 8.0 (in.)

Wetland Hydrology Indicators:

Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☒ Depressional

Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test

Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

☐ Other (Explain in Remarks)  
 Recent Weather: sunny  
 Recent Rainfall: <1"

WETLAND DETERMINATION:	Hydric soils present? yes	Hydrophytic Vegetation? yes
	Wetland Hydrology? yes	Wetland? yes
Remarks: all 3 criteria met		

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3601      DATE: 11/15/1993      INVESTIGATOR: ABC, DMB  
 COUNTY: Randolph      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: across from the Elkins speed way entrance

Code	Scientific Name	Stratum	Status	75.00 % Areal Cover
154	Dichanthelium acuminatum	Herb	FAC	30.00
176	Eupatoriadelphus maculatus	Herb	FACW	20.00
251	Solidago uliginosa	Herb	OBL	30.00
269	Unidentifiable grass	Herb	NI	10.00
394	Aster patens	Herb	NI	20.00
405	Alnus serrulata	Shrub	OBL	25.00
522	Salix nigra	Shrub	FACW+	10.00
901	Solidago patula	Herb	OBL	30.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-12	silty clay	10 YR 5/2	2.5 Y 6/6	
12"	refusal			

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 2.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 2.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: rain/overcast
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall:
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3602 DATE: 11/15/1993 INVESTIGATOR: ABC, DMB  
 COUNTY: Randolph STATE: WV STREAM: Leading Creek WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? yes  
 Is the area a potential Problem Area? no  
 Remarks: area is mowed for recreational use

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 55.00

Code	Scientific Name	Stratum	Status	% Areal Cover
132	Carex sp.	Herb	FACW	20.00
195	Juncus effusus	Herb	FACW+	50.00
224	Polygonum cuspidatum	Herb	FACU-	10.00
269	Unidentifiable grass	Herb	NI	30.00
273	Verbesina alternifolia	Herb	FAC	10.00
297	Carex gynandra	Herb	NI	10.00
522	Salix nigra	Shrub	FACW+	10.00
602	Acer rubrum	Tree	FAC	10.00
639	Ostrya virginiana	Tree	FACU-	5.00
651	Prunus serotina	Tree	FACU	10.00
901	Solidago patula	Herb	OBL	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18"	clay	10 YR 5/2	10 YR 6/6sat	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 12.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 12.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
Source/Site Characterization:	<input type="checkbox"/> Water Marks
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Sediment Deposit
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Drainage Patterns in Wetlands
<input type="checkbox"/> Backwater	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Depressional	<input type="checkbox"/> Oxidized Root Channels/Upper 12
Recorded Data (Describe in Remarks):	<input checked="" type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Aerial Photographs	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Other	<input type="checkbox"/> Other (Explain in Remarks)
	Recent Weather:
	Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3604      DATE: 11/16/1993      INVESTIGATOR: ABC, DMB  
 COUNTY: Randolph      STATE: WV      STREAM: Leading Creek      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      yes  
 Is the area a potential Problem Area?      no  
 Remarks: grazed pasture & disturbed-very wet

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					50.00
Code	Scientific Name	Stratum	Status		% Areal Cover
119	Carex bromoides	Herb	FACW		10.00
124	Carex folliculata	Herb	NI		10.00
129	Carex lurida	Herb	OBL		40.00
178	Eupatorium perfoliatum	Herb	FACW+		20.00
195	Juncus effusus	Herb	FACW+		50.00
269	Unidentifiable grass	Herb	NI		20.00
300	Asclepias sp.	Herb	NI		10.00
394	Aster patens	Herb	NI		10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At      Hydric Soil? yes  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0-18"      clay      10 YR 4/1      2.5YR 4/8 (35%)ox. roots (tons)

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      2.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      12.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather:
<input type="checkbox"/> Other	Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3605      DATE: 11/16/1993      INVESTIGATOR: ABC, DMB  
 COUNTY: Randolph      STATE: WV      STREAM: Stalnaker Run      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: AA located in a pasture along 219

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC				75.00
Code	Scientific Name	Stratum	Status	% Areal Cover
-----				
178	Eupatorium perfoliatum	Herb	FACW+	30.00
195	Juncus effusus	Herb	FACW+	25.00
405	Alnus serrulata	Shrub	OBL	20.00
507	Rosa multiflora	Shrub	FACU	5.00
-----				

SOIL PROFILE: (Minimum 18 inches ) Series Name: At				Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments
-----				
0-5"	silt	10 YR 2/1		
5-12"	silt	10 YR 3/2	10 YR 6/8 (15%)	ox.roots
12"	refusal			
-----				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	0.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	12.0 (in.)	<input type="checkbox"/> Inundated	
Depth to Saturated Soil:	10.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
		<input type="checkbox"/> Water Marks	
		<input type="checkbox"/> Drift Lines	
		<input type="checkbox"/> Sediment Deposit	
		<input type="checkbox"/> Drainage Patterns in Wetlands	
Source/Site Characterization:		Secondary Indicators (2 or more req'd)	
<input type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather:	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall:	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			
-----			

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met



# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3606 DATE: 11/16/1993 INVESTIGATOR: ABC, DMB  
 COUNTY: Randolph STATE: WV STREAM: unnamed WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B/PSS  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	71.00 % Areal Cover
116	Caltha palustris	Herb	OBL	5.00
119	Carex bromoides	Herb	FACW	5.00
124	Carex folliculata	Herb	NI	10.00
165	Eleocharis sp.	Herb	NI	5.00
178	Eupatorium perfoliatum	Herb	FACW+	25.00
195	Juncus effusus	Herb	FACW+	20.00
269	Unidentifiable grass	Herb	NI	20.00
277	Viola spp.	Herb	FAC	10.00
320	Vernonia noveboracensis	Herb	FACW	20.00
342	Carex prasina	Herb	OBL	10.00
398	Clethra acuminata	Herb	NI	10.00
405	Alnus serrulata	Shrub	OBL	50.00
507	Rosa multiflora	Shrub	FACU	20.00
901	Solidago patula	Herb	OBL	15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At Hydric Soil? yes  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-18 silty clay 10 YR 4/1 7.5 YR 5/8ox.roots (tons)

## Hydric Soil Indicators:

[ ] Histic Epipedon  
 [ ] Histic Aquic Moisture Regime  
 [ ] Sulfidic Material  
 [X] Gleyed  
 [ ] Low Chroma  
 [X] mottles  
 [ ] Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations: Wetland Hydrology Indicators:  
 Depth of Surface Water: 1.0 (in.) Primary Indicators:  
 Depth to Free Water in Pit: 12.0 (in.) [ ] Inundated  
 Depth to Saturated Soil: 2.0 (in.) [X] Saturated in Upper 12  
 [ ] Water Marks  
 [ ] Drift Lines  
 Source/Site Characterization: [ ] Sediment Deposit  
 [ ] Seasonal High Water Table [ ] Drainage Patterns in Wetlands  
 [ ] Spring/Seep Secondary Indicators (2 or more req'd)  
 [X] Floodplain [X] Oxidized Root Channels/Upper 12  
 [ ] Backwater [ ] Water-Stained Leaves  
 [X] Depressional [ ] Local Soil Survey Data  
 Recorded Data (Describe in Remarks): [ ] FAC-Neutral Test  
 [ ] Stream, Lake, or Tide Gauge [ ] Other (Explain in Remarks)  
 [ ] Aerial Photographs Recent Weather:  
 [ ] Other Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3608      DATE: 11/17/1993      INVESTIGATOR: ABC, DMB  
 COUNTY: Randolph      STATE: WV      STREAM: unnamed      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: unnamed stream

Code	Scientific Name	Stratum	Status	% Areal Cover
195	Juncus effusus	Herb	FACW+	10.00
221	Phalaris arundinacea	Herb	FACW+	70.00
249	Solidago rugosa	Herb	FAC	15.00
320	Vernonia noveboracensis	Herb	FACW	10.00
394	Aster patens	Herb	NI	15.00
664	Salix babylonica	Tree	FACW-	10.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: EnC      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-18	silty clay	10 YR 5/1	10 YR 5/8ox.roots	

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☐ Floodplain  
☐ Backwater  
☒ Depressional

#### Secondary Indicators (2 or more req'd)

☒ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

#### Recent Weather:

Recent Rainfall:

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3609      DATE: 11/18/1993      INVESTIGATOR: ABC, DMB  
 COUNTY: Randolph      STATE: WV      STREAM:      WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					87.50
Code	Scientific Name	Stratum	Status		% Areal Cover
154	Dichanthelium acuminatum	Herb	FAC		10.00
237	Rubus hispidus	Herb	FACW		20.00
249	Solidago rugosa	Herb	FAC		15.00
405	Alnus serrulata	Shrub	OBL		20.00
453	Hypericum prolificum	Shrub	FACU		20.00
522	Salix nigra	Shrub	FACW+		20.00
602	Acer rubrum	Tree	FAC		10.00
602	Acer rubrum	Tree	FAC		15.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Ph & Pn					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-12"	silt	10 YR 5/1	10 YR 6/8	(25%)ox.roots	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 12.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 6.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather:
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall:
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3610A DATE: 11/18/1993 INVESTIGATOR: ABC, DMB  
 COUNTY: Randolph STATE: WV STREAM: Claylick Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: wetland borders on county 11

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					69.00
Code	Scientific Name	Stratum	Status		% Areal Cover
116	Caltha palustris	Herb	OBL		5.00
154	Dichanthelium acuminatum	Herb	FAC		20.00
221	Phalaris arundinacea	Herb	FACW+		15.00
251	Solidago uliginosa	Herb	OBL		10.00
269	Unidentifiable grass	Herb	NI		15.00
273	Verbesina alternifolia	Herb	FAC		60.00
277	Viola spp.	Herb	FAC		5.00
321	Eupatoriadelphus fistulosus	Herb	FACW		10.00
404	Alnus rugosa	Shrub	FACW+		10.00
405	Alnus serrulata	Shrub	OBL		15.00
507	Rosa multiflora	Shrub	FACU		15.00
676	Castanea dentata	Tree	NI		5.00
815	Vitis sp.	Vine	NI		20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: At					Hydric Soil? yes
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-5"	silt	10 YR 5/2	10 YR 5/4 (10%)	ox.roots	
5-12"	sandy silt	10 YR 4/2	10 YR 5/6 (15%)	ox.roots	
12"	refusal				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 1.0 (in.)  
 Depth to Free Water in Pit: 10.0 (in.)  
 Depth to Saturated Soil: 4.0 (in.)

### Wetland Hydrology Indicators:

Primary Indicators:  
☐ Inundated  
☒ Saturated in Upper 12  
☒ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit  
☐ Drainage Patterns in Wetlands  
 Secondary Indicators (2 or more req'd)  
☐ Oxidized Root Channels/Upper 12  
☒ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Source/Site Characterization:

☐ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☐ Backwater  
☐ Depressional

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather:  
 Recent Rainfall:

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: 3610B DATE: 11/18/1993 INVESTIGATOR: ABC, DMB  
 COUNTY: Randolph STATE: WV STREAM: Claylick Run WATERSHED: Tygart Valley River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks: wetland borders on county 11

Code	Scientific Name	Stratum	Status	69.00 % Areal Cover
116	Caltha palustris	Herb	OBL	5.00
154	Dichanthelium acuminatum	Herb	FAC	20.00
221	Phalaris arundinacea	Herb	FACW+	15.00
251	Solidago uliginosa	Herb	OBL	10.00
269	Unidentifiable grass	Herb	NI	15.00
273	Verbesina alternifolia	Herb	FAC	60.00
277	Viola spp.	Herb	FAC	5.00
321	Eupatoriadelphus fistulosus	Herb	FACW	10.00
404	Alnus rugosa	Shrub	FACW+	10.00
405	Alnus serrulata	Shrub	OBL	15.00
507	Rosa multiflora	Shrub	FACU	15.00
676	Castanea dentata	Tree	NI	5.00
815	Vitis sp.	Vine	NI	20.00

Depth	Texture	Matrix Color	Mottle Color(%)	Hydric Soil? yes Comments
0-5"	silt	10 YR 5/2	10 YR 5/4	(10%)ox.roots
5-12"	sandy silt	10 YR 4/2	10 YR 5/6	(15%)ox.roots
12"	refusal			

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 1.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 10.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 4.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input type="checkbox"/> Drift Lines
	<input type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Water-Stained Leaves
<input checked="" type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather:
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall:
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION: Hydric soils present? yes      Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 criteria met

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: I-66-1      DATE: 09/08/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Shenandoah STATE: VA STREAM: unnamed      WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM/POW  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks: manmade pond

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					100.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
178	Eupatorium perfoliatum	Herb	FACW+	5.00	
199	Juncus subcaudatus	Herb	OBL	5.00	
268	Typha latifolia	Herb	OBL	15.00	
320	Vernonia noveboracensis	Herb	FACW	10.00	
340	Carex intumescens	Herb	FACW	5.00	
373	Hydrilla sp.	Herb	NI	65.00	
374	Juncus torreyi	Herb	FACW	10.00	
522	Salix nigra	Shrub	FACW+	30.00	

SOIL PROFILE: (Minimum 18 inches ) Series Name: Frederick      Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silty clay	5 Y 4/1	none	
3-8	silty clay	2.5 YR 5/0	2.5YR 5/6 (30%)	
refusal				

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input checked="" type="checkbox"/> Water Marks
	<input checked="" type="checkbox"/> Drift Lines
	<input checked="" type="checkbox"/> Sediment Deposit
	<input type="checkbox"/> Drainage Patterns in Wetlands
Source/Site Characterization:	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input type="checkbox"/> Spring/Seep	<input type="checkbox"/> Water-Stained Leaves
<input type="checkbox"/> Floodplain	<input type="checkbox"/> Local Soil Survey Data
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> FAC-Neutral Test
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Other (Explain in Remarks)
Recorded Data (Describe in Remarks):	Recent Weather: overcast
<input type="checkbox"/> Stream, Lake, or Tide Gauge	Recent Rainfall: none
<input type="checkbox"/> Aerial Photographs	
<input type="checkbox"/> Other	

WETLAND DETERMINATION:      Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: I-66-2 DATE: 09/08/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Shenandoah STATE: VA STREAM: unnamed WATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00

Code	Scientific Name	Stratum	Status	% Areal Cover
129	Carex lurida	Herb	OBL	25.00
178	Eupatorium perfoliatum	Herb	FACW+	40.00
204	Lobelia siphilitica	Herb	FACW+	50.00
243	Scirpus atrovirens	Herb	OBL	20.00
269	Unidentifiable grass	Herb	NI	90.00
320	Vernonia noveboracensis	Herb	FACW	50.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Endcav Hydric Soil? no

Depth	Texture	Matrix Color	Mottle Color(%)	Comments
0-3	silt loam	10 YR 3/2	none	much organic
3-12	silty clay	N 5/	10 YR 5/6	(20%)
refusal				

## Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input checked="" type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input checked="" type="checkbox"/> mottles	<input checked="" type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

## HYDROLOGY:

### Field Observations:

Depth of Surface Water: 0.0 (in.)  
 Depth to Free Water in Pit: 0.0 (in.)  
 Depth to Saturated Soil: 0.0 (in.)

### Wetland Hydrology Indicators:

#### Primary Indicators:

☐ Inundated  
☒ Saturated in Upper 12  
☐ Water Marks  
☐ Drift Lines  
☐ Sediment Deposit

### Source/Site Characterization:

☒ Seasonal High Water Table  
☐ Spring/Seep  
☒ Floodplain  
☒ Backwater  
☐ Depressional

#### Secondary Indicators (2 or more req'd)

☐ Oxidized Root Channels/Upper 12  
☐ Water-Stained Leaves  
☐ Local Soil Survey Data  
☐ FAC-Neutral Test  
☐ Other (Explain in Remarks)

### Recorded Data (Describe in Remarks):

☐ Stream, Lake, or Tide Gauge  
☐ Aerial Photographs  
☐ Other

Recent Weather: overcast  
 Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met

# ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: I-66-3A DATE: 09/08/1993 INVESTIGATOR: EFA, DAE  
 COUNTY: Shenandoah STATE: VA STREAM: near Mulberry RWATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site? yes  
 Is the site significantly disturbed (Atypical Situation)? no  
 Is the area a potential Problem Area? no  
 Remarks:

Code	Scientific Name	Stratum	Status	% Areal Cover
113	Bidens frondosa	Herb	FACW	10.00
178	Eupatorium perfoliatum	Herb	FACW+	40.00
204	Lobelia siphilitica	Herb	FACW+	50.00
269	Unidentifiable grass	Herb	NI	100.00
320	Vernonia noveboracensis	Herb	FACW	50.00
333	Polygonum persicaria	Herb	FACW	10.00
340	Carex intumescens	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: FRE; Endcav Hydric Soil? no  
 Depth Texture Matrix Color Mottle Color(%) Comments  
 0-6 silty clay 2.5 Y 4/2 ox.root channel  
 refusal concretions

## Hydric Soil Indicators:

- |  |  |
|--|--|
| <input type="checkbox"/> Histosol          | <input type="checkbox"/> Histic Epipedon   |
| <input type="checkbox"/> Sulfidic Material | <input type="checkbox"/> Aquic Moisture Regime   |
| <input type="checkbox"/> Gleyed            | <input checked="" type="checkbox"/> Low Chroma   |
| <input type="checkbox"/> mottles           | <input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol) |

## HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water: 0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit: 0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil: 0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION: Hydric soils present? yes Hydrophytic Vegetation? yes  
 Wetland Hydrology? yes Wetland? yes  
 Remarks: all 3 parameters met



ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: I-66-3B      DATE: 09/08/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Shenandoah STATE: VA STREAM: near Mulberry RWATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM1B  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC 100.00				
Code	Scientific Name	Stratum	Status	% Areal Cover
113	Bidens frondosa	Herb	FACW	10.00
178	Eupatorium perfoliatum	Herb	FACW+	40.00
204	Lobelia siphilitica	Herb	FACW+	50.00
269	Unidentifiable grass	Herb	NI	100.00
320	Vernonia noveboracensis	Herb	FACW	50.00
333	Polygonum persicaria	Herb	FACW	10.00
340	Carex intumescens	Herb	FACW	20.00

SOIL PROFILE: (Minimum 18 inches ) Series Name: Frederick;EndcaHydric Soil? no  
 Depth      Texture      Matrix Color      Mottle Color(%)      Comments  
 0-6      silty clay      2.5 Y 4/2           ox.root channel  
 refusal                     concretions

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:	Wetland Hydrology Indicators:
Depth of Surface Water:      0.0 (in.)	Primary Indicators:
Depth to Free Water in Pit:      0.0 (in.)	<input type="checkbox"/> Inundated
Depth to Saturated Soil:      0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12
	<input type="checkbox"/> Water Marks
Source/Site Characterization:	<input type="checkbox"/> Drift Lines
<input type="checkbox"/> Seasonal High Water Table	<input type="checkbox"/> Sediment Deposit
<input type="checkbox"/> Spring/Seep	<input checked="" type="checkbox"/> Drainage Patterns in Wetlands
<input checked="" type="checkbox"/> Floodplain	Secondary Indicators (2 or more req'd)
<input checked="" type="checkbox"/> Backwater	<input type="checkbox"/> Oxidized Root Channels/Upper 12
<input checked="" type="checkbox"/> Depressional	<input type="checkbox"/> Water-Stained Leaves
	<input type="checkbox"/> Local Soil Survey Data
Recorded Data (Describe in Remarks):	<input type="checkbox"/> FAC-Neutral Test
<input type="checkbox"/> Stream, Lake, or Tide Gauge	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Aerial Photographs	Recent Weather: overcast
<input type="checkbox"/> Other	Recent Rainfall: none

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters present

ROUTINE WETLAND DETERMINATION FORM

SITE/PLOT#: I-66-4      DATE: 09/08/1993      INVESTIGATOR: EFA, DAE  
 COUNTY: Shenandoah STATE: VA STREAM: near Mulberry RWATERSHED: Shenandoah River  
 COWARDIN CLASSIFICATION: PEM 1F  
 Do Normal Circumstances exist on the site?      yes  
 Is the site significantly disturbed (Atypical Situation)?      no  
 Is the area a potential Problem Area?      no  
 Remarks:

VEGETATION: Percent Dominant Species that are OBL, FACW or FAC					100.00
Code	Scientific Name	Stratum	Status	% Areal Cover	
100	Acorus calamus	Herb	OBL	90.00	
195	Juncus effusus	Herb	FACW+	10.00	
269	Unidentifiable grass	Herb	NI	100.00	
340	Carex intumescens	Herb	FACW	5.00	

SOIL PROFILE: (Minimum 18 inches ) Series Name: Endcav					Hydric Soil? no
Depth	Texture	Matrix Color	Mottle Color(%)	Comments	
0-6 refusal	silty clay	2.5 Y 5/2	none	ox.root channel	

Hydric Soil Indicators:

<input type="checkbox"/> Histosol	<input type="checkbox"/> Histic Epipedon
<input type="checkbox"/> Sulfidic Material	<input type="checkbox"/> Aquic Moisture Regime
<input type="checkbox"/> Gleyed	<input checked="" type="checkbox"/> Low Chroma
<input type="checkbox"/> mottles	<input type="checkbox"/> Entisol (organic context, vertical streaking, chroma 3, wet spodosol)

HYDROLOGY:

Field Observations:		Wetland Hydrology Indicators:	
Depth of Surface Water:	1.0 (in.)	Primary Indicators:	
Depth to Free Water in Pit:	0.0 (in.)	<input checked="" type="checkbox"/> Inundated	
Depth to Saturated Soil:	0.0 (in.)	<input checked="" type="checkbox"/> Saturated in Upper 12	
		<input checked="" type="checkbox"/> Water Marks	
		<input checked="" type="checkbox"/> Drift Lines	
		<input checked="" type="checkbox"/> Sediment Deposit	
		<input checked="" type="checkbox"/> Drainage Patterns in Wetlands	
Source/Site Characterization:		Secondary Indicators (2 or more req'd)	
<input checked="" type="checkbox"/> Seasonal High Water Table		<input checked="" type="checkbox"/> Oxidized Root Channels/Upper 12	
<input type="checkbox"/> Spring/Seep		<input checked="" type="checkbox"/> Water-Stained Leaves	
<input checked="" type="checkbox"/> Floodplain		<input type="checkbox"/> Local Soil Survey Data	
<input type="checkbox"/> Backwater		<input type="checkbox"/> FAC-Neutral Test	
<input checked="" type="checkbox"/> Depressional		<input type="checkbox"/> Other (Explain in Remarks)	
Recorded Data (Describe in Remarks):		Recent Weather: overcast	
<input type="checkbox"/> Stream, Lake, or Tide Gauge		Recent Rainfall: none	
<input type="checkbox"/> Aerial Photographs			
<input type="checkbox"/> Other			

WETLAND DETERMINATION:    Hydric soils present? yes      Hydrophytic Vegetation? yes  
    Wetland Hydrology? yes      Wetland? yes  
 Remarks: all 3 parameters met