

Photo 17: Transition between PEM and PSS components of WRG001 near Pontiff Road, looking west.



Photo 18: Upland fallow agricultural field adjacent to WRG001 PSS, looking west to WRG007.



Photo 19: PEM wetland WKD004 in fallow agricultural field, looking northeast.



Photo 20: PEM wetland WRG004 on open forest hillslope, looking southeast to ephemeral stream SRG003.



Photo 21: PEM wetland WRG006, looking northwest to PSS wetland WRG007 along the Dining Fork.



Photo 22: Transition between PSS WRG007 and PEM WRG006 wetland near proposed centerline, looking north.



Photo 23: Upland fallow agricultural field west of WRG008, looking south to WRG007F.



Photo 24: PFO/PEM wetland WRG008, looking southeast.



Photo 25: PEM wetland WRG013 in narrow floodplain along SRG009, looking southeast.



Photo 26: Wetland WRG011 edge in floodplain of SRG014, looking south for forested upland hillslope



Photo 27: Wetland WRG012 along SRG015, looking north.



Photo 28: Upland forest hillslope toe near WRG011, looking north.



REPRESENTATIVE STREAM PHOTOGRAPHS

Photo 29: SRG001, the Dining Fork of Conotton Creek, looking upstream/north to fallow agricultural field.



Photo 30: SRG001, the Dining Fork of Conotton Creek, looking southwest/downstream to cattle pasture.



Photo 31: Stream SRG002 between old field shrub and fallow agricultural field, looking northwest/upstream.



Photo 32: Stream SRG002 and WRG001, looking southeast/upstream to forest.



Photo 33: Intermittent stream SKD003, looking northwest/upstream in wetland WRG009.



Photo 34: Intermittent stream SKD003, looking southeast/downstream in wetland WRG009.



Photo 35: Ephemeral stream SRG003, looking northeast/upstream to open forest and old field.



Photo 36: Ephemeral stream SRG003, looking southwest/downstream to SRG002 in forest.



Photo 37: Intermittent stream SRG007, looking east/upstream to Kilgore compressor station.



Photo 38: Intermittent stream SRG007, looking west/downstream to Kilgore compressor station.



Photo 39: Intermittent stream SRG009 near centerline, looking northwest/upstream in forest.



Photo 40: Intermittent stream SRG009 near centerline, looking southeast/downstream in forest.



Photo 41: Perennial stream SRG014, looking north/upstream in wetland WRG011.



Photo 42: Perennial stream SRG014, looking south/downstream in wetland WRG011.



Photo 43: Ephemeral stream SRG015, looking north/upstream to underground section.



Photo 44: Ephemeral stream SRG015, looking south/downstream in wetland WRG012.



Photo 45: Seep at the head of ephemeral SRG015, looking northeast.



Photo 46: Seep at head of ephemeral SRG017, looking east/downstream to WRG011.



REPRESENTATIVE POND PHOTOGRAPHS

Photo 47: Pond PRG001 looking northeast to SRG008 and man-made berm.



Photo 48: Pond PRG001 looking east to SRG008 and man-made berm.

WETLAND DATA SHEETS

APPENDIX B

Project/Site: Kilgore-Polo Road 138kV Extension Applicant/Owner: AEP Investigator(s): Keith D'Angiolillo, Becky Koze Landform (hillslope, terrace, etc.): floodplain Subregion (LRR or MLRA): LRR N Soil Map Unit Name Lat. Soil Map Unit Name Vestmoreland-Coshocton silt loam Are climatic/hydrologic conditions of the site typical for t Are vegetation , soil , or hydrology Are vegetation , soil , or hydrology	s, 8 to 15 % slopes NV	none): <u>concave</u> Slope (%): <u>3%</u> -81.03616 Datum: WGS84 VI Classification: <u>None</u>
SUMMARY OF FINDINGS Hydrophytic vegetation present? Yes Hydric soil present? Yes Wetland hydrology present? Yes	Is the sampled area with	in a wetland? Yes
Remarks: WKD002/WKD003 - Continuation of WRG009 meter station access road culverts. Abutting in Fork. HYDROLOGY	-	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check a Surface Water (A1) True Aq X High Water Table (A2) Hydroge X Saturation (A3) Oxidized Water Marks (B1) X Living R Sediment Deposits (B2) Presence Drift Deposits (B3) Recent I Algal Mat or Crust (B4) Soils (C4 Iron Deposits (B5) Thin Mu	all that apply) Su uatic Plants (B14) Sp en Sulfide Odor (C1) Drain d Rhizospheres on Moo oots (C3) Drain e of Reduced Iron (C4) Crain fron Reduction in Tilled Sa 6) Stu ck Surface (C7) X Ge Explain in Remarks) Sh	dary Indicators (minimum of two required) fface Soil Cracks (B6) arsely Vegetated Concave Surface (B8) ainage Patterns (B10) ss Trim Lines (B16) /-Season Water Table (C2) ayfish Burrows (C8) turation Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) omorphic Position (D2) allow Aquitard (D3) crotopographic Relief (D4) C-Neutral Test (D5)
Field Observations: Surface water present? Yes No X Water table present? Yes X No X Saturation present? Yes X No X (includes capillary fringe) Describe recorded data (stream gauge, monitoring well,	Depth (inches): 8 Depth (inches): 4	Wetland hydrology present? Y
Remarks: Floodplain along tributaries to Dining Fork. A	ppears to flood.	

VEGETATION - Use scientific of plante

						50/20 Thresholds
Tree Stratum Plot Siz Prunus serotina	e (30 ft.)	Absolute % Cover 30	Dominant Species Y	Indicator Status FACU	20% 50% Tree Stratum 6 15 Sapling/Shrub Stratum 14 35
						Herb Stratum2153Woody Vine Stratum00
						Dominance Test Worksheet Number of Dominant
						Species that are OBL, FACW, or FAC: <u>4</u> (A)
				Tatal Osum		Total Number of Dominant Species Across all Strata: <u>5</u> (B)
				Total Cover		Percent of Dominant Species that are OBL,
hrub/Sapling Plot Siz Stratum	e (15 ft.)	Absolute % Cover	Dominant Species	Indicator Status	FACW, or FAC: <u>80.00%</u> (A
Alnus serrulata			50	Y	OBL	Prevalence Index Worksheet
Sambucus nigra			<u>15</u> 5	<u>Y</u>	FAC FACU	Total % Cover of:
Rosa multiflora			5	N	FACU	OBL species $125 \times 1 =$ 125 FACW species $30 \times 2 =$ 60 FAC species $15 \times 3 =$ 45
						FACU species $35 \times 4 = 140$ UPL species $0 \times 5 = 0$
						UPL species $0 \times 5 = 0$ Column totals 205 (A) 370 (B)
						Prevalence Index = $B/A = 1.80$
			=	 Total Cover 		Hydrophytic Vegetation Indicators:
Herb Stratum Plot Siz	ze(5 ft.)	Absolute	Dominant	Indicator	Rapid test for hydrophytic vegetation
Symplocarpus foetidus		,	% Cover 75	Species Y	Status OBL	X Dominance test is >50% X Prevalence index is ≤3.0*
Impatiens capensis		_	30	Ŷ	FACW	Morphological adaptations* (provide supporting data in Remarks or on a
		_				 separate sheet) Problematic hydrophytic vegetation* (explain)
		_				*Indicators of hydric soil and wetland hydrology mus present, unless disturbed or problematic
						Definitions of Vegetation Strata:
						Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height.
		_				Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall.
				Total Cover		Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall.
Woody Vine Plot Siz Stratum	e (30 ft.)	Absolute % Cover	Dominant Species	Indicator Status	Woody vines - All woody vines greater than 3.28 ft height.
						Hydrophytic
						vegetation
			=	 Total Cover 		present? Y
narks: (Include photo numbe	ers here or on a	a sepa	rate sheet			
		•				
· ·						
loodplain abutting SKD0	· · ·	ç				

SOIL							Sa	mpling Point: DPKD001		
Profile Des	cription: (Descri	be to th	ne depth needed	l to doc	ument th	e indicat	or or confirm the abser	nce of indicators.)		
Depth	Matrix			lox Fea			Texture	Remarks		
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-15	10YR 5/1	95	10YR 5/6 5 C PL clay loam							
*Type: C=0	Concentration, D	=Deple	tion, RM=Reduc	ed Mat	rix, CS=	Covered	or Coated Sand Grains	5		
	PL=Pore Lining	, M=Ma	atrix				Indicators for	Problematic Hydric Soils:		
Black H Hydrog Stratifie 2 cm N Deplete Thick D Sandy (LRR N Sandy Sandy Strippe	Epipedon (A2) distic (A3) den Sulfide (A4) ed Layers (A5) luck (A10) (LRR ed Below Dark S Dark Surface (A1 Mucky Mineral (S I, MLRA 147, 14 Gleyed Matrix (S Redox (S5) d Matrix (S6)	urface 2) S1) S 8) S4)	(MLRA Thin Da (MLRA Loamy X Deplete (A11) Redox Deplete Redox Iron-Ma Umbric Piedmo Red Pa	ue Belo 147, 14 ark Surf 147, 14 Gleyed ed Matri Dark Su ed Dark Depress anganes Surfacto ont Floo irent Ma	w Surfa 48) ace (S9) 48) Matrix (x (F3) urface (F Surface sions (F4) se Massi e (F13) (dplain S aterial (F	F2) (F7) 8) es (F12) MLRA 1 oils (F19 21) (MLI	Coast Prair Piedmont F (MLRA 136 Very Shallo	ow Dark Surface (TF12) lain in Remarks)		
Type:	Layer (if observe nes):	,			-		Hydric soil prese	nt? <u>Y</u>		
Remarks: Deplete	ed clay and oxi	dized	root channels	in floc	odplain.					

Project/Site: Kilgore-Polo Road 138kV E	xtension City/County:	Carroll Sampling	Date: 5/1/2014
Applicant/Owner: AEP	State:		Point DPKD002
Investigator(s): Keith D'Angiolillo, Becky Ko		, Township, Range: S18 T12N	
Landform (hillslope, terrace, etc.): terrace		ncave, convex, none): <u>conve</u>	
Subregion (LRR or MLRA): LRR N	Lat.: 40.45871	Long.: -81.03603	Datum: WGS84
Soil Map Unit Name Westmoreland-Coshoct	on silt loams, 15 to 25 % slope	s NWI Classification	n: None
Are climatic/hydrologic conditions of the site			
Are vegetation, soil, or	hydrologysignificantly hydrologynaturally pr	disturbed? Are "normal	Yes
Are vegetation, soil, or	hydrologynaturally pr	oblematic? circumstance	
		(If needed, ex	plain any answers in remarks)
SUMMARY OF FINDINGS			
Hydrophytic vegetation present? No			
Hydric soil present? No	Is the sam	pled area within a wetland?	No
Wetland hydrology present? No			
Remarks:			
Raised terrace between WKD002 a	nd WKD003, abutting SKD	003 and tributary. North	of larger wetland
SRG009 in riparian forest near pipe	-	,	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is require	red; check all that apply)	Surface Soil Crack	s (B6)
Surface Water (A1)	True Aquatic Plants (B14)		d Concave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns	
Saturation (A3)		Moss Trim Lines (F	
Water Marks (B1)	Oxidized Rhizospheres on	Dry-Season Water	
Sediment Deposits (B2)	Living Roots (C3) Presence of Reduced Iron (C		. ,
Drift Deposits (B3)	Recent Iron Reduction in Till		on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Soils (C6)	Stunted or Stresse	
Iron Deposits (B5)	Thin Muck Surface (C7)	Geomorphic Positi	
	Other (Explain in Remarks)		
Inundation Visible on Aerial		Shallow Aquitard (
Imagery (B7)		Microtopographic I	
Water-Stained Leaves (B9)		FAC-Neutral Test	(05)
Aquatic Fauna (B13)			
Field Observations:		Wetley d	
Surface water present? Yes	No X Depth (inches):		
Water table present? Yes	No X Depth (inches):		-
Saturation present? Yes	No X Depth (inches):	present?	<u> </u>
(includes capillary fringe)			
Describe recorded data (stream gauge, mor	nitoring well, aerial photos, prev	ious inspections), if available:	
Remarks:			
-			
Dry terrace between branches of Sk	<d003.< td=""><td></td><td></td></d003.<>		

VEGETATION - Use scientific names of plants

		ames of					Sampling Point: DPKD002 50/20 Thresholds
Tree Stratum Plot S Prunus serotina	Size (30 ft.)	Absolute % Cover 80	Dominant Species Y	Indicator Status FACU	20%50%Tree Stratum1640Sapling/Shrub Stratum923Herb Stratum2050Woody Vine Stratum00
				 	Total Cover		Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) Total Number of Dominant Species Across all Strata: 4 (B) Percent of Dominant Species that are OBL,
Stratum	Size (15 ft.)	Absolute % Cover	Dominant Species	Indicator Status	FACW, or FAC:(A/
Rosa multiflora Crataegus sp. Malus sp. Rubus pensilvanicus				20 15 5 5	Y N N 	FACU FAC-UPL NI FAC	Prevalence Index WorksheetTotal % Cover of:OBL species $0 \times 1 = 0$ FACW species $0 \times 2 = 0$ FAC species $5 \times 3 = 15$ FACU species $200 \times 4 = 800$ UPL species $0 \times 5 = 0$ Column totals 205 (A)Prevalence Index = B/A = 3.98
Bromus pubescens Solidago canadensis	Size (5 ft.)	Absolute % Cover 85 10	Total Cover Dominant Species Y N	Indicator Status FACU FACU	Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation Dominance test is >50% Prevalence index is ≤3.0* Morphological adaptations* (provide
Achillea millefolium				5 	N		supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology mus present, unless disturbed or problematic
							Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height.
					Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall.
Woody Vine Plot S	Size (30 ft.)	Absolute % Cover	Dominant Species	Indicator Status	 Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height.
Stratum							
Stratum					Total Cover		Hydrophytic vegetation present? N

SOIL							Sa	mpling Point: DPKD002
Profile Des	cription: (Descr	ibe to th	ne depth needed	to docu	ument th	e indica	or or confirm the abser	nce of indicators.)
Depth	Matrix			ox Feat		-	Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-3	10YR 3/2	100					silt loam	
3-15	10YR 5/4	100					silty clay loam	
*Turner 0 (Democratican D	Danla	tion DM Deduc	a al Mastr		2		
	PL=Pore Lining			ed Mati	nx, CS=0	Joverea	or Coated Sand Grains	3
	Ŭ	, 101–1018					lu dia stana fan	Problematic Undrie Caller
Hydric Sol	I Indicators:		Dark S	urfage (07)		indicators for	Problematic Hydric Soils:
Histiso	(A1)		Dark Su		w Surfa	CP (S8)	2 cm Muck	(A10) (MLRA 147)
	Epipedon (A2)		(MLRA			00 (00)		ie Redox (A16) (MLRA 147, 148)
	Histic (A3)				ace (S9)			Floodplain Soils (F19)
	en Sulfide (A4)		(MLRA				(MLRA 136	
	ed Layers (A5)				Matrix (F2)		w Dark Surface (TF12)
	luck (A10) (LRR		Deplete				Other (Exp	lain in Remarks)
	ed Below Dark S				urface (F			
	Dark Surface (A1				Surface			
-	Mucky Mineral (sions (F8			
	I, MLRA 147, 1 4 Gleyed Matrix (S						(LRR N, MLRA 136) 36, 122)	
	Redox (S5)) +)) (MLRA 148)	
	d Matrix (S6)						RA 127, 147)	
						/ (
*Indicators	of hydrophytic v	egetatio	on and wetland h	nydrolog	gy must l	be prese	nt, unless disturbed or	problematic
	Layer (if observ	ed):						
Type:					-		Hydric soil prese	nt? <u>N</u>
Depth (inch	nes):				-			
Remarks:								

Project/Site: Kilgore-Polo Road 138kV	Extension	City/County:	Carroll	Sampling Date	e: <u>5/1/2014</u>		
Applicant/Owner: <u>AEP</u>		State:		Sampling Poir			
Investigator(s): Keith D'Angiolillo, Becky I				Range: S18 T12N R5			
Landform (hillslope, terrace, etc.): hillslo				k, none): <u>concave</u>	Slope (%): <u>10%</u>		
Subregion (LRR or MLRA): LRR N	Lat.:	40.45833		.: -81.03821	Datum: WGS84		
Soil Map Unit Name Westmoreland-Cosho	octon silt loams,	8 to 15 % slopes	<u> </u>	IWI Classification: No	one		
Are climatic/hydrologic conditions of the s		-					
Are vegetation, soil, o	or hydrology	significant	y disturbed?	Are "normal	Yes		
Are vegetation, soil, o	or hydrology	naturally p	roblematic?	circumstances" pr			
				(if needed, explain	n any answers in remarks		
SUMMARY OF FINDINGS							
Hydrophytic vegetation present? Yes							
Hydric soil present? Yes	_	Is the san	npled area wit	hin a wetland?	Yes		
Wetland hydrology present? Yes	_						
Remarks:							
WKD004 - Seep on hillslope in fal	low corn field	Disannears	nto corn field	d downelone (east	t) Appears to be		
				u uuwiisiope (easi	i). Appears to be		
isolated, although drainage flows	east toward S	SKD003.					
HYDROLOGY							
Wetland Hydrology Indicators:			Seco	ndary Indicators (mir	nimum of two required)		
Primary Indicators (minimum of one is req	wired: check all	that apply)					
, , , , , , , , , , , , , , , , , , ,		11 37		Surface Soil Cracks (Be			
Surface Water (A1)		atic Plants (B14)		parsely Vegetated Co			
X High Water Table (A2)	Hydrogen	Sulfide Odor (C1)		Prainage Patterns (B10))		
X Saturation (A3)	Oxidized F	Rhizospheres on	N	loss Trim Lines (B16)			
Water Marks (B1)	X Living Roo	ots (C3)	C	ory-Season Water Tab	le (C2)		
Sediment Deposits (B2)		of Reduced Iron (C4) C	Crayfish Burrows (C8)	. ,		
Drift Deposits (B3)		on Reduction in Ti		aturation Visible on A	erial Imagery (C9)		
Algal Mat or Crust (B4)	Soils (C6)			Stunted or Stressed Plants (D1)			
Iron Deposits (B5)	Thin Muck	Surface (C7)		Geomorphic Position (
Inundation Visible on Aerial	Other (Exp	plain in Remarks)	S	hallow Aquitard (D3)			
Imagery (B7)			N	licrotopographic Relie	f (D4)		
Water-Stained Leaves (B9)				AC-Neutral Test (D5)	. (= .)		
Aquatic Fauna (B13)							
Field Observations:							
	No V	Donth (inchos)		Wetland			
Surface water present? Yes	NoX	Depth (inches)		hydrology			
Water table present? Yes X	No	Depth (inches)			X		
Saturation present? Yes X	No	Depth (inches)	: 4	present?	<u>Y</u>		
(includes capillary fringe)							
Describe recorded data (stream gauge, m		orial photos pro	vious increatio	and) if available:			
Describe recorded data (stream gauge, m	ormoning well, a	ienai priotos, pre	vious inspectio	ons), il avallable.			
Remarks:							
Water flowing from seep at time o	f survev, satu	rating downslo	pe soils.				

GETATION - U	Se Selentine I		. p.a				Sampling Poin 50/20 Thresholds	
Free Stratum	Plot Size (30 ft.)	Absolute % Cover	Dominant Species	Indicator Status	Tree Stratum	20% 50% 0 0
							Sapling/Shrub Stratum	3 8
							Herb Stratum Woody Vine Stratum	22 54 0 0
							woody vine offatum	0 0
							Dominance Test Workshee	et
							Number of Dominant	
				·	······		Species that are OBL, FACW, or FAC:	4 (A)
							Total Number of Dominant	<u> </u>
							Species Across all Strata:	<u>4</u> (B)
				0 =	Total Cover		Percent of Dominant	
apling/Shrub				Abaaluta	Deminent	Indiantar	Species that are OBL,	100.000/ / / /
Stratum	Plot Size (15 ft.)	Absolute % Cover	Dominant Species	Indicator Status	FACW, or FAC:	<u>100.00%</u> (A/
Salix discolor				10	Y	FACW	Prevalence Index Workshe	ot
Sambucus nigra	2			5	Y	FAC	Total % Cover of:	el
Gambucus nigra	4				<u>ı</u>	TAO	OBL species 0 x 1 =	. 0
							FACW species 100 x 2 =	200
							FAC species $10 \times 3 =$	
					. <u> </u>		FACU species 8 x 4 = UPL species 0 x 5 =	
							Column totals 118 (A)	262 (B)
							Prevalence Index = B/A =	2.22
					Tatal Oaura			
				15=	Total Cover		Hydrophytic Vegetation Inc	dicators.
Laub Chratture		- 4	``	Absolute	Dominant	Indicator	Rapid test for hydrophyti	
lerb Stratum	Plot Size (5 ft.)	% Cover	Species	Status	X Dominance test is >50%	
Phalaris arundi				50	<u>Y</u>	FACW	X Prevalence index is ≤3.0	
Cinna arundina Eutrochium pur				<u>40</u> 5	<u> </u>	FACW FAC	Morphological adaptation supporting data in Rema	
Carex sp.	buleum			5	N	FAC-OBL	separate sheet)	
Apocynum cani				5	Ν	FACU	Problematic hydrophytic	vegetation*
Dipsacus fullon	um			3	N	FACU	(explain)	
							*Indicators of hydric soil and wetlar	
							present, unless disturbed or proble	matic
							Definitions of Vegetation S	trata:
							Tree - Woody plants 3 in. (7.6 cm)	
							breast height (DBH), regardless of	neight.
							Sapling/shrub - Woody plants less	than 3 in. DBH
							greater than 3.28 ft (1 m) tall.	
				108	Total Cover		Herb - All herbaceous (non-woody) plants, regardle
Woody Vine				Absolute	Dominant	Indicator	size, and woody plants less than 3	
Stratum	Plot Size (30 ft.)	% Cover	Species	Status	Woody vines - All woody vines gre	eater than 3.28 ft
							height.	
					. <u> </u>			
							Hydrophytic	
				0 =	Total Cover		vegetation present? Y	
narks: (Include ph	oto numbers he	ere or on a	sepai	rate sheet)			•	
	ourrounded	by follow		field Willo	we stunted a	nd emall		
lowed wet area	sunounded	by fallow	/ com		ws stunted a	nu sman.		

SOIL							Sa	mpling Point: DPKD003
Profile Des	cription: (Descri	be to th	ne depth needed	to docu	ument th	ne indicat	tor or confirm the abser	nce of indicators.)
Depth	Matrix			ox Feat			Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-5	10YR 4/1	95	10YR 5/6	5	С	PL/M	clay loam	
5-16	10YR 5/2	90	7.5YR 4/6	10	С	М	clay loam	
*Type: C-C	Concentration D	-Denle	tion RM-Reduc	ed Mat	ix CS-	Covered	or Coated Sand Grains	3
	PL=Pore Lining			eu mau	ix, 00-	covereu	or coaled Sand Orain.	5
	I Indicators:	, 101–1010					Indicators for	Problematic Hydric Soils:
ingune 30	i mulcators.		Dark Su	irface (S7)		indicators for	Froblematic Hydric Solis.
Histiso	(A1)				w Surfa	ce (S8)	2 cm Muck	(A10) (MLRA 147)
	Epipedon (A2)		(MĹRA			、		rie Redox (A16) (MLRA 147, 148)
Black H	listic (A3)				ace (S9))		Floodplain Soils (F19)
	en Sulfide (A4)		(MLRA				(MLRA 136	
	ed Layers (A5)		Loamy			F2)		ow Dark Surface (TF12)
	luck (A10) (LRR		X Deplete				Other (Exp	lain in Remarks)
			(A11) Redox					
	ark Surface (A1		Deplete					
	Mucky Mineral (Redox					
	I, MLRA 147, 14 Gleyed Matrix (S						(LRR N, MLRA 136) 36, 122)	
	Redox (S5)	5 4)) (MLRA 148)	
	d Matrix (S6)						RA 127, 147)	
	u maint (00)					, (
*Indicators	of hydrophytic v	egetati	on and wetland h	nydrolog	gy must	be prese	ent, unless disturbed or	problematic
		_				-		-
	Layer (if observe	ed):						
Type:					-		Hydric soil prese	nt? <u>Y</u>
Depth (inch	les):				-			
Remarks:								
rtomarko.								
_							A	
Deplete	d clay and ox	dized	root channels	in hills	slope s	eep are	a. Surrounded by c	disturbed ag solls.
N								

Project/Site: Kilgore-Polo Road 138kV	Extension	City/County:	Carroll	Sampling Date: 5/		
Applicant/Owner: <u>AEP</u>	/	State:		Sampling Point D	PKD004	
Investigator(s): Keith D'Angiolillo, Becky k	(oze			inge: S18 T12N R5W		
Landform (hillslope, terrace, etc.): <u>hillslop</u> Subregion (LRR or MLRA): LRR N	Lat.:			none): convex	Slope (%): <u>15%</u> Datum: WGS84	
Soil Map Unit Name Westmoreland-Cosho		40.45827		-81.03823 VI Classification: None		
Soli Map Offic Name Westmoreland-Cosho	cion sili ioanis,	, 15 10 25 % Slupe	<u>5 </u> 110	VI Classification. None		
Are climatic/hydrologic conditions of the si		-				
Are vegetation, soil, c	or nydrology	significantl	y disturbed?	Are "normal	Yes	
Are vegetation, soil, c	n nyarology	naturally p	roblematic?	circumstances" prese (If needed, explain ar		
				(ii needed, explain al		
SUMMARY OF FINDINGS						
Hydrophytic vegetation present? No	_	la tha aam		in a watland 2 Ma		
Hydric soil present? No	_	is the sam	pled area with	in a wetland? No	_	
Wetland hydrology present? No	_					
Remarks:						
Hillslope fallow corn field south of	WKG004.					
HYDROLOGY						
Wetland Hydrology Indicators:			Secon	dary Indicators (minim	um of two required)	
Primary Indicators (minimum of one is req	uired; check all	that apply)		rface Soil Cracks (B6)	. ,	
Surface Water (A1)		atic Plants (B14)		arsely Vegetated Conca	ave Surface (B8)	
High Water Table (A2)		Sulfide Odor (C1)				
				Drainage Patterns (B10)		
Saturation (A3)		Rhizospheres on		ss Trim Lines (B16)		
Water Marks (B1)	Living Ro			-Season Water Table (C2)	
Sediment Deposits (B2)		of Reduced Iron (· ·	ayfish Burrows (C8)	(00)	
Drift Deposits (B3)		on Reduction in Til		turation Visible on Aeria	0,,,,	
Algal Mat or Crust (B4)	Soils (C6)			inted or Stressed Plants	s (D1)	
Iron Deposits (B5)	Thin Mucl	k Surface (C7)	Ge	omorphic Position (D2)		
Inundation Visible on Aerial	Other (Ex	plain in Remarks)	Sh	allow Aquitard (D3)		
Imagery (B7)			Mic	crotopographic Relief (D	4)	
Water-Stained Leaves (B9)			FA	C-Neutral Test (D5)		
Aquatic Fauna (B13)						
Field Observations:						
Surface water present? Yes	No X	Depth (inches)	:	Wetland		
Water table present? Yes	No X	Depth (inches)		hydrology		
Saturation present? Yes	No X	Depth (inches)		present?	Ν	
(includes capillary fringe)		,				
Describe recorded data (stream gauge, m	onitoring wall	orial photos area) if available:		
Describe recorded data (stream gauge, m	onitoring well, a	aenai photos, pre	vious inspection	is), il avallable:		
Domorko						
Remarks:						
Appears to be drained by tiles.						

Tree Stratum					Dominant Species	Indicator Status	50/20 Thresholds20%50%Tree Stratum000Sapling/Shrub Stratum0Herb Stratum923Woody Vine Stratum00Dominance Test Worksheet
5 5 7 3							Dominance Test Worksheet
Sapling/Shrub			•	0 =	= Total Cover	Indicator	Number of Dominant Species that are OBL, FACW, or FAC: 2 Total Number of Dominant Species Across all Strata: 2 Percent of Dominant Species that are OBL, FACW, or FAC: 100.00%
Stratum	Plot Size (15 ft.)	% Cover	Species	Status	Prevalence Index Worksheet
1 2 3 4 5 5 7 3 3 9 9							Total % Cover of:OBL species 0 $x 1 =$ 0 FACW species 0 $x 2 =$ 0 FAC species 30 $x 3 =$ 90 FACU species 15 $x 4 =$ 60 UPL species 0 $x 5 =$ 0 Column totals 45 (A) 150 Prevalence Index = B/A = 3.33
Herb Stratum	Plot Size (5 ft.)	0 = Absolute % Cover 15	Total Cover Dominant Species Y	Indicator Status FAC	Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation X Dominance test is >50% Prevalence index is ≤3.0*
Eutrochium purp Dipsacus fullonu Cardamine diphy Dichanthelium cl Apocynum canne Apocynum canne	ureum m Ila andestinum			10 5 5 5 5 5	Y N N N N	FAC FACU FACU FAC FAC FACU	Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology mu present, unless disturbed or problematic
23							Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diam breast height (DBH), regardless of height.
							Sapling/shrub - Woody plants less than 3 in. DBH greater than 3.28 ft (1 m) tall.
Woody Vine Stratum	Plot Size (30 ft.)	45 = Absolute % Cover	Total Cover	Indicator Status	Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall.
12					Species	Jialus	Woody vines - All woody vines greater than 3.28 fi height.
3 4 5			:				Hydrophytic vegetation
			•	0 =	Total Cover		present? Y
emarks: (Include phot Weedy species gr			·		nd.		

SOIL							Sa	mpling Point: DPKD004			
Profile Des	cription: (Descri	ibe to th	ne depth needed	to doci	ument th	e indica	or or confirm the abser	nce of indicators.)			
Depth				ox Fea			Texture	Remarks			
(Inches)	Color (moist)	%	Color (moist)	Type*	Loc**	TEXIULE	Itemarks				
0-14	10YR 4/3	100					silt loam				
14+	rock										
				ed Mati	rix, CS=0	Covered	or Coated Sand Grains	3			
**Location:	PL=Pore Lining	, M=Ma	itrix								
Hydric Soi	I Indicators:						Indicators for	Problematic Hydric Soils:			
			Dark Si								
Histiso					w Surfac	ce (S8)		(A10) (MLRA 147)			
	pipedon (A2)							ie Redox (A16) (MLRA 147, 148)			
	listic (A3)				ace (S9)						
	en Sulfide (A4) ed Layers (A5)				46) Matrix (I	(F2) (MLRA 136, 147)					
	luck (A10) (LRR	NI)	Loamy Deplete			(F2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)					
	ed Below Dark S				urface (F	6)					
	ark Surface (A1				Surface						
	Mucky Mineral (sions (F8						
	I, MLRA 147, 14						(LRR N, MLRA 136)				
	Gleyed Matrix (S						36, 122)				
Sandy	Redox (S5)		Piedmo	nt Floo	dplain So	oils (F19) (MLRA 148)				
Strippe	d Matrix (S6)		Red Pa	rent Ma	aterial (F	21) (MLI	RA 127, 147)				
*Indicators	of hydrophytic v	regetatio	on and wetland h	nydrolog	gy must l	be prese	nt, unless disturbed or	problematic			
Restrictive	Layer (if observe	ed):									
	ock				_		Hydric soil prese	nt? <u>N</u>			
Depth (inch	nes): 14				-						
Deverentiat											
Remarks:											

Project/Site: Kilgore-Polo Road 138kV Extension	City/County: Carroll	Sampling Date: 4/30	
Applicant/Owner: AEP	State: OH	Sampling Point DPk	(D005
Investigator(s): Rod Ginter, Chris Wulff		nip, Range: <u>S18 T12N R5W</u>	
Landform (hillslope, terrace, etc.): hillslope depression			Slope (%): <u>3%</u>
Subregion (LRR or MLRA): LRR N Lat			Datum: WGS84
Soil Map Unit Name Westmoreland-Coshocton silt loam	is, 15 to 25 % slopes	NWI Classification: PEM1C	
Are climatic/hydrologic conditions of the site typical for			
Are vegetation, soil, or hydrology	significantly disturbe		Yes
Are vegetation, soil, or hydrology	naturally problemation		
		(If needed, explain any	answers in remarks
SUMMARY OF FINDINGS			
Hydrophytic vegetation present? Yes			
Hydric soil present? Yes	Is the sampled are	a within a wetland? Yes	
Wetland hydrology present? Yes			
Remarks:			
WKD001. RCG and sensitive fern depression	n seen area west/unslon	e of Pond PRG001_water f	lowing
through the wetland from seep or broken tile.			lowing
through the wettand from seep of broken tile.	WILLIN INVITEIVITC. R	aming during survey.	
HYDROLOGY			
Wetland Hydrology Indicators:	:	Secondary Indicators (minimum	of two required)
Primary Indicators (minimum of one is required; check	all that apply)	Surface Soil Cracks (B6)	
Surface Water (A1) True Ac	uatic Plants (B14)	Sparsely Vegetated Concave	Surface (B8)
	-	X Drainage Patterns (B10)	
	d Rhizospheres on	Moss Trim Lines (B16)	
	Roots (C3)	Dry-Season Water Table (C2)
	ce of Reduced Iron (C4) Iron Reduction in Tilled	Crayfish Burrows (C8)	
		Saturation Visible on Aerial In Stunted or Stressed Plants (E	
Algal Mat or Crust (B4) Soils (C	-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	ick Surface (C7)	X Geomorphic Position (D2)	
Inundation Visible on Aerial Other (E	Explain in Remarks)	Shallow Aquitard (D3)	
Imagery (B7)	_	Microtopographic Relief (D4)	
Water-Stained Leaves (B9)		FAC-Neutral Test (D5)	
Aquatic Fauna (B13)			
Field Observations:			
	K Depth (inches):	Wetland	
Water table present? Yes X No	Depth (inches): 10	hydrology	
Saturation present? Yes X No	Depth (inches): 0	present? Y	
(includes capillary fringe)			
(
Describe recorded data (stream gauge, monitoring well	, aerial photos, previous insp	ections), if available:	
Remarks:			
Water running out of hillslope above wetland,	spreading through wetle	and, and into pond.	
		,	

VEGETATION - Use scientific names of pla	ants			Sampling Poi	nt: DPKD005
				50/20 Thresholds	
Tree Stratum Plot Size (30 ft.)	Absolute	Dominant	Indicator	Tas a Otratium	20% 50%
4	% Cover	Species	Status	Tree Stratum	0 0
12				Sapling/Shrub Stratum Herb Stratum	1 3 24 60
3			·	Woody Vine Stratum	24 80
4				woody vine Stratum	0 0
5				Dominance Test Workshe	et
6		·······		Number of Dominant	
7				Species that are OBL,	2 (A)
8 9				FACW, or FAC: Total Number of Dominant	<u>3</u> (A)
10				Species Across all Strata:	3 (B)
···	0	Total Cover		Percent of Dominant	(2)
				Species that are OBL,	
Shrub/Sapling	Absolute	Dominant	Indicator	FACW, or FAC:	100.00% (A/B)
Stratum Plot Size (15 ft.)	% Cover	Species	Status		<u>100.0070</u> (70B)
				Drevelance Index Worksh	
1 Spiraea tomentosa	5	Y	FACW	Prevalence Index Worksh	leet
2				Total % Cover of:	0
3				OBL species 0 x 1 FACW species 120 x 2	
5				FAC species 0 x 3	
56				FACU species 0 x 4	
7				UPL species 0 x 5	
8				Column totals 120 (A)	
9	• • • • • • • • • • • • • • • • • • •			Prevalence Index = B/A =	2.00
10					
	5	 Total Cover 			
				Hydrophytic Vegetation I	
Herb Stratum Plot Size (5 ft.)	Absolute	Dominant	Indicator	Rapid test for hydrophy	
	% Cover	Species	Status	X Dominance test is >50°	
1 Phalaris arundinacea	70	<u>Y</u>	FACW	X Prevalence index is ≤3.	
2 Onoclea sensibilis	25	<u>Y</u>	FACW	Morphological adaptation	
3 Agrimonia parviflora	20 5	<u></u> N	FACW FAC-OBL	supporting data in Rem	larks of on a
4 <u>Carex sp.</u> 5	5	<u> </u>	FAC-UBL	separate sheet) Problematic hydrophyti	c vegetation*
6				(explain)	c vegetation
7				*Indicators of hydric soil and wetl	and budgeless must be
8				present, unless disturbed or prob	
9					
10	• • <u> </u>			Definitions of Vegetation	Strata:
11				Tree - Woody plants 3 in. (7.6 cm	
12				breast height (DBH), regardless of	of height.
13				Sapling/shrub - Woody plants le	on than 2 in DPU and
14 15				greater than 3.28 ft (1 m) tall.	
···	120	Total Cover		Herb - All herbaceous (non-wood	lv) plants regardless of
				size, and woody plants less than	
Woody Vine Plot Size (30 ft.)	Absolute	Dominant	Indicator		
Stratum	% Cover	Species	Status	Woody vines - All woody vines g	reater than 3.28 ft in
1				height.	
23					
3 4				Undered 1	
			·	Hydrophytic	
5		<u></u>		vegetation	
	0	 Total Cover 		present? Y	-
Remarks: (Include photo numbers here or on a sep	arate sheet)			I	
RCG dominant throughout entire wetland	more sensiti	ve fern near i	nond		
			ponu.		

SOIL							Sa	mpling Point: DPKD005
Profile Des	cription: (Descri	be to th	ne depth needed	to doci	ument th	e indica	tor or confirm the abser	nce of indicators.)
Depth				ox Fea			Texture	Remarks
(Inches)	Color (moist)	% Color (moist) %			Type*	Loc**		Remarks
0-2	10YR 4/3	100					silt loam	
2-16	10YR 5/2	90	7.5YR 4/6	10	С	М	clay loam	
*Tupo: C-(Concontration D	Doplo	tion PM-Podua	od Mat		Covered	or Coated Sand Grains	
	PL=Pore Lining			eu mau	10, 03=0	Sovereu	or Coaled Sand Grains	5
	I Indicators:	, 101–1012					Indicators for	Problematic Hydric Soils:
Hyune So	i muicators.		Dark Su	irface (97)		indicators for	Froblematic Hydric Solis.
Histiso	(A1)				w Surfa	ce (S8)	2 cm Muck	(A10) (MLRA 147)
	Epipedon (A2)		(MLRA			()		rie Redox (A16) (MLRA 147, 148)
	listic (A3)				ace (S9)			loodplain Soils (F19)
	en Sulfide (A4)		(MLRA				(MLRA 136	
Stratifie	ed Layers (A5)		Loamy	Gleyed	Matrix (F2)	Very Shallo	ow Dark Surface (TF12)
	luck (A10) (LRR		X Deplete				Other (Exp	lain in Remarks)
	ed Below Dark S		·		urface (F	,		
	Dark Surface (A1				Surface			
-	Mucky Mineral (sions (F			
	I, MLRA 147, 14 Gleyed Matrix (S						(LRR N, MLRA 136) 36, 122)	
	Redox (S5)	54)) (MLRA 148)	
	d Matrix (S6)						RA 127, 147)	
						2 ') (III E	((1 , 1 - 1, 1 - 1)	
*Indicators	of hydrophytic v	egetatio	on and wetland h	nydrolog	gy must	be prese	ent, unless disturbed or	problematic
	, , ,	0		· · ·		•		
	Layer (if observe	ed):						
Type:					-		Hydric soil prese	nt? <u>Y</u>
Depth (incl	ies):				-			
Remarks:								
Remarks.								
B								

Project/Site: Kilgore-Polo Road 138kV Ext Applicant/Owner: AEP Investigator(s): Rod Ginter, Chris Wulff Landform (hillslope, terrace, etc.): hillslope Subregion (LRR or MLRA): LRR N Soil Map Unit NameGuensey silty clay loam, and the site to the site tot to the site to t	State: O Section, T Local relief (conc Lat.: 40.45821 8 to 15 % slopes, eroded	Township, Range: <u>S18 T12N R5W</u> ave, convex, none): <u>concave</u> Long.: -81.03037 NWI Classification: <u>PEM1</u> Yes <u>X</u> No(If no, exp isturbed? Are "normal	PRG001 Slope (%): <u>4%</u> Datum: <u>WGS84</u> C lain in remarks) <u>Yes</u> nt?
Hydrophytic vegetation present?YesHydric soil present?YesWetland hydrology present?Yes	Is the sample	ed area within a wetland? Yes	-
Remarks: WRG001 - PSS/EM. Skunk cabbage Dining Fork. More open skunk cabba drains to Dining Fork of Conotton Cre HYDROLOGY	age PEM east of Pontiff Rd	•	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)	d; check all that apply) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roots (C3) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)		ve Surface (B8) 22) Imagery (C9) (D1)
Field Observations: Surface water present? Yes Water table present? Yes Saturation present? Yes (includes capillary fringe) Describe recorded data (stream gauge, monit Remarks:	No X Depth (inches): No Depth (inches): No Depth (inches): oring well, aerial photos, previo	8 Wetland 0 hydrology present?	Y
Seeping from hillslope in SE corner n	ear Pontiff Rd, might be fro	om broken tiles in adjacent ag f	ield.

----finlant

	Jse scientific i		pian				Sampling Point: DPRG001
Tree Stratum	Plot Size (30 ft.)	Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds20%50%Tree Stratum000Sapling/Shrub Stratum1025Herb StratumHerb Stratum1743Woody Vine Stratum0
Sapling/Shrub	Plot Size (15 ft.)	Absolute	= Total Cover Dominant		Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 5 (A) Total Number of Dominant Species Across all Strata: 5 (B) Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/I)
Stratum Spiraea tomei Alnus serrulat Salix discolor Cornus racem	ntosa a			% Cover 20 15 10 5	Species Y Y Y N	Status FACW OBL FACW FAC	Prevalence Index WorksheetTotal % Cover of:OBL species $55 \times 1 = 55$ FACW species $70 \times 2 = 140$ FAC species $5 \times 3 = 15$ FAC loss for $x = 50$
					= Total Cover		FACU species $5 \times 4 =$ 20 UPL species $0 \times 5 =$ 0 Column totals 135 (A) 230 Prevalence Index = B/A = 1.70 Hydrophytic Vegetation Indicators:
Herb Stratum Symplocarpus Phalaris aruno Typha latifolia Symphyotrich Onoclea sens Alliaria petiola	dinacea um lateriflorum ibilis	5 ft.)	Absolute % Cover 30 30 10 5 5 5 5	Dominant Species Y N N N N	Indicator Status OBL FACW OBL FACW FACW FACU	Rapid test for hydrophytic vegetation X Dominance test is >50% X Prevalence index is <3.0*
							Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH is greater than 3.28 ft (1 m) tall.
Woody Vine Stratum	Plot Size (30 ft.)	85 Absolute % Cover	Total Cover Dominant Species	Indicator Status	Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height.
				0	= Total Cover		Hydrophytic vegetation present? <u>Y</u>

SOIL							Sa	mpling Point: DPRG001
Profile Des	cription: (Descr	ibe to th	ne depth needed	l to doci	ument th	ie indica [.]	or or confirm the abser	nce of indicators.)
Depth	Matrix		Red	lox Feat			Texture	Remarks
(Inches)	Color (moist)		% Color (moist) %			Loc**		Remains
0-6	10YR 4/3	100					silt loam	
6-16	10YR 5/2	90	10YR5/6					
				ed Mat	rix, CS=	Covered	or Coated Sand Grains	S
**Location:	PL=Pore Lining	, M=Ma	ıtrix					
Hydric Soi	I Indicators:						Indicators for	Problematic Hydric Soils:
			Dark S			(0.0)		
Histiso			•		w Surfa	ce (S8)		(A10) (MLRA 147)
	Epipedon (A2) Histic (A3)		(MLRA Thin Da		+o) ace (S9)			rie Redox (A16) (MLRA 147, 148) Floodplain Soils (F19)
	jen Sulfide (A4)		(MLRA				(MLRA 136	
	ed Layers (A5)				Matrix (F2)		ow Dark Surface (TF12)
	luck (A10) (LRR	N)	X Deplete			,		lain in Remarks)
	ed Below Dark S				urface (F		、 、	
	Dark Surface (A1				Surface			
-	Mucky Mineral (sions (F			
	I, MLRA 147, 14						(LRR N, MLRA 136) 36, 122)	
	Gleyed Matrix (S Redox (S5)	54)) (MLRA 148)	
	d Matrix (S6)						RA 127, 147)	
						/ (
*Indicators	of hydrophytic v	regetatio	on and wetland I	nydrolog	gy must	be prese	ent, unless disturbed or	problematic
						1		
Destrictive	Lover /if choore	a d).						
	Layer (if observ Jone	ed):					Hydric soil prese	nt? V
Depth (incl					-		Hydric son prese	iit :
Bopti (ino					-			
Remarks:								

Project/Site: Kilgore-Polo Road 138kV Ext Applicant/Owner: AEP	<u>ension</u> City/County: <u>C</u> State: O	arrollSampling Date:4 HSampling Point D	
Investigator(s): Rod Ginter, Chris Wulff		ownship, Range: S18 T12N R5W	JFKG002
Landform (hillslope, terrace, etc.): hillslope		ave, convex, none): None	Slope (%): 6%
Subregion (LRR or MLRA): LRR N	Lat.: 40.458103	Long.: -81.03057	
Soil Map Unit Name Guensey silty clay loam, 8		NWI Classification: None	
Are climatic/hydrologic conditions of the site ty			
Are vegetation, soil, or hy	/drologysignificantly d		Yes
Are vegetation, soil, or hy	/drology naturally prob		ny answers in remarks
SUMMARY OF FINDINGS		(ii needed, explain a	
Hydrophytic vegetation present? No			
Hydric soil present? No	Is the sample	ed area within a wetland? No	1
Wetland hydrology present? Yes			_
Remarks:			
Upland adjacent to WRG001 in fallow Raining steadily during field work, and	•	•	pipeline ROW.
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minim	um of two required)
Primary Indicators (minimum of one is require	d; check all that apply)	Surface Soil Cracks (B6)	
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Conca	ave Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)	
X Saturation (A3)	Oxidized Rhizospheres on	Moss Trim Lines (B16)	
Water Marks (B1)	Living Roots (C3)	Dry-Season Water Table ((C2)
Sediment Deposits (B2)	Presence of Reduced Iron (C4)		(02)
Drift Deposits (B3)	Recent Iron Reduction in Tilled		al Imagery (C9)
Algal Mat or Crust (B4)	Soils (C6)	Stunted or Stressed Plant	
Iron Deposits (B5)	Thin Muck Surface (C7)	Geomorphic Position (D2)	. ,
Inundation Visible on Aerial	Other (Explain in Remarks)	Shallow Aquitard (D3)	
Imagery (B7)		Microtopographic Relief (04)
Water-Stained Leaves (B9)		FAC-Neutral Test (D5)	,
Aquatic Fauna (B13)			
Field Observations:			
Surface water present? Yes	No X Depth (inches):	Wetland	
Water table present? Yes	No X Depth (inches):	hydrology	
	No Depth (inches):	0 present?	Υ
(includes capillary fringe)			
Describe recorded data (stream gauge, monited to the second stream gauge and the second stream s	oring well, aerial photos, previo	us inspections), if available:	
Remarks:			
Raining steadily throughout the day, a	and ground saturated nearl	y everywhere in the project ar	ea.

EGETATION - U							Sampling Point: DPRG002 50/20 Thresholds
Tree Stratum	Plot Size (30 ft.)	Absolute % Cover	Dominant Species	Indicator Status	20%50%Tree Stratum00Sapling/Shrub Stratum00Herb Stratum1230
							Woody Vine Stratum 0 0 Dominance Test Worksheet Number of Dominant
							Species that are OBL, FACW, or FAC:(A) Total Number of Dominant
				0=	Total Cover		Species Across all Strata: 1 (B) Percent of Dominant
Sapling/Shrub Stratum	Plot Size (15 ft.)	Absolute % Cover	Dominant Species	Indicator Status	Species that are OBL, FACW, or FAC:0.00% (A/I
							Prevalence Index WorksheetTotal % Cover of:OBL species $0 \times 1 = 0$ FACW species $0 \times 2 = 0$ FAC species $0 \times 3 = 0$ FACU species $4 = 180$ UPL species $5 \times 5 = 25$ Column totals 50 Prevalence Index = B/A = 4.10
				0 =	Total Cover		
Herb Stratum Trifolium repens Taraxacum offic Lamium purpur Daucus carota Dipsacus fullon	cinale eum	5 ft.)	Absolute % Cover 30 10 10 5 5	Dominant Species Y N N N N	Indicator Status FACU FACU NI UPL FACU	Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation Dominance test is >50% Prevalence index is <3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation*
							(explain) *Indicators of hydric soil and wetland hydrology must present, unless disturbed or problematic
						<u> </u>	Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diamet breast height (DBH), regardless of height.
				60 =	Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall.
Woody Vine Stratum	Plot Size (30 ft.)	Absolute % Cover	Dominant Species	Indicator Status	 Herb - All herbaceous (non-woody) plants, regardles size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft i height.
							Hydrophytic
				0 =	Total Cover		vegetation present? <u>N</u>
emarks: (Include pho	oto numbers he	ere or on a	separ	ate sheet			
Fallow agricultur	al field, corn	stubble,	bare	ground, and	I typical new	field species	5.

SOIL							Sa	ampling Point: DPRG002		
Profile Des	cription: (Descri	ha ta th	ne denth needed	l to doci	umont th	o indica	tor or confirm the abser	ace of indicators)		
Depth	Matrix			lox Feat						
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks		
0-16	10YR 5/3	97	10YR 5/6	3	С	М	silt clay loam			
				ed Mat	rix, CS=	Covered	or Coated Sand Grains	8		
	PL=Pore Lining	, M=Ma	ıtrix							
Hydric So	il Indicators:				~ _`		Indicators for	Problematic Hydric Soils:		
Llistian	((A A)		Dark Si		S7) w Surfa		O are Music			
Histiso	Epipedon (A2)		(MLRA			ce (So)		. (A10) (MLRA 147) rie Redox (A16) (MLRA 147, 148		
	Histic (A3)				ace (S9))		Floodplain Soils (F19)		
	jen Sulfide (A4)		(MLRA				(MLRA 130	6, 147)		
	ed Layers (A5)				Matrix (F2)	Very Shallo	ow Dark Surface (TF12)		
	luck (A10) (LRR						Other (Exp	lain in Remarks)		
	ed Below Dark S				urface (F					
	Dark Surface (A1 Mucky Mineral (S				Surface sions (F					
-	I, MLRA 147, 14						(LRR N, MLRA 136)			
Sandy	Gleyed Matrix (S						36, 122)			
	Redox (S5)						9) (MLRA 148)			
Strippe	d Matrix (S6)		Red Pa	rent Ma	aterial (F	21) (ML I	RA 127, 147)			
*Indicators	of hydrophytic y	onotati	on and wetland h	vdrolog	ny muet	ha nrasa	ent, unless disturbed or	problematic		
mulcators		eyetati		iyurulu	gy musi	be piese	int, unless disturbed of	problematic		
	Layer (if observe	ed):					11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1			
Type: N Depth (incl	None				-		Hydric soil prese			
Doptil (illoi					-					
Remarks:										
Tilled a	gricultural land	d, mixe	ed soils, minor	redox	, but ch	nroma r	not low.			

Project/Site: Kilgore-Polo Road 138kV Extension Applicant/Owner: AEP	on City/County: State:	Carroll OH	Sampling Date: <u>4/</u> Sampling Point Dl			
Investigator(s): Rod Ginter, Chris Wulff	Section	n, Township, Rar	nge: S17 T12N R5W			
Landform (hillslope, terrace, etc.): hilltop depress	ion Local relief (co	ncave, convex, r	none): concave	Slope (%): 3%		
Subregion (LRR or MLRA): LRR N	Lat.: 40.45829		-81.02371	Datum: WGS84		
Soil Map Unit Name Rigley sandy loam, 15 to 25 %			I Classification: None			
				lein in nemenles)		
Are climatic/hydrologic conditions of the site typica				olain in remarks)		
Are vegetation, soil, or hydrol	ogy significantl	y disturbed?	Are "normal	Yes		
Are vegetation , soil , or hydrole	ogy naturally p	roblematic?	circumstances" prese	nt?		
			(If needed, explain an	y answers in remarks		
SUMMARY OF FINDINGS						
Hydrophytic vegetation present? Yes			e e wetlend 2 Vee			
Hydric soil present? Yes	is the sall	pled area within	n a wetland? Yes	-		
Wetland hydrology present? Yes						
Remarks:						
INGINAINS.						
WRG002 - PEM. RCG along an eph strea	am in a new field/for	mer pasture in	side vallev draining	a to Irish Creek.		
Abuts ephemeral/intermittent stream SRC		•	•	5		
		ISH CIEEK and	CONDITION CIEEK.			
HYDROLOGY						
Wetland Hydrology Indicators:		Second	any Indicators (minimu	m of two required)		
			ary Indicators (minimu	in or two required)		
Primary Indicators (minimum of one is required; ch			ace Soil Cracks (B6)			
Surface Water (A1)	ue Aquatic Plants (B14)	Spa	parsely Vegetated Concave Surface (B8)			
X High Water Table (A2) Hy	drogen Sulfide Odor (C1)	X Drai	rainage Patterns (B10)			
	idized Rhizospheres on		oss Trim Lines (B16)			
	ing Roots (C3)		ry-Season Water Table (C2)			
	esence of Reduced Iron (Crayfish Burrows (C8)			
	cent Iron Reduction in Til		Saturation Visible on Aerial Imagery (C9)			
			Stunted or Stressed Plants (D1)			
	ils (C6)					
	in Muck Surface (C7)		morphic Position (D2)			
Inundation Visible on AerialOt	ner (Explain in Remarks)	Sha	llow Aquitard (D3)			
Imagery (B7)		Mici	otopographic Relief (D	4)		
Water-Stained Leaves (B9)		FAC	-Neutral Test (D5)			
Aquatic Fauna (B13)						
Field Observations:						
Surface water present? Yes No	X Depth (inches)		Wetland			
	Depth (inches)		hydrology			
				V		
Saturation present? Yes X No	Depth (inches)	. 0	present?	Y		
(includes capillary fringe)						
Describe recorded data (stream gauge, monitoring	well earial photos pro	vious increations) if eveileble:			
Describe recorded data (stream gauge, monitoring	well, aenai priotos, pre	vious inspections	s), il avaliable.			
Remarks:						
	······································					
Low wet area along stream channel in for	mer pasture/new fie	iu area, strean	a channel upslope	and downslope.		

/EGETATION - Use scientific names of plan	nts			Sampling Point: DPRG003
Tree Stratum Plot Size (30 ft.) 1 2 3	Absolute % Cover	Dominant Species	Indicator Status	50/20 Thresholds 20% 50% Tree Stratum 0 0 Sapling/Shrub Stratum 0 0 Herb Stratum 20 50 Woody Vine Stratum 0 0
Sapling/Shrub Plot Size (15 ft.) 1 2 3 4	0= Absolute % Cover	Total Cover Dominant Species	Indicator Status	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 2 Total Number of Dominant Species Across all Strata: 2 Percent of Dominant Species that are OBL, FACW, or FAC: 2 B Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B) Prevalence Index Worksheet Total % Cover of: OBL species 10 x 1 = 10
4 5 6 7 8 9 10 Herb Stratum Plot Size (5 ft.) 1 Phalaris arundinacea 2 Juncus effusus 3 Carex vulpinoidea 4 Apocynum cannabinum 5	0 = Absolute % Cover 60 25 10 5	Total Cover Dominant Species Y Y N N	Indicator Status FACW FACW OBL FACU	FACW species $\overline{85}$ $x 2 =$ $\overline{170}$ FAC species $\overline{0}$ $x 3 =$ $\overline{0}$ FACU species $\overline{5}$ $x 4 =$ 20 UPL species $\overline{0}$ $x 5 =$ $\overline{0}$ Column totals 100 (A) 200 (B) Prevalence Index = B/A = 2.00 (B) Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation X Dominance test is >50% X Prevalence index is $\leq 3.0^*$ Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation*
6 7 8 9 10 11 12 13 14 15		Total Cover		(explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter a breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum Plot Size (30 ft.) 1	Absolute % Cover	Dominant Species	Indicator Status	Woody vines - All woody vines greater than 3.28 ft in height. Hydrophytic vegetation
Remarks: (Include photo numbers here or on a sepa		Total Cover		present? Y

SOIL							Sa	ampling Point: DPRG003
Drofile Doo	orintion: (Docori	iha ta th	a danth naadad	l to doo	imont th	o indiaa	tor or confirm the abser	and of indicators)
Depth	Matrix			lox Feat				
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-2	10YR 4/2	100	, , , , , , , , , , , , , , , , , , ,				silt loam	
2-16	10YR 5/2	85	10YR5/6	15	С	М	silty clay	
					_			
				ed Mati	rix, CS=0	Covered	or Coated Sand Grains	5
	PL=Pore Lining	, IVI=IVI8	itrix					
Hydric Sol	I Indicators:		Dark S	urfaco (97)		Indicators for	Problematic Hydric Soils:
Histiso	(A1)				w Surfa	ce (S8)	2 cm Muck	(A10) (MLRA 147)
	Epipedon (A2)		•	147, 14		()		rie Redox (A16) (MLRA 147, 148)
	listic (A3)				ace (S9)			Floodplain Soils (F19)
	en Sulfide (A4)						(MLRA 136	
	ed Layers (A5)	NI)	X Deplete		Matrix (F2)	Very Shallo	ow Dark Surface (TF12) lain in Remarks)
	luck (A10) (LRR ed Below Dark S				x (F3) urface (F	6)		
	Dark Surface (A1				Surface			
	Mucky Mineral (Redox	Depress	sions (F8	8)		
	I, MLRA 147, 14						(LRR N, MLRA 136)	
Sandy	Gleyed Matrix (S Redox (S5)	54)					36, 122)	
	d Matrix (S6)						9) (MLRA 148) RA 127, 147)	
						21) (1012)	(A 121, 141)	
*Indicators	of hydrophytic v	egetatio	on and wetland I	nydrolog	gy must	be prese	ent, unless disturbed or	problematic
Restrictive	Layer (if observe	ed):						
	lone						Hydric soil prese	nt? Y
Depth (inch	nes):				_			
Remarks:								
Remarks.								
Annear	s to be former	lv cattl	e trampled so	ils are	a alono	strean	n in old pasture.	
, ppcur		ly out				, ou our		
L								

Project/Site: Kilgore-Polo Road 138kV Extension	City/County: Carrol		
Applicant/Owner: AEP	State: OH	Sampling Point D	PRG004
Investigator(s): Rod Ginter, Chris Wulff		ship, Range: <u>S17 T12N R5W</u>	
Landform (hillslope, terrace, etc.): hillslope		convex, none): None	Slope (%): <u>6%</u>
	it.: 40.45826	Long.: -81.02370	Datum: WGS84
Soil Map Unit Name Rigley sandy loam, 15 to 25 % slo	ppes	NWI Classification: None	
Are climatic/hydrologic conditions of the site typical fo			
Are vegetation, soil, or hydrology	significantly distur	bed? Are "normal	Yes
Are vegetation, soil, or hydrology	naturally problema		
		(If needed, explain al	ny answers in remarks)
SUMMARY OF FINDINGS			
Hydrophytic vegetation present? <u>No</u>			
Hydric soil present? No	Is the sampled a	rea within a wetland? No	_
Wetland hydrology present? Yes			
Remarks:			
Upland adjacent to WRG002 in new field are	a northwest of DPRG0	3 Former pasture and a	as nineline
	a northwest of DI 1000	55. Torrier pasture and g	
ROW. Raining steadily during field work.			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minim	um of two required)
Primary Indicators (minimum of one is required; check	all that apply)	Surface Soil Cracks (B6)	
	quatic Plants (B14)		NO Surface (PP)
		Sparsely Vegetated Conca	ive Surface (Bo)
	gen Sulfide Odor (C1)	Drainage Patterns (B10)	
	ed Rhizospheres on	Moss Trim Lines (B16)	
	Roots (C3)	Dry-Season Water Table (C2)
	nce of Reduced Iron (C4)	Crayfish Burrows (C8)	
	t Iron Reduction in Tilled	Saturation Visible on Aeria	
Algal Mat or Crust (B4) Soils (Stunted or Stressed Plants	s (D1)
	luck Surface (C7)	Geomorphic Position (D2)	
Inundation Visible on Aerial Other	(Explain in Remarks)	Shallow Aquitard (D3)	
Imagery (B7)		Microtopographic Relief (D	4)
Water-Stained Leaves (B9)		FAC-Neutral Test (D5)	
Aquatic Fauna (B13)			
Field Observations:			
Surface water present? Yes No	X Depth (inches):	Wetland	
Water table present? Yes No	X Depth (inches):	hydrology	
Saturation present? Yes X No	Depth (inches):	present?	Υ
(includes capillary fringe)			
Describe recorded data (stream gauge, monitoring we	Il aerial photos, provious in	spections) if available:	
Describe recorded data (stream gauge, monitoring we	ii, aenai priotos, previous in	specificits), il available.	
December 1			
Remarks:			
		and the stand of the stand	
Raining steadily throughout the day, and gro	ound saturated nearly ev	erywhere in the project ar	ea.

			Dominant Species	Indicator Status	50/20 Thresholds 20% 50% Tree Stratum 0 0 Sapling/Shrub Stratum 0 0 Herb Stratum 20 51 Woody Vine Stratum 0 0 Dominance Test Worksheet 0 Number of Dominant Species that are OBL,
					Woody Vine Stratum 0 0 Dominance Test Worksheet Number of Dominant
					Number of Dominant
					Species that are OBL,
					FACW, or FAC: 0 (A)
(15 ft.		0	Total Cover		Species Across all Strata:(B)
(15 ft.		Abaoluto		Indiaator	Percent of Dominant Species that are OBL,
)	Absolute % Cover	Dominant Species	Indicator Status	FACW, or FAC: 0.00% (A/
	<u> </u>				Prevalence Index Worksheet Total % Cover of:
					OBL species 0 $x 1 =$ 0 FACW species 0 $x 2 =$ 0
					FAC species 0 $x 3 =$ 0 FACU species96 $x 4 =$ 384
					UPL species $5 \times 5 = 25$ Column totals 101 (A) 409 (B)
					Prevalence Index = $B/A = 4.05$
		0	Total Cover		Hydrophytic Vegetation Indicators:
e (5 ft.)	Absolute % Cover	Dominant Species	Indicator Status	Rapid test for hydrophytic vegetation Dominance test is >50%
		<u>80</u> 5	<u> </u>	FACU FACU	Prevalence index is ≤3.0* Morphological adaptations* (provide
		5	N	FACU	supporting data in Remarks or on a
		3	<u> </u>	FACU	separate sheet) Problematic hydrophytic vegetation*
		3	Ν	FACU	(explain)
					*Indicators of hydric soil and wetland hydrology mus present, unless disturbed or problematic
					Definitions of Vegetation Strata:
					Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height.
					Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall.
		. <u></u>	Total Cover		Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall.
(30 ft.)	Absolute % Cover	Dominant Species	Indicator Status	Woody vines - All woody vines greater than 3.28 ft height.
					Hydrophytic
					Hydrophytic vegetation
			 Total Cover 		present? <u>N</u>
	e (5 ft.	e (5 ft.)	0 0 0 0 0 % Cover 80 5 5 5 3 3 3 101 % Cover % Cover % Cover 0 101 % Cover % Cover	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $

SOIL							Sa	mpling Point: DPRG004		
Profile Des	cription: (Descri	be to th	ne depth needed	to docu	ument th	e indicat	or or confirm the abser	nce of indicators.)		
Depth	Matrix			ox Feat			Texture	Remarks		
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**				
0-16	10YR 5/4	100					silt clay loam			
*Type: C-C	Concentration D	-Denle	tion RM-Reduc	ed Matr	ix CS-0	Covered	or Coated Sand Grains			
	PL=Pore Lining			cu mati	IX, 00=0	Jovereu	or obaled band oralli.			
	I Indicators:	,					Indicators for	Problematic Hydric Soils:		
			Dark Su					,		
Histisol (A1) Polyvalue Below Surface (S8) 2 cm Muck (A10) (MLRA 147)										
	pipedon (A2)							ie Redox (A16) (MLRA 147, 148)		
	listic (A3) en Sulfide (A4)		(MLRA		ace (S9)		(MLRA 136	Floodplain Soils (F19)		
	ed Layers (A5)				Matrix (F2)		ow Dark Surface (TF12)		
	luck (A10) (LRR	N)	Deplete					lain in Remarks)		
Deplete	ed Below Dark S	urface			urface (F			·		
	Dark Surface (A1				Surface					
	Mucky Mineral (sions (F8		(LRR N, MLRA 136)			
	I, MLRA 147, 14 Gleyed Matrix (S						(LRR N, MLRA 130) 36, 122)			
	Redox (S5)	,) (MLRA 148)			
	d Matrix (S6)						ŔĂ 127, 147)			
*Indicators	of hydrophytic v	egetatio	on and wetland h	nydrolog	gy must	be prese	nt, unless disturbed or	problematic		
	Layer (if observe	ed):					11.1.1.1			
D					-		Hydric soil prese	nt? <u>N</u>		
Depth (Incr					-					
Remarks:										
Compa	cted soils in ol	d past	ure.							

Project/Site: Kilgore-Polo Road 138kV Exter		Carroll	_Sampling Date: 4/2		
Applicant/Owner: <u>AEP</u>	State:		Sampling Point DF	7KG005	
Investigator(s): Rod Ginter, Chris Wulff		, Township, Range		O_{1}	
Landform (hillslope, terrace, etc.): hilltop depre		ncave, convex, nor		Slope (%): <u>3%</u> Datum: WGS84	
Subregion (LRR or MLRA): LRR N Soil Map Unit Name Westmoreland-Coshocton	Lat.: 40.45839	Long.: -8	Classification: None	Datum: WGS84	
Soli Map Onit Name Westmoreland-Coshoctons	sin loarns, $15 10 25 \%$ slope		hassincation. None		
Are climatic/hydrologic conditions of the site typ					
Are vegetation, soil, or hyd	rology significantly rology naturally pr	/ disturbed? Ar	re "normal	Yes	
Are vegetation, soil, or hyd	rologynaturally pr		rcumstances" preser		
SUMMARY OF FINDINGS		(11	needed, explain any	y answers in remarks	
Hydrophytic vegetation present? Yes					
Hydric soil present? Yes	Is the sam	pled area within a	a wetland? Yes		
Wetland hydrology present? Yes		•		-	
Remarks:					
WRG004 - PEM. Skunk cabbage seep	on forested hillside dra	inina into rivine	below. Abuts er	hemeral	
• •		•		nomoral	
stream SRG003 that drains west to Dir	ling Fork and Conotion	Creek.			
HYDROLOGY					
Wetland Hydrology Indicators:		Secondar	y Indicators (minimu	m of two required)	
Primary Indicators (minimum of one is required;	check all that apply)	Surfac	e Soil Cracks (B6)		
	True Aquatic Plants (B14)		ely Vegetated Concav	e Surface (B8)	
X High Water Table (A2)	Hydrogen Sulfide Odor (C1)		age Patterns (B10)		
	Oxidized Rhizospheres on		Trim Lines (B16)		
	Living Roots (C3)		Season Water Table (C2)		
	Presence of Reduced Iron (0		rayfish Burrows (C8)		
Drift Deposits (B3)	Recent Iron Reduction in Till		ation Visible on Aerial	Imagery (C9)	
	Soils (C6)		Stunted or Stressed Plants (D1)		
	Thin Muck Surface (C7)		orphic Position (D2)	()	
Inundation Visible on Aerial	Other (Explain in Remarks)	Shallo	hallow Aquitard (D3)		
Imagery (B7)			opographic Relief (D4	1)	
Water-Stained Leaves (B9)			Veutral Test (D5)	/	
Aquatic Fauna (B13)					
Field Observations:					
Surface water present? Yes N			Wetland		
Water table present? Yes X N			hydrology		
Saturation present? Yes X N	o Depth (inches):	0	present?	Y	
(includes capillary fringe)					
Describe recorded data (stream gauge, monitor	ing well parial photos, prov	vious inspections)	if available:		
Describe recorded data (stream gauge, monitor	ing weil, aenai photos, prev	nous inspections),	li avaliable.		
Remarks:					
Coop groe on billolong in unland forest	incload atraces above	downeland			
Seep area on hillslope in upland forest	, incised stream channe	ei downslope.			

20 Thresholds 20% 50% e Stratum 0 0 bling/Shrub Stratum 0 0 b Stratum 13 33 ody Vine Stratum 0 0 minance Test Worksheet 0 0 minance Test Worksheet 0 0 more of Dominant 2 (A) al Number of Dominant 2 (B) ceies Across all Strata: 2 (B) cent of Dominant 2 (B) ceies that are OBL, 2 (A) ceies that are OBL, 2 (B) cent of Dominant 2 (B) ceies that are OBL, 2 (A)
nber of Dominant ecies that are OBL, CW, or FAC: <u>2</u> (A) al Number of Dominant ecies Across all Strata: <u>2</u> (B) cent of Dominant ecies that are OBL,
valence Index Worksheet al % Cover of:
$\begin{array}{rrrr} 30 & \text{solution} \\ \text{L species} & 30 & \text{x 1 = } & 30 \\ \text{CW species} & 0 & \text{x 2 = } & 0 \\ \text{C species} & 35 & \text{x 3 = } & 105 \\ \text{CU species} & 0 & \text{x 4 = } & 0 \\ \text{L species} & 0 & \text{x 5 = } & 0 \\ \text{L species} & 0 & \text{x 5 = } & 0 \\ \text{umn totals} & 65 & (A) & 135 \\ \text{valence Index = B/A = } & 2.08 \end{array} $ $\begin{array}{r} \text{CU species} & 0 & \text{cm} \\ \text{CU species} & $
Irophytic Vegetation Indicators: Rapid test for hydrophytic vegetation Dominance test is >50% Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) cators of hydric soil and wetland hydrology must be ent, unless disturbed or problematic
initions of Vegetation Strata: - Woody plants 3 in. (7.6 cm) or more in diameter a st height (DBH), regardless of height. ling/shrub - Woody plants less than 3 in. DBH and ter than 3.28 ft (1 m) tall.
 All herbaceous (non-woody) plants, regardless of and woody plants less than 3.28 ft tall. bdy vines - All woody vines greater than 3.28 ft in ht.
Hydrophytic vegetation present? Y

SOIL							Sa	mpling Point: DPRG005	
Profile Des	cription: (Descri	ibe to th	ne depth needed	to docu	ument th	e indicat	or or confirm the abser	nce of indicators.)	
Depth	Matrix	Red	ox Feat	tures		Texture	Remarks		
(Inches) 0-2	Color (moist) 10YR 3/2	% 100	Color (moist)	%	Type*	Loc**	silt loam		
2-7	101R 5/2 10YR 5/1	90	7.5YR 5/6	10	С	М	silty clay		
7-16	10YR 6/1	90	7.5YR 5/6	10	C	M	silty clay		
	Concontration D	-Doplo	tion PM-Poduc	od Mat		Covorod	or Coated Sand Grains	2	
	PL=Pore Lining			eu man	ix, 00–0	Sovereu	or Coaled Sand Grains	5	
	I Indicators:	,					Indicators for	Problematic Hydric Soils:	
Black H Hydrog Stratifie	Epipedon (A2) Histic (A3) en Sulfide (A4) ed Layers (A5)		(MLRA Thin Da (MLRA Loamy	ue Belo 147, 14 ark Surfa 147, 14 Gleyed	w Surfac 18) ace (S9) 18) Matrix (I		Coast Prain Piedmont F (MLRA 136 Very Shallo	w Dark Surface (TF12)	
Deplete Thick D Sandy (LRR N Sandy Sandy Strippe	Stratified Layers (A5) Loamy Gleyed Matrix (F2) Very Shallow Dark Surface (TF12) 2 cm Muck (A10) (LRR N) X Depleted Matrix (F3) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Other (Explain in Remarks) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Red Parent Material (F21) (MLRA 127, 147) *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic								
	Layer (if observe lone nes):	ed):			-		Hydric soil prese	nt? <u>Y</u>	
Remarks:									
Soft cla	y over seep a	rea.							

Soil Map Unit Name <u>Westmoreland-Coshocton silt lo</u> Are climatic/hydrologic conditions of the site typical f Are vegetation, soil, or hydrolog	State: OH Section, Township, Section, Township, Local relief (concave, converting the concave, converting the convert	g.: -81.02828 Datum: WGS84 NWI Classification: <u>None</u>		
Hydrophytic vegetation present? No Hydric soil present? No Wetland hydrology present? Yes	Is the sampled area w	ithin a wetland? <u>No</u>		
Upland below to WRG004 and WRG005 in steadily during field work. HYDROLOGY Wetland Hydrology Indicators:	Sec	ondary Indicators (minimum of two required)		
High Water Table (A2) X Saturation (A3) Oxid	Aquatic Plants (B14)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2)		
Sediment Deposits (B2) Pres Drift Deposits (B3) Rece Algal Mat or Crust (B4) Soils	ence of Reduced Iron (C4)	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)		
Inundation Visible on AerialOthe Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)		Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)		
Field Observations: Surface water present? Yes No Water table present? Yes No Saturation present? Yes X No (includes capillary fringe) Describe recorded data (stream gauge, monitoring v	X Depth (inches): X Depth (inches): Depth (inches): 0 Vell, aerial photos, previous inspect	Wetland hydrology present? Y ions), if available:		
Remarks: Raining steadily throughout the day, and g	round saturated nearly everyw	where in the project area.		

VEGETATION - Use scientific names of plan	nts			Sampling Point: DPRG006
				50/20 Thresholds
Tree Stratum Plot Size (30 ft.)	Absolute	Dominant	Indicator	20% 50%
,	% Cover	Species	Status	Tree Stratum 15 38 Sapling/Shrub Stratum 3 8
1 <u>Acer saccharum</u> 2 Carya ovata	<u> </u>	<u> </u>	FACU FACU	Sapling/Shrub Stratum 3 8 Herb Stratum 5 13
3 Ulmus rubra	5	<u></u>	FAC	Woody Vine Stratum 1 3
4 Quercus alba	5	<u> </u>	FACU	
5 Quercus rubra	5	N	FACU	Dominance Test Worksheet
6				Number of Dominant
7				Species that are OBL,
8				FACW, or FAC: (A)
9				Total Number of Dominant
10	75	= Total Cover		Species Across all Strata: <u>6</u> (B)
	75			Percent of Dominant
Capling/Chryb	Abaaluta	Deminant	Indiantar	Species that are OBL,
Sapling/Shrub Plot Size(15 ft.) Stratum	Absolute % Cover	Dominant	Indicator Status	FACW, or FAC: <u>16.67%</u> (A/B)
		Species		
1 Rosa multiflora	15	Y	FACU	Prevalence Index Worksheet
2				Total % Cover of:
3				OBL species $0 \times 1 = 0$
4				FACW species 0 $x 2 =$ 0 FAC species 10 $x 3 =$ 30
5 6				FAC species $10 \times 3 = 30$ FACU species $110 \times 4 = 440$
7				UPL species $0 \times 5 = 0$
8				Column totals 120 (A) 470 (B)
9	·······			Prevalence Index = $B/A = 3.92$
10				
	15	 Total Cover 		
				Hydrophytic Vegetation Indicators:
Herb Stratum Plot Size (5 ft.)	Absolute	Dominant	Indicator	Rapid test for hydrophytic vegetation
1 Dedembullum neltetum	% Cover	Species	Status	Dominance test is >50%
1 Podophyllum peltatum 2 Bromus pubescens	<u>10</u> 10	Y Y	FACU FACU	Prevalence index is ≤3.0* Morphological adaptations* (provide
3 Rosa multiflora	5	<u> </u>	FACU	supporting data in Remarks or on a
4		<u> </u>	17.00	separate sheet)
5				Problematic hydrophytic vegetation*
6				(explain)
7				*Indicators of hydric soil and wetland hydrology must be
8				present, unless disturbed or problematic
9				
10				Definitions of Vegetation Strata:
11				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
12 13				breast height (DDH), regardless of height.
14				Sapling/shrub - Woody plants less than 3 in. DBH and
15				greater than 3.28 ft (1 m) tall.
	25	= Total Cover		Harb All borbassous (pap woody) plants, regardless of
				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
Woody Vine Plot Size (30 ft.)	Absolute	Dominant	Indicator	
Stratum	% Cover	Species	Status	Woody vines - All woody vines greater than 3.28 ft in
1 <u>Toxicodendron radicans</u>	5	Y	FAC	height.
2				
4				Hydrophytic
5				vegetation
	5	= Total Cover		present? <u>N</u>
Remarks: (Include photo numbers here or on a sepa	rate sheet			
Former pasture area, and typical new field	/pasture spe	cies.		
	- actaio ope			

SOIL							Sa	mpling Point: DPRG006			
Profile Des	cription: (Descri	ibe to th	ne depth needed	to doci	ument th	e indicat	or or confirm the abser	nce of indicators.)			
Depth	Depth Matrix Redox Featu						Texture	Remarks			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	TOXICIO	Romano			
0-4	10YR 3/1	100					silty clay loam				
4-16	10YR 4/3	100					clay loam				
				ed Mati	rix, CS=0	Covered	or Coated Sand Grains	6			
**Location:	PL=Pore Lining	, M=Ma	trix								
Hydric Soi	I Indicators:						Indicators for	Problematic Hydric Soils:			
			Dark Su								
Histiso			•		w Surfac	ce (S8)		(A10) (MLRA 147)			
	Epipedon (A2)		(MLRA					ie Redox (A16) (MLRA 147, 148)			
	listic (A3)				ace (S9)						
	en Sulfide (A4)		(MLRA				(MLRA 136				
	ed Layers (A5)				Matrix (I	F2)		w Dark Surface (TF12)			
	luck (A10) (LRR					(C)	Other (Exp	lain in Remarks)			
	ed Below Dark S Dark Surface (A1				urface (F Surface						
	Mucky Mineral (sions (F8						
	I, MLRA 147, 14						(LRR N, MLRA 136)				
	Gleyed Matrix (S						36, 122)				
	Redox (S5)	.,) (MLRA 148)				
	d Matrix (S6)						ŔĂ 127, 147)				
··	()				,	<i>,</i> ,					
*Indicators	of hydrophytic v	egetatio	on and wetland h	nydrolog	gy must l	be prese	nt, unless disturbed or	problematic			
Restrictive	Layer (if observe	ed):									
	lone						Hydric soil prese	nt? N			
Depth (inch	nes):				_						
Remarks:											
INCINAINS.											

Project/Site: Kilgore-Polo Road 138kV Ext Applicant/Owner: AEP Investigator(s): Rod Ginter, Chris Wulff Landform (hillslope, terrace, etc.): hilltop dep Subregion (LRR or MLRA): LRR N Soil Map Unit Name Westmoreland-Coshoctor Are climatic/hydrologic conditions of the site ty Are vegetation, soil, or hy Are vegetation, soil, or hy	State: Section Local relief (co Lat.: 40.4581 n silt loams, 15 to 25 % slope	OH Sa a, Township, Range: S ncave, convex, none): Long.: -81.02 s NWI Class - Yes X No y disturbed? Are "n roblematic? circum	concave Slope (%): 3% 2809 Datum: WGS84 sification: None (If no, explain in remarks) ormal Yes hstances" present? Yes				
SUMMARY OF FINDINGS		(If nee	ded, explain any answers in remarks				
Hydrophytic vegetation present? Yes Hydric soil present? Yes Wetland hydrology present? Yes	Is the sam	pled area within a we	tland? <u>Yes</u>				
WRG005 - PEM. Carex, skunk cabba stream SRG004 that drains west to D	•	-	ine below. Abuts ephemeral				
Wetland Hydrology Indicators:			dicators (minimum of two required)				
Primary Indicators (minimum of one is require			bil Cracks (B6)				
Surface Water (A1)	True Aquatic Plants (B14)						
X High Water Table (A2)	Hydrogen Sulfide Odor (C1)						
X Saturation (A3)	Oxidized Rhizospheres on		Lines (B16)				
Water Marks (B1)	Living Roots (C3)		n Water Table (C2)				
Sediment Deposits (B2)	Presence of Reduced Iron (urrows (C8)				
Drift Deposits (B3) Algal Mat or Crust (B4)	Recent Iron Reduction in Til Soils (C6)		Visible on Aerial Imagery (C9) Stressed Plants (D1)				
Iron Deposits (B5)	Thin Muck Surface (C7)		ic Position (D2)				
	Other (Explain in Remarks)						
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Aquatic Fauna (B13)			quitard (D3) graphic Relief (D4) al Test (D5)				
Field Observations:							
Surface water present? Yes Water table present? Yes X Saturation present? Yes X (includes capillary fringe) Image: Comparison of the second sec	No X Depth (inches) No Depth (inches) No Depth (inches)	<u>6</u> hy	etland /drology /esent? Y				
Describe recorded data (stream gauge, monit	oring well, aerial photos, pre	vious inspections), if av	ailable:				
Remarks:							
Seep area on hillslope in upland fore	st, incised stream chann	el downslope.					

EGETATION - U	Use scientific	names of	plant	S			Sampling Po	int: DPRG007
							50/20 Thresholds	
Tas a Otraction		00.4	`	Absolute	Dominant	Indicator		20% 50%
Tree Stratum	Plot Size (30 ft.)	% Cover	Species	Status	Tree Stratum	0 0
1				/* 00101	opeelee	oluluo	Sapling/Shrub Stratum	0 0
2							Herb Stratum	11 28
							Woody Vine Stratum	0 0
							Dominance Test Worksho	eet
							Number of Dominant	
							Species that are OBL,	
							FACW, or FAC:	4 (A)
							Total Number of Dominant	
							Species Across all Strata:	4 (B)
				0 =	 Total Cover 		Percent of Dominant	
							Species that are OBL,	
Sapling/Shrub				Absolute	Dominant	Indicator	FACW, or FAC:	100.00% (A/B
Stratum	Plot Size (15 ft.)	% Cover	Species	Status	TAGW, OFTAG.	100.0070 (AD
Stratum					opecies	Status		
							Prevalence Index Worksh	neet
							Total % Cover of:	
							OBL species 10 x 1	= 10
							FACW species 15 x 2	= 30
							FAC species 30 x 3	90
							FACU species 0 x 4	= 0
							UPL species 0 x 5	i = 0
							Column totals 55 (A)	130 (B)
							Prevalence Index = B/A =	2.36
				0 =	 Total Cover 			
							Hydrophytic Vegetation I	ndicators:
Laula Otractorea		- 4	``	Absolute	Dominant	Indicator	Rapid test for hydrophy	tic vegetation
Herb Stratum	Plot Size (5 ft.)	% Cover	Species	Status	X Dominance test is >50	%
Carex blanda				20	Y	FAC	X Prevalence index is ≤3	.0*
Viola sororia				10	Y	FAC	Morphological adaptati	
Symplocarpus	s foetidus			10	Y	OBL	supporting data in Rem	
	um lateriflorum			10	Y	FACW	separate sheet)	
Agrimonia par				5	<u> </u>	FACW	Problematic hydrophyti	ic vegetation*
/ grimonia par	Villora					171011	(explain)	e vegetation
							`	
				·			*Indicators of hydric soil and wet	
							present, unless disturbed or prob	nematic
							Definitions of Vegetation	Strata.
							•	
							Tree - Woody plants 3 in. (7.6 cr breast height (DBH), regardless	
							bleast height (DBH), regardless	or neight.
				. <u> </u>			Sapling/shrub - Woody plants le	ess than 3 in DBH an
							greater than 3.28 ft (1 m) tall.	
					Tatal Osuar			
				55	= Total Cover		Herb - All herbaceous (non-wood	dy) plants, regardless
							size, and woody plants less than	3.28 ft tall.
Woody Vine	Plot Size (30 ft.)	Absolute	Dominant	Indicator		
Stratum			,	% Cover	Species	Status	Woody vines - All woody vines g	greater than 3.28 ft in
				. <u> </u>			height.	
							Hydrophytic	
							vegetation	
				0 :	= Total Cover		present? Y	
							p	-
marks: (Include p	hoto numbers he	ere or on a	separ	ate sheet				
		u						

SOIL							Sa	ampling Point: DPRG007
Profile Des	cription: (Descri	be to th	ne depth needed	l to doc	ument th	ie indica [.]	tor or confirm the abse	nce of indicators.)
Depth	Matrix			lox Fea			Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remaiks
0-6	GL1 6/10GY	100					silty clay	
6-16	10YR 6/1	90	7.5YR 5/6	10	С	М	silty clay	
*Tupo: C-(Concontration D	Doplo	tion PM-Poduc	od Mat	riv CS-(Covered	or Coated Sand Grain	
	PL=Pore Lining			eu mai	nx, CS=0	Covereu	or Coaleu Sanu Grain	5
	- · · · · · · · · · · · · · · · · · · ·	, 101–1012					Indiantara far	Problematic Undrie Sailer
nyaric Sol	il Indicators:		Dark S	urfaga (97)		indicators for	Problematic Hydric Soils:
Histiso	Ι (Δ1)				ow Surfa	ce (S8)	2 cm Muck	: (A10) (MLRA 147)
	Epipedon (A2)		(MLRA			00 (00)		rie Redox (A16) (MLRA 147, 148)
	Histic (A3)				ace (S9))		Floodplain Soils (F19)
	en Sulfide (A4)		(MLRA				(MLRA 13)	
	ed Layers (A5)		X Loamy	Gleyed	Matrix (F2)		ow Dark Surface (TF12)
	luck (A10) (LRR		X Deplete				Other (Exp	lain in Remarks)
	ed Below Dark S		·		urface (F	,		
	Dark Surface (A1				Surface			
-	Mucky Mineral (sions (F			
	N, MLRA 147, 14						(LRR N, MLRA 136)	
	Gleyed Matrix (S Redox (S5)	54)					36, 122) 9) (MLRA 148)	
	d Matrix (S6)						RA 127, 147)	
						21)(1112)	(, , , , , , , , , , , , , , , , , , ,	
*Indicators	of hydrophytic v	egetati	on and wetland I	nydrolog	gy must	be prese	ent, unless disturbed or	problematic
		U		,				
	Layer (if observe	ed):						
	lone				-		Hydric soil prese	ent? Y
Depth (inch	ies):				-			
Remarks:								
itemarks.								
Soft cla	y over seep a	rea. G	Bleyed at surfa	ace.				
	•		-					
L								

Project/Site: Kilgore-Polo Road 138kV Extension	City/County: Carroll	Sampling Date: 4/29/2014
Applicant/Owner: AEP	State: OH	Sampling Point DPRG008
Investigator(s): Rod Ginter, Chris Wulff	Section, Township, Ra	
Landform (hillslope, terrace, etc.): hillslope depress		
Subregion (LRR or MLRA): LRR N L Soil Map Unit Name Rigley sandy loam, 15 to 25 % s		-81.02849 Datum: WGS84 VI Classification: None
Are climatic/hydrologic conditions of the site typical for		
Are vegetation, soil, or hydrolog Are vegetation, soil, or hydrolog	 significantly disturbed? naturally problematic? 	Are "normal Yes circumstances" present?
, io togotation, oon, of hydrolog		(If needed, explain any answers in remarks)
SUMMARY OF FINDINGS		, , , , , , , , , , , , , , , , , , ,
Hydrophytic vegetation present? Yes		
Hydric soil present? Yes	Is the sampled area with	in a wetland? Yes
Wetland hydrology present? Yes	-	
Remarks:		
WRG003 - PEM. RCG/Juncus seep on fore	st/ROW edge draining into fore	sted rivine below. Abuts
ephemeral stream SRG005 that drains wes		
	3	
HYDROLOGY Wetland Hydrology Indicators:	Coord	don (la disstore (minimum of two required)
Primary Indicators (minimum of one is required; check		dary Indicators (minimum of two required)
		rface Soil Cracks (B6)
		arsely Vegetated Concave Surface (B8)
	· · · · · · · · · · · · · · · · · · ·	ainage Patterns (B10)
		ss Trim Lines (B16)
		-Season Water Table (C2)
		ayfish Burrows (C8) turation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Soils		inted or Stressed Plants (D1)
		omorphic Position (D2)
		allow Aquitard (D3)
Inundation Visible on AerialOthe Imagery (B7)		crotopographic Relief (D4)
Water-Stained Leaves (B9)		C-Neutral Test (D5)
Aquatic Fauna (B13)	<u></u>	
Field Observations:		
Surface water present? Yes No	X Depth (inches):	Wetland
Water table present? Yes X No	Depth (inches): 3	hydrology
Saturation present? Yes X No	Depth (inches): 0	present? Y
(includes capillary fringe)		
Describe recorded data (stream gauge, monitoring w	ell aerial photos, previous inspection	s) if available:
Remarks:		
Seep area on hillslope below ROW/pasture		annel downslope. May be result of
broken drainage tile in field, but no visible t	les.	

Tree Stratum	Plot Size (30 ft.	`	Absolute	Dominant	Indicator	Sampling Po 50/20 Thresholds	20%	50%
Tree Stratum	Plot Size (30 ft	`	Absolute	Dominant	Indicator		20%	E00/
		50 ft.)	% Cover	Species	Status	Tree Stratum	0	0
							Sapling/Shrub Stratum	0	0
							Herb Stratum Woody Vine Stratum	19 0	47 0
							Dominance Test Worksho	-	-
							Number of Dominant	561	
							Species that are OBL,	•	(•)
							FACW, or FAC: Total Number of Dominant	2	(A)
							Species Across all Strata:	2	(B)
				0 =	Total Cover		Percent of Dominant		
							Species that are OBL,		
Sapling/Shrub Stratum	Plot Size (15 ft.)	Absolute % Cover	Dominant Species	Indicator Status	FACW, or FAC:	100.00	<u>0%</u> (A/B)
							Prevalence Index Worksh	neet	
							Total % Cover of:		
							OBL species 0 x 1)
						·	FACW species 60 x 2 FAC species 30 x 3		<u>20</u> 0
							FACU species 3 x 4		2
							UPL species 0 x 5	= ()
							Column totals 93 (A)		22 (B)
							Prevalence Index = B/A =	2.39)
				0 =	Total Cover				
							Hydrophytic Vegetation I		
Herb Stratum	Plot Size (5 ft.)	Absolute	Dominant	Indicator	Rapid test for hydrophy X Dominance test is >50		tation
Phalaris arundii	nacea			% Cover 30	Species Y	Status FACW	$\frac{X}{X}$ Prevalence index is ≤ 3		
Juncus effusus	lacea			20	<u> </u>	FACW	Morphological adaptati		ovide
Viola sororia				15	N	FAC	supporting data in Rem		
Carex blanda				10	Ν	FAC	separate sheet)		
Agrimonia parvi	iflora			5	N	FACW	Problematic hydrophyt	c vegeta	tion*
Juncus tenuis				5	<u>N</u>	FAC	(explain)		
Symphyotrichur				5	<u> </u>	FACW FACU	*Indicators of hydric soil and wet		logy must be
Trifolium repens	Ď			3	<u>IN</u>	FACU	present, unless disturbed or prot	lematic	
							Definitions of Vegetation		
				<u> </u>		. <u> </u>	Tree - Woody plants 3 in. (7.6 cm breast height (DBH), regardless	n) or more	in diameter
							Sapling/shrub - Woody plants le		in DBH and
							greater than 3.28 ft (1 m) tall.		
				93 =	 Total Cover 		Herb - All herbaceous (non-wood size, and woody plants less than		
Woody Vine Stratum	Plot Size (30 ft.)	Absolute % Cover	Dominant Species	Indicator Status	Woody vines - All woody vines of		
Stratum				% Cover	Species	Status	height.		11 3.20 It III
							Hydrophytic		
							vegetation		
				0 =	= Total Cover		present? Y	-	
marks: (Include pho	oto numbers he	ere or on a	separa	ate sheet)				-	

SOIL							S	ampling Point: DPRG008			
Profile Des	cription: (Descr	ibe to th	e depth needed	to docu	ument th	e indicat	or or confirm the abse	nce of indicators.)			
Depth	Matrix			ox Feat			Texture	Remarks			
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Kentaiko			
0-2	10YR 5/3	100									
2-8	10YR 5/2	R 5/2 90 7.5YR 5/6 10 C M silty clay									
8-16 10YR 4/4 100 sandy clay											
*Type: C=C	Concentration, D	=Deple	tion, RM=Reduc	ed Mati	rix, CS=0	Covered	or Coated Sand Grain	S			
**Location:	PL=Pore Lining	, M=Ma	trix								
Hydric Soi	I Indicators:						Indicators for	Problematic Hydric Soils:			
Histic E Black H Hydrog Stratifie 2 cm M Deplete Thick D Sandy (LRR N Sandy Sandy Strippe	Hydric Soil Indicators: Indicators for Problematic Hydric Soils: Histisol (A1) Dark Surface (S7) Histic Epipedon (A2) (MLRA 147, 148) Black Histic (A3) Thin Dark Surface (S9) Hydrogen Sulfide (A4) (MLRA 147, 148) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) (LRR N) X Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 136, 122)										
	Layer (if observe Clay nes): 8	ed):			-		Hydric soil prese	ent? <u>Y</u>			
Soft cla	y loam over s	eep ar	ea.								

Project/Site: Kilgore-Polo Road 138kV Extension	City/County: Carrol	Sampling Date:4	4/29/2014		
Applicant/Owner: AEP	State: OH	Sampling Point	DPRG009		
Investigator(s): Rod Ginter, Chris Wulff		ship, Range: S18 T12N R5W			
Landform (hillslope, terrace, etc.): hillslope		convex, none): <u>None</u>	Slope (%): <u>15%</u>		
	at.: 40.45734	Long.: -81.02836	Datum: WGS84		
Soil Map Unit Name Rigley sandy loam, 15 to 25 % s	lopes	NWI Classification: None	9		
Are climatic/hydrologic conditions of the site typical f			plain in remarks)		
Are vegetation, soil, or hydrolog	y significantly distur	ped? Are "normal	Yes		
Are vegetation, soil, or hydrolog	y naturally problema	itic? circumstances" pres			
		(If needed, explain a	ny answers in remarks		
SUMMARY OF FINDINGS					
Hydrophytic vegetation present? <u>No</u>					
Hydric soil present? No	Is the sampled a	rea within a wetland? No)		
Wetland hydrology present? No					
Remarks:					
Nonano.					
Lipland west of WRG002 along forest/new	field POW area . Partly f	rested hillslope Paining	stoodily during		
Upland west of WRG003 along forest/new	lielu ROW alea. Partiy it	frested misiope. Raining	steadily during		
field work.					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minim	up of two required)		
Primary Indicators (minimum of one is required; check	k all that apply)		ium or two required)		
		Surface Soil Cracks (B6)			
	Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2) Hydr	ogen Sulfide Odor (C1)	Drainage Patterns (B10)			
Saturation (A3) Oxidi	zed Rhizospheres on	Moss Trim Lines (B16)			
Water Marks (B1) Living	g Roots (C3)	Dry-Season Water Table	(C2)		
Sediment Deposits (B2) Prese	ence of Reduced Iron (C4)	Crayfish Burrows (C8)			
Drift Deposits (B3)	nt Iron Reduction in Tilled	Saturation Visible on Aeria	al Imagery (C9)		
Algal Mat or Crust (B4) Soils	(C6)	Stunted or Stressed Plant	s (D1)		
Iron Deposits (B5) Thin	Muck Surface (C7)	Geomorphic Position (D2))		
Inundation Visible on Aerial Othe	r (Explain in Remarks)	Shallow Aquitard (D3)			
Imagery (B7)		Microtopographic Relief (I	74)		
Water-Stained Leaves (B9)		FAC-Neutral Test (D5))		
Aquatic Fauna (B13)					
Field Observations:		Wetland			
Surface water present? Yes No	X Depth (inches):				
Water table present? Yes <u>No</u>	X Depth (inches):	hydrology	N1		
Saturation present? Yes <u>No</u>	X Depth (inches):	present?	N		
(includes capillary fringe)					
Describe recorded data (stream gauge, monitoring w	all aerial photos, previous in	spections) if available:			
Demodur					
Remarks:					
Raining steadily throughout the day, and gr	ound saturated in many i	places, but not at this loca	ation		
o i o i o		•			

VEGETATION - Use scientific names of plan	ts			Sampling Poi	nt: DPRG009
				50/20 Thresholds	
Tree Stratum Plot Size (30 ft.)	Absolute	Dominant	Indicator		20% 50%
	% Cover	Species	Status	Tree Stratum	12 30
1 Acer saccharum	20	Y	FACU	Sapling/Shrub Stratum	5 13
2 Ostrya virginiana	20	Y	FACU	Herb Stratum	20 49
3 Cornus florida	10	N	FACU	Woody Vine Stratum	0 0
4 Prunus serotina	5	N	FACU		
5 Carpinus caroliniana	5	N	FAC	Dominance Test Workshe	et
6				Number of Dominant	
/				Species that are OBL,	0 (A)
8 9				FACW, or FAC: Total Number of Dominant	<u> </u>
9 10				Species Across all Strata:	5 (B)
	60	Total Cover			<u> </u>
				Percent of Dominant	
Cooling/Chrub	Abaaluta	Deminant	Indiantar	Species that are OBL,	
Sapling/Shrub Plot Size (15 ft.)	Absolute	Dominant	Indicator	FACW, or FAC:	0.00% (A/B)
Stratum	% Cover	Species	Status		
1 Rosa multiflora	20	Y	FACU	Prevalence Index Worksh	eet
2 Acer saccharum	5	Y	FACU	Total % Cover of:	
3				OBL species 0 x 1	
4				FACW species 0 x 2	
5				FAC species 10 x 3	
6				FACU species 168 x 4	
/				UPL species 0 x 5	
8				Column totals 178 (A)	<u>702</u> (B)
9				Prevalence Index = B/A =	3.94
10		= Total Cover			
	25			Hydrophytic Vegetation Ir	diastore
	Absolute	Dominant	Indicator	Rapid test for hydrophy	
Herb Stratum Plot Size (5 ft.)	% Cover	Species	Status	Dominance test is >50%	
1 Festuca arundinacea	80	Y	FACU	Prevalence index is ≤3.	
2 Rubus pensilvanicus	5	<u> </u>	FAC	Morphological adaptatio	
3 Podophyllum peltatum	5	N	FACU	supporting data in Rem	
4 Lamium purpureum	5	N	NI	separate sheet)	
5 Trifolium repens	3	N	FACU	Problematic hydrophytic	c vegetation*
6				(explain)	0
7				*Indicators of hydric soil and wetle	and hydrology must be
8				present, unless disturbed or prob	
9					
10				Definitions of Vegetation	Strata:
11				Tree - Woody plants 3 in. (7.6 cm	
12				breast height (DBH), regardless of	of height.
13				Sanling/shruh Woody plants log	no than 2 in DPU and
14				Sapling/shrub - Woody plants les greater than 3.28 ft (1 m) tall.	andin a ini. DDF1 dilQ
15				g	
	98	 Total Cover 		Herb - All herbaceous (non-wood	y) plants, regardless of
Weedy Vine	Abachita	Dominant	Indiastar	size, and woody plants less than	3.28 ft tall.
Woody Vine Plot Size (30 ft.)	Absolute	Dominant	Indicator		
Stratum	% Cover	Species	Status	Woody vines - All woody vines g height.	reater than 3.28 ft in
2				neight.	
3					
				Livelan budie	
4				Hydrophytic	
5		T + + 2		vegetation	
	0	= Total Cover		present? N	
Pemarke: (Include photo numbers here or on a cons	rate shoot'			<u> </u>	
Remarks: (Include photo numbers here or on a sepa	rate sneet				
Edge of former pasture area and forest.					

SOIL							Sa	mpling Point: DPRG009		
Profile Des	cription: (Descri	ibe to th	e depth needed	to docu	ument th	e indicat	or or confirm the abser	nce of indicators.)		
Depth (In all a a)	Matrix	0/		lox Feat		L**	Texture	Remarks		
(Inches) 0-3	Color (moist) 10YR 4/2	% 100	Color (moist)	Color (moist) % Type* Loc**						
3-16	10YR 5/3	100					silty clay loam silty clay loam			
0.10	1011(0/0	100					Sitty Clay Ioan			
*Type: C-C	Concentration D	-Denlei	tion RM-Reduc	ed Mat	ix CS-0	Covered	or Coated Sand Grains			
	PL=Pore Lining				1, 00-0	Sovered	or obaled band oralli.	2		
	× ×						Indicators for	Problematic Hydric Soils:		
Histic E Black H Hydrog Stratifie 2 cm M Deplete Thick D Sandy (LRR N Sandy Sandy Strippe	Hydric Soil Indicators: Indicators for Problematic Hydric Soils: Histisol (A1) Dark Surface (S7) Histic Epipedon (A2) (MLRA 147, 148) Black Histic (A3) Thin Dark Surface (S9) Hydrogen Sulfide (A4) (MLRA 147, 148) Stratified Layers (A5) Loamy Gleyed Matrix (F2) 2 cm Muck (A10) (LRR N) Depleted Matrix (F2) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8) (LRR N, MLRA 147, 148) Iron-Manganese Masses (F12) (LRR N, MLRA 136) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)									
	Layer (if observe lone nes):	ed):			-		Hydric soil prese	nt? <u>N</u>		
Remarks:										

Project/Site: Kilgore-Polo Road 138kV E Applicant/Owner: AEP Investigator(s): Rod Ginter, Chris Wulff Landform (hillslope, terrace, etc.): hillslope Subregion (LRR or MLRA): LRR N Soil Map Unit Name Guernsey silty clay load	e depression Lat.: m, 8 to 15 % sl	Local relief (cc 40.45638 opes, eroded	n, Township, Ra ncave, convex, Long.: NV	Sampling Date: 4. Sampling Point D ange: S17 T12N R5W none): concave -81.03098 VI Classification: <u>None</u>	PRG010 Slope (%): <u>4%</u> Datum: <u>WGS84</u>
Are climatic/hydrologic conditions of the site Are vegetation, soil, or Are vegetation, soil, or SUMMARY OF FINDINGS	hydrology	-	y disturbed?	Are "normal circumstances" prese	Yes
Hydrophytic vegetation present?YesHydric soil present?YesWetland hydrology present?Yes		Is the sam	npled area with	in a wetland? Yes	<u>. </u>
Remarks: WRG006 - PEM. Skunk cabbage/R Former or current pasture in easter west to Dining Fork and Conotton C	n end. Abut				
HYDROLOGY Wetland Hydrology Indicators:			Saaan	dary Indicators (minim	up of two required)
Primary Indicators (minimum of one is requi	ired: check all	that apply)		rface Soil Cracks (B6)	uni oi two required)
X Surface Water (A1)		tic Plants (B14)			No Surface (B8)
X High Water Table (A2)		uatic Plants (B14) Sparsely Vegetated Concave Surface en Sulfide Odor (C1) X Drainage Patterns (B10)			
X Saturation (A3)					
		Rhizospheres on			
Water Marks (B1) Sediment Deposits (B2)	Living Roo	of Reduced Iron (y-Season Water Table (ayfish Burrows (C8)	(2)
Drift Deposits (B3)		n Reduction in Til		turation Visible on Aeria	Imageny (C9)
Algal Mat or Crust (B4)	Soils (C6)			unted or Stressed Plants	
Iron Deposits (B5)		Surface (C7)		eomorphic Position (D2)	5 (21)
		plain in Remarks)		allow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)				crotopographic Relief (D	(4)
Water-Stained Leaves (B9)				C-Neutral Test (D5)	(די
Aquatic Fauna (B13)			<u></u>		
Field Observations:					
Surface water present? Yes X	No	Depth (inches)	: 1	Wetland	
Water table present? Yes X	No	Depth (inches)		hydrology	
Saturation present? Yes X	No	Depth (inches)	: 0	present?	Y
(includes capillary fringe)					
Describe recorded data (stream gauge, mo	nitoring well, a	erial photos, pre	vious inspectior	l ns), if available:	
Remarks:					
Seep area in valley hillslope below	culvert cross	sing in Pontiff	Rd. More defi	ned stream channe	el to east of
Pontiff Rd. Surface water running i		-			

VEGETATION - Use scientific names of plan	ts		Sampling Point: DPRG010
Tree Stratum Plot Size(30 ft.) 1 <u>Salix nigra</u> 2 <u>Ulmus americana</u> 34	Absolute Domir % Cover Spec 5 Y 5 Y	ties Status	50/20 Thresholds20%50%Tree Stratum225Sapling/Shrub Stratum249Woody Vine Stratum0
5 6 7 8 9 10 5bs:b/Sopling	= Total C		Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: <u>5</u> (A) Total Number of Dominant Species Across all Strata: <u>6</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>92,220</u> ((A/D)
Shrub/Sapling Plot Size(15 ft.) Stratum	Absolute Domir % Cover Spec		FACW, or FAC: <u>83.33%</u> (A/B)
1 Rosa multiflora 2	Y	FACU	Prevalence Index WorksheetTotal % Cover of:OBL species75X 1 =75FACW species30X 2 =60FAC species0X 3 =0FACU species13X 4 =52UPL species0X 5 =0Column totals118(A)187Prevalence Index = B/A =1.58
10	10 = Total C	Cover	
Herb Stratum Plot Size (5 ft.) 1 Symplocarpus foetidus 2 Carex vulpinoidea 3 Juncus effusus 4 Calamagrostis canadensis 5 Taraxacum officinale 6 7	Absolute Domin % Cover Spec 40 Y 30 Y 20 Y 5 N 3 N	ties Status OBL OBL FACW FACW	Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation X Dominance test is >50% X Prevalence index is <3.0*
8			present, unless disturbed or problematic
10 11 12 13 14			Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter a breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
15 Woody Vine Plot Size (30 ft.) Stratum 2	98 = Total C Absolute Domir % Cover Spec	nant Indicator	 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.
3 4 5	= Total C	Cover	Hydrophytic vegetation present? <u>Y</u>
Remarks: (Include photo numbers here or on a separ Disturbed cattle pasture east end with skur		anary grass in wes	t end adjacent to PSS WRG007.

SOIL							Sa	ampling Point: DPRG010
Profile Des	cription: (Descr	ibe to th	ne depth needec	to doc	ument th	ie indica [.]	tor or confirm the abse	nce of indicators.)
Depth	Matrix		Rec	lox Fea	tures		Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-3	10YR 5/1	100					silty clay loam	
3-16	10YR 6/1	80	7.5YR 4/6	20	С	М	silty clay	
				ed Mat	rix, CS=	Covered	or Coated Sand Grain	S
**Location:	PL=Pore Lining	, M=Ma	atrix					
Hydric So	I Indicators:						Indicators for	Problematic Hydric Soils:
			Dark S				o 14 1	
Histiso	Epipedon (A2)		•	147, 14	w Surfa	ce (58)		x (A10) (MLRA 147) rie Redox (A16) (MLRA 147, 148)
	listic (A3)				+o) ace (S9)			Floodplain Soils (F19)
	en Sulfide (A4)			147, 14			(MLRA 13	
	ed Layers (A5)				Matrix (F2)		ow Dark Surface (TF12)
	luck (A10) (LŔR	: N)	X Deplete			,		plain in Remarks)
	ed Below Dark S		(A11) Redox	Dark Su	urface (F	6)		
	Dark Surface (A1				Surface			
-	Mucky Mineral (sions (F			
	I, MLRA 147, 14						(LRR N, MLRA 136)	
	Gleyed Matrix (S Redox (S5)	54)					36, 122) 9) (MLRA 148)	
	d Matrix (S6)						RA 127, 147)	
						21)(1112)	(A 12), 14)	
*Indicators	of hydrophytic v	egetati	on and wetland I	hydrolog	gy must	be prese	ent, unless disturbed or	problematic
						-		
	Layer (if observ	ed):						
	Clay				_		Hydric soil prese	ent? Y
Depth (Incr	les).				-			
Remarks:								
rtemante.								
0.44					1	م با ام م	to a sector fallow and fal	
Soft de	pieted clay loa	am in s	eep area in fo	ormer p	basture	and be	etween fallow ag fiel	u and stream.

Project/Site: Kilgore-Polo Road 138kV	Extension City/County:	Carroll	Sampling Date: 4/	/29/2014
Applicant/Owner: AEP	State:		Sampling Point D	
Investigator(s): Rod Ginter, Chris Wulff		n, Township, Range		
Landform (hillslope, terrace, etc.): hillslo		ncave, convex, non		Slope (%): <u>6%</u>
Subregion (LRR or MLRA): LRR N	Lat.: 40.45628		1.03094	Datum: WGS84
Soil Map Unit Name <u>Guernsey silty clay lo</u>			lassification: None	
Are climatic/hydrologic conditions of the s				olain in remarks)
Are vegetation, soil,	or hydrologysignificantly or hydrologynaturally pr	y disturbed? Are	e "normal	Yes
Are vegetation, soil,	or hydrologynaturally pr	roblematic? cire	cumstances" prese	
		(11)	needed, explain an	ny answers in remarks
SUMMARY OF FINDINGS				
Hydrophytic vegetation present? No	_			
Hydric soil present? No	Is the sam	pled area within a	wetland? No	_
Wetland hydrology present? No	_			
Remarks:	I			
Upland south of WRG006 along p	asture fenceline. Raining st	teadily during fiel	d work.	
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary	Indicators (minim	um of two required)
Primary Indicators (minimum of one is rec	uired: check all that apply)	-	e Soil Cracks (B6)	
Surface Water (A1)	True Aquatic Plants (B14)		ly Vegetated Conca	we Surface (B8)
High Water Table (A2)	Hydrogen Sulfide Odor (C1)		ge Patterns (B10)	
Saturation (A3)			rim Lines (B16)	
	Oxidized Rhizospheres on			
Water Marks (B1) Sediment Deposits (B2)	Living Roots (C3) Presence of Reduced Iron (ason Water Table (0 h Burrows (C8)	52)
Drift Deposits (B3)	Recent Iron Reduction in Til		tion Visible on Aeria	I Imagery (C9)
Algal Mat or Crust (B4)	Soils (C6)		d or Stressed Plants	
Iron Deposits (B5)	Thin Muck Surface (C7)		orphic Position (D2)	(-))
Inundation Visible on Aerial	Other (Explain in Remarks)		v Aquitard (D3)	
Imagery (B7)			pographic Relief (D	4)
Water-Stained Leaves (B9)			eutral Test (D5)	-1)
Aquatic Fauna (B13)				
Field Observations:				
Surface water present? Yes	No X Depth (inches)		Wetland	
Water table present? Yes	No X Depth (inches)		hydrology	
Saturation present? Yes	No X Depth (inches)		present?	Ν
(includes capillary fringe)				
(
Describe recorded data (stream gauge, m	onitoring well, aerial photos, prev	vious inspections), i	f available:	
Remarks:				
Doining atoodily through out the st		of yot optimate -	avaant at af	
Raining steadily throughout the da	ay, and soll very moist, but n	iot yet saturated	except at surfac	e.
1				

20% 50% 2 5 Stratum 3 8 24 59 ratum 0 0
e OBL, : <u>1</u> (A) of Dominant s all Strata: <u>5</u> (B) ninant e OBL, : <u>20.00%</u> (A/B)
dex Worksheet of: $5 \times 1 = 5$ $3 \times 3 = 9$ $125 \times 4 = 500$ $0 \times 5 = 0$ 138 (A) 524 (B) ex = B/A = 3.80
Yegetation Indicators: for hydrophytic vegetation test is >50% index is ≤3.0* ical adaptations* (provide data in Remarks or on a neet) c hydrophytic vegetation* ic soil and wetland hydrology must be sturbed or problematic
Vegetation Strata: tts 3 in. (7.6 cm) or more in diameter a 1), regardless of height. /oody plants less than 3 in. DBH and t (1 m) tall.
ous (non-woody) plants, regardless o lants less than 3.28 ft tall. woody vines greater than 3.28 ft in
iic N
an 3F W 3 f pl

SOIL							Sa	ampling Point: DPRG011
Profile Des	cription: (Descri	be to th	ne depth needed	to doci	ument th	e indica	or or confirm the abser	nce of indicators.)
Depth	Matrix		Red	ox Fea	tures		Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**		rtomanto
0-16	10YR 4/4	60	10YR 4/6	40			silty clay loam	
	Concentration, D PL=Pore Lining			ed Mat	rix, CS=0	Covered	or Coated Sand Grains	S
Hydric Soi	I Indicators:		Dark Su	urfaca (97)		Indicators for	Problematic Hydric Soils:
Black H Hydrog Stratifie 2 cm V Deplete Thick D Sandy (LRR N Sandy Sandy Strippe	Epipedon (A2) distic (A3) den Sulfide (A4) ed Layers (A5) luck (A10) (LRR ed Below Dark S Dark Surface (A1 Mucky Mineral (S I, MLRA 147, 14 Gleyed Matrix (S Redox (S5) d Matrix (S6)	urface 2) 51) 8) 64) egetatio	Polyval (MLRA Thin Da (MLRA Loamy Deplete (A11) Redox I Redox I Iron-Ma Umbric Piedmo Red Pa	ue Belo 147, 14 ark Surfa 147, 14 Gleyed ed Matri Dark Su ed Dark Depress anganes Surface ont Floo rent Ma	w Surfac 48) ace (S9) 48) Matrix (I x (F3) urface (F Surface sions (F8 se Masse e (F13) (dplain Se aterial (F2	F2) (F7) 3) MLRA 1 bils (F12) MLRA 1 21) (MLI	Coast Prain Piedmont F (MLRA 136 Very Shallo	ow Dark Surface (TF12) lain in Remarks)
	lone	54).			-		Hydric soil prese	nt? <u>N</u>
Remarks:								

Project/Site: Kilgore-Polo Road 138kV Ext			Sampling Date:		
Applicant/Owner: AEP		State: OH	Sampling Point		
Investigator(s): Rod Ginter, Chris Wulff			Range: S18 T12N R5W		
Landform (hillslope, terrace, etc.): floodplain			ex, none): concave	Slope (%): <u>3%</u>	
Subregion (LRR or MLRA): LRR N	Lat.: 40.4575	8 Lor	ng.: -81.03297	Datum: WGS84	
Soil Map Unit NameOrville silt loam, occassion	nally flooded		NWI Classification: PEN	11C	
Are climatic/hydrologic conditions of the site t					
Are vegetation, soil, or hy	vdrologysign	ficantly disturbed?		Yes	
Are vegetation, soil, or hy	ydrologynatu	rally problematic?	circumstances" pres		
			(If needed, explain a	any answers in remarks	
SUMMARY OF FINDINGS					
Hydrophytic vegetation present? Yes					
Hydric soil present? Yes	Is th	e sampled area w	vithin a wetland? Ye	S	
Wetland hydrology present? Yes					
Remarks:					
WR0007 R00 Reselvated addee at	and also and an a		at a builting the Disting		
WRG007 - PSS. Brookside alder, ste		-		FORK (SRG001),	
which drains to Conotton Creek. Flo	odplain of Dining Fo	ork. NWI PEM1	C.		
HYDROLOGY					
Wetland Hydrology Indicators:		Sec	condary Indicators (minin	num of two required)	
Primary Indicators (minimum of one is require	d: check all that apply		Surface Soil Cracks (B6)	. ,	
Surface Water (A1)	True Aquatic Plants (Sparsely Vegetated Conc	ave Surface (B8)	
X High Water Table (A2)		n Sulfide Odor (C1) X Drainage Patterns (B10)			
X Saturation (A3)			Moss Trim Lines (B16)		
	Oxidized Rhizosphere	es on	Dry-Season Water Table	(02)	
Sediment Deposits (B2)	Living Roots (C3) Presence of Reduced		Crayfish Burrows (C8)	(02)	
				ol Imagany (CO)	
X Drift Deposits (B3) Algal Mat or Crust (B4)	Recent Iron Reductio Soils (C6)		Saturation Visible on Aeri Stunted or Stressed Plant		
Iron Deposits (B5)	Thin Muck Surface (C		Geomorphic Position (D2)		
)	
Inundation Visible on Aerial	Other (Explain in Rer		Shallow Aquitard (D3)	5.0	
Imagery (B7)			Microtopographic Relief (I	D4)	
Water-Stained Leaves (B9)		<u>X</u>	FAC-Neutral Test (D5)		
Aquatic Fauna (B13)					
Field Observations:					
Surface water present? Yes	No X Depth (in	nches):	Wetland		
Water table present? Yes X	No Depth (ii		hydrology		
Saturation present? Yes X	No Depth (ii	nches): 0	present?	Y	
(includes capillary fringe)		-	· ·		
Describe recorded data (stream gauge, monit	oring well, aerial photo	os, previous inspec	tions), if available:		
Remarks:					
Eloodolain of the Dining Fork Music	conturated collar of	orly floods at the	maa Naarly ayar bar		
Floodplain of the Dining Fork. Mucky	v saturated solls, cle	early noods at th	nes. Nearly over bar	iks during survey.	

GETATION - Use scientific names of plan				50/20 Thresholds	
	Absolute	Dominant	Indicator	Juizo Thresholds	20% 50%
ree Stratum Plot Size (30 ft.)				Tree Stratum	2078 3078
Soliv piero	% Cover	Species Y	Status OBL	Sapling/Shrub Stratum	15 38
Salix nigra	5				
Ulmus americana	3	Y	FACW	Herb Stratum	14 36
				Woody Vine Stratum	0 0
				Dominance Test Worksh	eet
				Number of Dominant	
				Species that are OBL,	
				FACW, or FAC:	8 (A
				Total Number of Dominant	t 1
				Species Across all Strata:	8 (B
	8	 Total Cover 		Percent of Dominant	
hand the second s	A la a a la sta	Densinent	la dia atau	Species that are OBL,	100.000/ /1
hrub/Sapling Plot Size (15 ft.)	Absolute	Dominant	Indicator	FACW, or FAC:	<u>100.00%</u> (A
Stratum	% Cover	Species	Status		
Alnus serrulata	30	Y	OBL	Prevalence Index Works	heet
Cornus racemosa	20	Y	FAC	Total % Cover of:	
	15	Y	FAC		1 - 40
Spiraea tomentosa		<u> </u>	-		
Rosa multiflora	5		FACU	FACW species 53 x 2	
Rubus pensylvanicus	5	N	FAC	FAC species 45 x 3	
				FACU species 13 x 4	
				UPL species 0 x 5	
				Column totals 151 (A	,
				Prevalence Index = B/A =	2.21
	75	 Total Cover 			
Phalaris arundinacea Laportea canadensis Onoclea sensibilis Galium asprellum Alliaria petiolata Dipsacus fullonum Lamium purpureum	20 20 15 5 3 3 	Y Y N N N N	FACW FAC OBL FACU FACU FACU NI	X Prevalence index is ≤3 Morphological adaptat supporting data in Rer separate sheet) Problematic hydrophyti (explain) *Indicators of hydric soil and we present, unless disturbed or pro Definitions of Vegetation Tree - Woody plants 3 in. (7.6 cl breast height (DBH), regardless Sapling/shrub - Woody plants li greater than 3.28 ft (1 m) tall.	ions* (provide marks or on a ic vegetation* tland hydrology mu- blematic I Strata: m) or more in diamo of height.
	71 :	 Total Cover 		Herb - All herbaceous (non-woo	dv) plants, regardle
				size, and woody plants less than	
Voody Vine Plot Size (30 ft.)	Absolute	Dominant	Indicator		
Stratum	% Cover	Species	Status	Woody vines - All woody vines	greater than 3.28 ft
				height.	
				Hydrophytic	
				Hydrophytic	
				vegetation	
	0	 Total Cover 		present? Y	_
narks: (Include photo numbers here or on a sepa	arate sheet				

SOIL							Sa	mpling Point: DPRG012			
Profile Des	cription: (Descr	ihe to th	ne denth needer	l to doci	iment th	e indica	for or confirm the abser	ace of indicators)			
Profile Description: (Describe to the depth needed to document the indical Depth Matrix Redox Features											
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks			
0-3	10YR4/3	100					silty clay loam				
3-10	10YR 5/2	90	7.5YR 4/6	10	С	PL	silty clay				
10-16	10YR 5/1	85	7.5YR 4/6	15	С	PL/M	silty clay				
				ed Mati	ix, CS=	Covered	or Coated Sand Grains	S			
	PL=Pore Lining	, M≡Na	itrix								
Hydric Soi	I Indicators:		Dork S	urface (87)		Indicators for	Problematic Hydric Soils:			
Histiso	(A1)				w Surfa	ce (S8)	2 cm Muck	(A10) (MLRA 147)			
	Epipedon (A2)		•	147, 14		()		rie Redox (A16) (MLRA 147, 148)			
Black H	listic (A3)				ace (S9))		Floodplain Soils (F19)			
	en Sulfide (A4)			147, 14			(MLRA 13				
	ed Layers (A5) luck (A10) (LRR	NI)	X Deplete		Matrix (F2)		ow Dark Surface (TF12)			
	ed Below Dark S				x (F3) Irface (F	6)		lain in Remarks)			
	Dark Surface (A1				Surface						
	Mucky Mineral (sions (F						
	I, MLRA 147, 14						(LRR N, MLRA 136)				
	Gleyed Matrix (S	S4)					36, 122)				
	Redox (S5)) (MLRA 148)				
Suppe	d Matrix (S6)			lient wa	itenai (F		RA 127, 147)				
*Indicators	of hydrophytic v	vegetatio	on and wetland I	nydrolog	gy must	be prese	nt, unless disturbed or	problematic			
	Layer (if observ	ed):									
Type: Dopth (inch					-		Hydric soil prese	nt? <u>Y</u>			
Depth (inch					-						
Remarks:											
Deplete	ed clay under a	alluvial	deposit.								

Project/Site: Kilgore-Polo Road 138kV Extension	City/County: Carroll	Sampling Date: 4/30/2014				
Applicant/Owner: AEP	State: OH	Sampling Point DPRG013				
Investigator(s): Rod Ginter, Chris Wulff	Section, Township	p, Range: S18 T12N R5W				
Landform (hillslope, terrace, etc.): floodplain	Local relief (concave, con	vex, none): <u>concave</u> Slope (%): <u>3%</u>				
Subregion (LRR or MLRA): LRR N Lat.		ong.: -81.03394 Datum: WGS84				
Soil Map Unit NameOrville silt loam, occassionally floor	led	NWI Classification: PEM1C				
Are climatic/hydrologic conditions of the site typical for the site typical for the site state of the	-					
Are vegetation, soil, or hydrology	significantly disturbed	? Are "normal Yes				
Are vegetation, soil, or hydrology	naturally problematic?					
		(If needed, explain any answers in remark				
SUMMARY OF FINDINGS						
Hydrophytic vegetation present? Yes						
Hydric soil present? Yes	Is the sampled area	within a wetland? Yes				
Wetland hydrology present? Yes						
Remarks:						
WRG008 - PEM. Reed canary grass area in t	he floodplain of Dining Fo	ork Abutting SRG001 in several				
locations. NWI PEM1C, part of a wetland com						
locations. New PENIC, part of a wetland con	iplex along Dining Fork (3					
HYDROLOGY						
Wetland Hydrology Indicators:	Se	econdary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check a	all that apply)	Surface Soil Cracks (B6)				
	uatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)				
	en Sulfide Odor (C1)	Drainage Patterns (B10)				
		Moss Trim Lines (B16)				
	d Rhizospheres on					
	oots (C3)	Dry-Season Water Table (C2)				
	e of Reduced Iron (C4) ron Reduction in Tilled	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4) Soils (C		Stunted or Stressed Plants (D1)				
		Geomorphic Position (D2)				
	Explain in Remarks)	Shallow Aquitard (D3)				
Imagery (B7)		Microtopographic Relief (D4)				
X Water-Stained Leaves (B9)		FAC-Neutral Test (D5)				
Aquatic Fauna (B13)						
Field Observations:		Wotland				
Surface water present? Yes <u>No</u>		Wetland				
Water table present? Yes X No	Depth (inches): 10	hydrology				
Saturation present? Yes X No	Depth (inches): 0	present?Y				
(includes capillary fringe)						
Describe recorded data (stream gauge, monitoring well	aerial photos, previous inspe	ections), if available:				
Demodua						
Remarks:						
Eleadalain of the Diaing Forth Coturated and	within the fleedulair of t	he Dining Fork				
Floodplain of the Dining Fork. Saturated soils	s, within the noodplain of t	пе ріпіпд ғогк.				

e scientific	names or	piants			Sampling Po	
					50/20 Thresholds	
Plot Size (30 ft) Absolute	Dominant	Indicator		20% 50%
11010120 (00 11.	/ % Cover	Species	Status	Tree Stratum	0 0
						0 0
						23 57
					Woody Vine Stratum	0 0
					Dominance Test Worksh	eet
			<u> </u>		Number of Dominant	
						. <u> </u>
			- Total Cover			<u> </u>
		0				
		A Is a shot a	Densinent	la dia atau		100.000/ (1/0)
Plot Size (15 ft.		Species	Status	FACW, of FAC:	<u>100.00%</u> (A/B)
					Prevalence Index Works	heet
					Total % Cover of:	
					· · · · · · · · · · · · · · · · · · ·	
					Frevalence Index = B/A =	2.09
		0	= Total Cover			
			-		Hydrophytic Vegetation	Indicators:
	- 0	Absolute	Dominant	Indicator		
Piol Size (5 11.) % Cover	Species	Status	X Dominance test is >50	1%
icea		90	Y	FACW		
S		10	N	FACW		
						narks or on a
ım		3	<u>N</u>	NI		lic vegetation*
					present, unless disturbed or pro	blematic
					Definitions of Vegetation	Strata:
					breast height (DBH), regardless	of height.
						ess than 3 in. DBH and
		113	= Total Cover			ody) plants regardless
		<u>.</u>	Deni	lus all a - f		
Plot Size (30 ft.)			Woody vince All woody dates	greater than 2.00 ft :-
		% Cover	Species	อเลเนร		greater trian 3.28 π In
			- Total Cavar			
		0	= Total Cover		present? Y	-
					1	
o numbers h	ere or on a	separate sheef				
o numbers h	ere or on a	separate sheet				
o numbers h	ere or on a	separate sheetj				
		separate sheet) RG007 along sl	room observed			
	Plot Size (Plot Size (Plot Size (Plot Size (S S S S S S Plot Size (Plot S	Plot Size (30 ft.	Plot Size (30 ft. Absolute % Cover	Plot Size (30 ft. Absolute % Cover Dominant Species	Plot Size (30 ft.) Absolute % Cover Dominant Species Indicator Status	Plot Size (30 ft.) Absolute % Cover Dominant Species Indicator Status Image: Status Image: Status Tree Stratum Sapling/Strub Stratum Herb Stratum Image: Status Image: Status Image: Status Image: S

SOIL							Sa	mpling Point: DPRG013	
Profile Description: (Describe to the depth needed to docu Depth Matrix Redox Feat						ne indica	tor or confirm the abser	ce of indicators.)	
(Inches)				%	Type*	Loc**	Texture	Remarks	
0-6	10YR 5/2	85				М	silty clay		
			7.5YR 4/6	10	С	М			
*Type: C=0	Concentration, D)=Deple	tion, RM=Reduc	ed Matr	ix. CS=	Covered	or Coated Sand Grains		
	PL=Pore Lining			04 11.44	,			-	
Hydric So	il Indicators:						Indicators for	Problematic Hydric Soils:	
			Dark Su					-	
Histiso					w Surfa	ce (S8)		(A10) (MLRA 147)	
	Epipedon (A2) Histic (A3)		(MLRA Thin Da		+8) ace (S9)	,		rie Redox (A16) (MLRA 147, 148) Floodplain Soils (F19)	
	jen Sulfide (A4)		(MLRA			,	(MLRA 136		
	ed Layers (A5)		Loamy	Gleyed	Matrix (F2)	Very Shallo	w Dark Surface (TF12)	
	luck (A10) (LRR		X Deplete				Other (Exp	lain in Remarks)	
	ed Below Dark S		·			,			
	Dark Surface (A1 Mucky Mineral (Redox		Surface				
-	I, MLRA 147, 14						(LRR N, MLRA 136)		
	Gleyed Matrix (S4)					36, 122)		
	Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148)								
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147)									
*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic									
	, , ,	U		, ,				•	
Destriction	<i>(</i> ; f . b								
Type:	Layer (if observ	ea):					Hydric soil prese	nt? V	
Depth (incl	nes):				-			<u> </u>	
					-				
Remarks:									
Deplete									
Deplete	ed clay, too we	et to fa	rm.						

Project/Site: Kilgore-Polo Road 138kV Ext	ension City/County:	Carroll	Sampling Date: 4/	30/2014			
Applicant/Owner: AEP	State:		Sampling Point DI	Point DPRG014			
Investigator(s): Rod Ginter, Chris Wulff		, Township, Range					
Landform (hillslope, terrace, etc.): terrace		ncave, convex, non		Slope (%): <u>8%</u>			
Subregion (LRR or MLRA): LRR N	Lat.: 40.45745	Long.: -81		Datum: WGS84			
Soil Map Unit Name Westmoreland-Coshoctor	n silt loam, 8 to 15 % slopes	NWI C	lassification: None				
Are climatic/hydrologic conditions of the site t				lain in remarks)			
Are vegetation, soil, or hy	/drologysignificantly /drologynaturally pr	disturbed? Are	e "normal	Yes			
Are vegetation, soil, or hy	/drologynaturally pr	oblematic? circ	cumstances" prese				
		(11)	needed, explain an	y answers in remarks			
SUMMARY OF FINDINGS							
Hydrophytic vegetation present? <u>No</u>							
Hydric soil present? No	Is the sam	pled area within a	wetland? No	_			
Wetland hydrology present? Yes							
Remarks:							
Upland fallow ag field west of WRG0	Raining steadily durir	ng field work.					
		-					
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary	Indicators (minimu	Im of two required)			
Primary Indicators (minimum of one is require	d; check all that apply)	-	e Soil Cracks (B6)	. ,			
Surface Water (A1)		Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2)	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)		Drainage Patterns (B10)				
X Saturation (A3)							
	Oxidized Rhizospheres on		loss Trim Lines (B16) Iry-Season Water Table (C2)				
Water Marks (B1) Sediment Deposits (B2)	Living Roots (C3) Presence of Reduced Iron (C		h Burrows (C8)	<i>, , , , , , , , , ,</i>			
Drift Deposits (B3)	Recent Iron Reduction in Till		tion Visible on Aerial	Imageny (CQ)			
Algal Mat or Crust (B4)	Soils (C6)		d or Stressed Plants				
Iron Deposits (B5)	Thin Muck Surface (C7)		orphic Position (D2)				
	Other (Explain in Remarks)						
Inundation Visible on Aerial			v Aquitard (D3)	4)			
Imagery (B7)			pographic Relief (D	4)			
Water-Stained Leaves (B9)		FAC-N	eutral Test (D5)				
Aquatic Fauna (B13)		I					
Field Observations:	No V Death (inclus)		Wetland				
Surface water present? Yes	No X Depth (inches):						
Water table present? Yes Saturation present? Yes X	No X Depth (inches): No Depth (inches):	0	hydrology	v			
Saturation present? Yes X (includes capillary fringe)	No Depth (inches):	0	present?	<u>Y</u>			
(includes capillary infige)							
Describe recorded data (stream gauge, monit	oring well, aerial photos, prev	ious inspections), i	f available:				
		- //					
Remarks:							
Raining steadily throughout the day,	and soil saturated but no	other signs of h	vdrology				
rearing cloading throughout the day,			,				

	ames of pla				Sampling Point: DPRG014 50/20 Thresholds
		Absolute	Dominant	Indicator	20% 50%
Tree Stratum Plot Size (30 ft.)	% Cover	Species	Status	Tree Stratum 2 5
Prunus serotina		5	Y	FACU	Sapling/Shrub Stratum 3 8
Fraxinus pennsylvanica		5	Y	FACW	Herb Stratum 7 19
					Woody Vine Stratum 0 0
		• • <u> </u>			,
					Dominance Test Worksheet
					Number of Dominant
					Species that are OBL,
					FACW, or FAC: 1 (A
					Total Number of Dominant
					Species Across all Strata: 6 (E
		10	 Total Cover 		Percent of Dominant
					Species that are OBL,
apling/Shrub	45.4	Absolute	Dominant	Indicator	FACW, or FAC: 16.67% (A
Stratum Plot Size (15 ft.)	% Cover	Species	Status	
Rosa multiflora		10	Ŷ	FACU	Prevalence Index Worksheet
		5	Y		
Prunus serotina		5	<u> </u>	FACU	Total % Cover of: OBL species 0 x 1 = 0
					OBL species $0 \times 1 = 0$ FACW species $5 \times 2 = 10$
					FACW species $5 \times 2 = 10$ FAC species $5 \times 3 = 15$
					FAC species $5 \times 3 = 15$ FACU species $47 \times 4 = 188$
					UPL species $0 \times 5 = 0$
					Column totals 57 (A) 213 (E
		·			Prevalence Index = $B/A = 3.74$
		• • <u> </u>			
		15	= Total Cover		
					Hydrophytic Vegetation Indicators:
	- 4	Absolute	Dominant	Indicator	Rapid test for hydrophytic vegetation
Herb Stratum Plot Size (5 ft.)	% Cover	Species	Status	Dominance test is >50%
Trifolium repens		15	Y	FACU	Prevalence index is ≤3.0*
Dipsacus fullonum		7	Y	FACU	Morphological adaptations* (provide
Taraxacum officinale		5	N	FACU	supporting data in Remarks or on a
Lamium purpureum		5	N	NI	separate sheet)
Eutrochium purpureum		5	N	FAC	Problematic hydrophytic vegetation*
					(explain)
					*Indicators of hydric soil and wetland hydrology mu
					present, unless disturbed or problematic
					Definitions of Vegetation Strata:
					Tree - Woody plants 3 in. (7.6 cm) or more in diam
					breast height (DBH), regardless of height.
					Sapling/shrub - Woody plants less than 3 in. DBH
					greater than 3.28 ft (1 m) tall.
					g. E. to than one or () my tan.
		· · · · · · · · · · · · · · · · · · ·			
		37	= Total Cover		Herb - All herbaceous (non-woody) plants, regard
					size, and woody plants less than 3.28 ft tall.
PIULOIZEI	30 ft.)	Absolute	Dominant	Indicator	size, and woody plants less than 3.28 ft tall.
Noody Vine Plot Size (Stratum	30 ft.)			Indicator Status	size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f
Stratum		Absolute	Dominant		size, and woody plants less than 3.28 ft tall.
PIULSIZE		Absolute	Dominant		size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f
Stratum Flot Size (Absolute % Cover	Dominant		size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f height.
Stratum		Absolute % Cover	Dominant		size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f height. Hydrophytic
Stratum Flot Size (Absolute % Cover	Dominant		size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f height.
Stratum Flot Size (Absolute % Cover	Dominant		size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f height. Hydrophytic
Stratum Flot Size (Absolute % Cover	Dominant Species		size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f height. Hydrophytic vegetation
Stratum		Absolute % Cover	Dominant Species		size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f height. Hydrophytic vegetation
Stratum Fiot Size (Absolute % Cover	Dominant Species		size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f height. Hydrophytic vegetation
Stratum Fiot Size (Absolute % Cover	Dominant Species		size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f height. Hydrophytic vegetation
Stratum Fiot Size (e or on a sep	Absolute % Cover	Dominant Species	Status	size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 f height. Hydrophytic vegetation

SOIL							Sa	mpling Point: DPRG014
Profile Des	cription: (Descri	ibe to th	ne depth needed	to docu	ument th	e indica	or or confirm the abser	nce of indicators.)
Depth	Matrix			lox Feat			Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	TEXIULE	Remarks	
0-4	10YR 4/3	100					silt loam	
4-16	10YR 6/6	100					silty clay loam	
				ed Mati	rix, CS=0	Covered	or Coated Sand Grains	3
	PL=Pore Lining	, M=Ma	itrix					
Hydric So	I Indicators:						Indicators for	Problematic Hydric Soils:
			Dark Su			(0 0)		/ · · · · / · · · · · · · · · · · · · ·
Histiso			•		w Surfa	ce (S8)		(A10) (MLRA 147)
	Epipedon (A2)				+8) ace (S9)			rie Redox (A16) (MLRA 147, 148) Floodplain Soils (F19)
	Histic (A3) Jen Sulfide (A4)		(MLRA				(MLRA 136	
	ed Layers (A5)				Hatrix (E2)		ow Dark Surface (TF12)
	luck (A10) (LRR	N)	Deplete			12)		lain in Remarks)
	ed Below Dark S				urface (F	6)		
	Dark Surface (A1				Surface			
	Mucky Mineral (sions (F8			
(LRR N	I, MLRA 147, 14	8)	Iron-Ma	nganes	se Masse	es (F12)	(LRR N, MLRA 136)	
	Gleyed Matrix (S	64)					36, 122)	
	Redox (S5)) (MLRA 148)	
Strippe	d Matrix (S6)		Red Pa	rent Ma	aterial (F	21) (MLI	RA 127, 147)	
41 I ¹ /								
^Indicators	of hydrophytic v	egetatio	on and wetland h	nydrolog	gy must	be prese	nt, unless disturbed or	problematic
	Layer (if observe	ed):						
	lone				_		Hydric soil prese	nt? <u>N</u>
Depth (incl	nes):				-			
Remarks:								
Remarks.								

Project/Site: Kilgore-Polo Road 138k Applicant/Owner: AEP	V Extension	City/County: State:	Carroll	Sampling Date:4	
Investigator(s): Rod Ginter, Chris Wulff				ange: S18 T12N R5W	FIGUIJ
Landform (hillslope, terrace, etc.): hillsl	000			, none): None	Slope (%): 6%
Subregion (LRR or MLRA): LRR N	Lat.:	40.45785		: -81.03579	
Soil Map Unit Name Westmoreland-Cosh				WI Classification: None	
Are climatic/hydrologic conditions of the					
Are vegetation, soil,	or hydrology	significant	y disturbed?	Are "normal	Yes
Are vegetation, soil,	or hydrology	naturally p	roblematic?	circumstances" prese	ent?
				(If needed, explain a	ny answers in remarks
SUMMARY OF FINDINGS					
Hydrophytic vegetation present? No					
Hydric soil present? No		is the sam	ipled area with	nin a wetland? No	_
Wetland hydrology present? Ye	S				
Remarks:					
Forest slope west of WRG009.	Raining steadi	ly during field v	vork.		
HYDROLOGY					
Wetland Hydrology Indicators:			Secor	ndary Indicators (minim	um of two required)
Primary Indicators (minimum of one is re	equired; check al	l that apply)	Su	urface Soil Cracks (B6)	
Surface Water (A1)	True Aqu	atic Plants (B14)	Sp	parsely Vegetated Conca	ave Surface (B8)
High Water Table (A2)		Sulfide Odor (C1)		ainage Patterns (B10)	
X Saturation (A3)		Rhizospheres on		oss Trim Lines (B16)	
Water Marks (B1)	Living Ro	•		y-Season Water Table (C2)
Sediment Deposits (B2)		of Reduced Iron (ayfish Burrows (C8)	/
Drift Deposits (B3)		on Reduction in Ti		aturation Visible on Aeria	I Imagery (C9)
Algal Mat or Crust (B4)	Soils (C6)	St	unted or Stressed Plants	s (D1)
Iron Deposits (B5)	Thin Muc	k Surface (C7)	Ge	eomorphic Position (D2)	
Inundation Visible on Aerial	Other (Ex	plain in Remarks)	Sł	nallow Aquitard (D3)	
Imagery (B7)		, ,		crotopographic Relief (D	94)
Water-Stained Leaves (B9)				AC-Neutral Test (D5)	,
Aquatic Fauna (B13)				()	
Field Observations:					
Surface water present? Yes	No X	Depth (inches)	:	Wetland	
Water table present? Yes	No X	Depth (inches)	:	hydrology	
Saturation present? Yes X	No	Depth (inches)	: 0	present?	Υ
(includes capillary fringe)					
Describe recorded data (stream gauge, i	monitorina well.	aerial photos, pre	vious inspectio	ns), if available:	
	, j ,			-,,	
Remarks:					
Raining steadily throughout the c	hav and soils	aturated but p	o other signs	of hydrology	
				s. nyarology.	

VEGETATION - Use scientific names of plan	nts			Sampling Point: DPRG015
Tree Stratum Plot Size (30 ft.) 1 Prunus serotina 2 Cornus florida 3 Quercus palustris 4	Absolute % Cover 30 20 5	Dominant Species Y Y N	Indicator Status FACU FACU FACW	50/20 Thresholds20%50%Tree Stratum1128Sapling/Shrub Stratum615Herb Stratum615Woody Vine Stratum00
5 6 7 8 9 10		= Total Cover		Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 0 Total Number of Dominant Species Across all Strata: 6 Percent of Dominant
Sapling/Shrub Plot Size(15 ft.) Stratum	Absolute % Cover	Dominant Species	Indicator Status	Species that are OBL, FACW, or FAC: 0.00% (A/B)
Rosa multiflora 2 Prunus serotina 3	20 10	Y Y 	FACU FACU	Prevalence Index WorksheetTotal % Cover of:OBL species $5 \times 1 = 5$ FACW species $5 \times 2 = 10$ FAC species $0 \times 3 = 0$ FACU species $105 \times 4 = 420$ UPL species $0 \times 5 = 0$ Column totals 115 (A) 435 Prevalence Index = B/A = 3.78
10 Herb Stratum 1 Podophyllum peltatum 2 Bromus pubescens 3 Symplocarpus foetidus 4 5 6 7 8	30 Absolute % Cover 15 10 5	Total Cover Dominant Species Y Y N N	Indicator Status FACU FACU OBL	Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation Dominance test is >50% Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
9 10 11 12 13 14 15 Woody Vine Plot Size (30 ft.) 5 1 2	30 30 Absolute % Cover	Total Cover Dominant Species	Indicator Status	 Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter a breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.
3				Hydrophytic vegetation

SOIL							Sa	mpling Point: DPRG015		
Profile Des	cription: (Descri	ibe to th	ne depth needed	to docu	ument th	e indicat	or or confirm the abser	nce of indicators.)		
Depth	Matrix			ox Feat			Texture	Remarks		
(Inches)	Color (moist)	%	Color (moist)	%	Type*	TEXIULE	Remarks			
0-3	10YR 4/3	100					silty clay loam			
4-16	10YR 6/6	100					sandy clay loam			
				ed Mati	ix, CS=0	Covered	or Coated Sand Grains	3		
**Location:	PL=Pore Lining	, M=Ma	itrix							
Hydric Soi	I Indicators:						Indicators for	Problematic Hydric Soils:		
			Dark Su			(a -)				
Histisol			•		w Surfa	ce (S8)		(A10) (MLRA 147)		
	pipedon (A2)							ie Redox (A16) (MLRA 147, 148)		
	listic (A3)				ace (S9)	69) Piedmont Floodplain Soils (F19) (MLRA 136, 147)				
	en Sulfide (A4) ed Layers (A5)				+o) Matrix (I	50)				
	luck (A10) (LRR	NI)	Deplete			-2)		ow Dark Surface (TF12) lain in Remarks)		
	ed Below Dark S				rface (F	6)				
	ark Surface (A1				Surface					
	Mucky Mineral (sions (F8					
	I, MLRA 147, 14						(LRR N, MLRA 136)			
Sandy	Gleyed Matrix (S	S4)	Umbric	Surface	e (F13) (MLRA 1	36, 122)			
	Redox (S5)) (MLRA 148)			
Strippe	d Matrix (S6)		Red Pa	rent Ma	terial (F	21) (ML F	RA 127, 147)			
*Indicators	of hydrophytic v	egetatio	on and wetland h	nydrolog	gy must	be prese	nt, unless disturbed or	problematic		
	Layer (if observe	ed):								
					-		Hydric soil prese	nt? <u>N</u>		
Depth (inch	ies):				-					
Remarks:										

Project/Site: Kilgore-Polo Road 138kV Exte	nsion City/County: C	Carroll Samplir	ng Date: <u>4/30/2014</u>
Applicant/Owner: <u>AEP</u>	State: C		ng Point DPRG016
Investigator(s): Rod Ginter, Chris Wulff		Township, Range: S18 T1	
Landform (hillslope, terrace, etc.): floodplain		cave, convex, none): con	
Subregion (LRR or MLRA): LRR N	Lat.: 40.45787	Long.: -81.03564	Datum: WGS84
Soil Map Unit Name Orville silt loam, occassion	ally flooded	NWI Classificat	ion: None
Are climatic/hydrologic conditions of the site typ			
Are vegetation, soil, or hyd	Irologysignificantly		
Are vegetation, soil, or hyd	Irology naturally prol		ces" present?
		(If needed,	explain any answers in remarks
SUMMARY OF FINDINGS			
Hydrophytic vegetation present? Yes			
Hydric soil present? Yes	Is the samp	led area within a wetland	? Yes
Wetland hydrology present? Yes			
Remarks:			
WRG009 - PFO/SS/EM. Skunk cabba	ge, brook alder, steepleb	ush, black willow, pin c	ak, and cherry floodplain
mosaic wetland. Abutting SKD003, wh			
mosaic welland. Addling SKD003, with		e Dining Fork. Kaining	g steadily during survey.
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicato	ors (minimum of two required)
Primary Indicators (minimum of one is required	; check all that apply)	Surface Soil Cra	
Surface Water (A1)	True Aquatic Plants (B14)		ated Concave Surface (B8)
X High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patter	
X Saturation (A3)		Moss Trim Lines	
Water Marks (B1)	Oxidized Rhizospheres on Living Roots (C3)	Dry-Season Wat	
Sediment Deposits (B2)	Presence of Reduced Iron (C4		. ,
Drift Deposits (B3)	Recent Iron Reduction in Tilled		le on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Soils (C6)	Stunted or Stres	
Iron Deposits (B5)	Thin Muck Surface (C7)	X Geomorphic Pos	()
	Other (Explain in Remarks)	Shallow Aquitare	
Inundation Visible on Aerial Imagery (B7)		Microtopographi	
X Water-Stained Leaves (B9)		X FAC-Neutral Tes	. ,
Aquatic Fauna (B13)			st (D3)
Field Observations:			
	lo <u>X</u> Depth (inches):	Wetlan	
	lo Depth (inches):	5 hydrold	
	lo Depth (inches):	0 present	t? <u>Y</u>
(includes capillary fringe)			
Describe recorded data (stream gauge, monito	ring well parial photos, provid	us insportions) if availab	
Describe recorded data (stream gauge, monito	ning weil, denai priotos, previo		
Remarks:			
Floodplain of tributary to Dining Fork.	Saturated soils, seeps h	igh water table, etc	
		J	

VEGETATION - Use scientific names of plan	its			Sampling Point: DPRG016
				50/20 Thresholds
Tree Stratum Plot Size (30 ft.)	Absolute	Dominant	Indicator	20% 50%
	% Cover	Species	Status	Tree Stratum 12 30
1 Prunus serotina	30	Y	FACU	Sapling/Shrub Stratum 12 30
2 Salix nigra	15	Y	OBL	Herb Stratum 8 20
3 Quercus palustris	10	Ν	FACW	Woody Vine Stratum 0 0
4 Ulmus americana	5	N	FACW	
5				Dominance Test Worksheet
6				Number of Dominant
7				Species that are OBL,
8				FACW, or FAC: 5 (A)
9				Total Number of Dominant
10				Species Across all Strata: 6 (B)
	60	 Total Cover 		Percent of Dominant
				Species that are OBL,
Sapling/Shrub	Absolute	Dominant	Indicator	FACW, or FAC: 83.33% (A/B)
Stratum Plot Size (15 ft.)	% Cover	Species	Status	
		•		
1 Alnus serrulata	30	Y	OBL	Prevalence Index Worksheet
2 Spiraea tomentosa	15	Y	FACW	Total % Cover of:
3 Cornus racemosa	5	N	FAC	OBL species <u>65</u> x 1 = <u>65</u>
4 Rubus pensilvanicus	5	N	FAC	FACW species 50 x 2 = 100
5 Rosa multiflora	5	N	FACU	FAC species 10 x 3 = 30
6				FACU species 35 x 4 = 140
7				UPL species $0 \times 5 = 0$
8				Column totals 160 (A) 335 (B)
9				Prevalence Index = B/A = 2.09
10				
	60	 Total Cover 		
				Hydrophytic Vegetation Indicators:
Harb Stratum Diat Size (Eft)	Absolute	Dominant	Indicator	Rapid test for hydrophytic vegetation
Herb Stratum Plot Size (5 ft.)	% Cover	Species	Status	X Dominance test is >50%
1 Symplocarpus foetidus	20	Ý	OBL	X Prevalence index is ≤3.0*
2 Lysimachia nummularia	15	Y	FACW	Morphological adaptations* (provide
3 Onoclea sensibilis	5	N	FACW	supporting data in Remarks or on a
4				separate sheet)
5			NI	Problematic hydrophytic vegetation*
6				(explain)
7				*Indicators of hydric soil and wetland hydrology must be
8				present, unless disturbed or problematic
9				F
10				Definitions of Vegetation Strata:
11				Tree - Woody plants 3 in. (7.6 cm) or more in diameter at
12				breast height (DBH), regardless of height.
13				
14				Sapling/shrub - Woody plants less than 3 in. DBH and
15				greater than 3.28 ft (1 m) tall.
10	40	Total Cover		
				Herb - All herbaceous (non-woody) plants, regardless of
Woody Vine Dist Size (20.44)	Absolute	Dominant	Indicator	size, and woody plants less than 3.28 ft tall.
Stratum Plot Size (30 ft.)	% Cover	Species	Status	Woody vines - All woody vines greater than 3.28 ft in
1	70 COver	Species	Status	height.
2				neight.
3				
4				Hydrophytic
5				vegetation
	0	= Total Cover		present? Y
Remarks: (Include photo numbers here or on a sepa	rate sheet			
Floodplain along SKD003				

SOIL							Sa	mpling Point: DPRG016		
Profile Des	cription: (Descri	be to th	ne depth needed	l to doci	ument th	ie indica	tor or confirm the abser	nce of indicators.)		
Depth							Texture	Remarks		
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Kenaks		
0-16	10YR 5/1 85 7.5YR 4/6 15 C M					М	silty clay			
				ed Mat	rix, CS=0	Covered	or Coated Sand Grains	5		
	PL=Pore Lining	, M=Ma	atrix							
Hydric Soi	I Indicators:		Dark O		07)		Indicators for	Problematic Hydric Soils:		
Histiso	(1)		Dark Si		57) w Surfa	(82) 00	2 om Muck	(A10) (MLRA 147)		
	Epipedon (A2)			147, 14		00)		rie Redox (A16) (MLRA 147, 148)		
	listic (A3)				ace (S9))		Floodplain Soils (F19)		
Hydrog	en Sulfide (A4)		(MLRA	147, 14						
	ed Layers (A5)				Matrix (F2)		ow Dark Surface (TF12)		
	luck (A10) (LRR		X Deplete				Other (Exp	lain in Remarks)		
	ed Below Dark S				urface (F					
)ark Surface (A1 Mucky Mineral (Surface sions (F8					
	I, MLRA 147, 14						(LRR N, MLRA 136)			
	Gleyed Matrix (S						36, 122)			
	Redox (S5)		Piedmo	ont Floo	dplain S	oils (F19) (MLRA 148)			
Strippe	d Matrix (S6)		Red Pa	rent Ma	aterial (F	21) (ML I	RA 127, 147)			
*I	di la di			1			and the Paral and a	and the second s		
[^] Indicators	of hydrophytic v	egetatio	on and wetland i	nyarolog	gy must	be prese	ent, unless disturbed or	problematic		
Restrictive	Layer (if observe	ed):								
Type:	\ \				_		Hydric soil prese	nt? <u>Y</u>		
Depth (inch	ies):				-					
Remarks:										
rtomanto.										
Doplete	d clay, too we	t to fa	rm							
Depiete	u clay, loo we	1 10 18								

Project/Site: Kilgore-Polo Road 138kV External Applicant/Owner: AEP	ension City/County: State:	Carroll OH	_Sampling Date: <u>5/1</u> Sampling Point DF		
Investigator(s): Rod Ginter, Chris Wulff		n, Township, Range			
Landform (hillslope, terrace, etc.): floodplain		ncave, convex, non		Slope (%): 10%	
Subregion (LRR or MLRA): LRR N	Lat.: <u>40.45678</u>	Long.: -81		Datum: WGS84	
Soil Map Unit Name Westmoreland-Coshoctor	n silt loams, 15 to 25 % slope	es NWI C	lassification: None		
Are climatic/hydrologic conditions of the site ty					
Are vegetation, soil, or hy	vdrologysignificantl vdrologynaturally p	y disturbed? Are	e "normal	Yes	
Are vegetation, soil, or hy	drologynaturally p		cumstances" preser		
		(11	needed, explain any	answers in remarks	
SUMMARY OF FINDINGS					
Hydrophytic vegetation present? Yes					
Hydric soil present? Yes	is the sam	pled area within a	wetland? Yes	-	
Wetland hydrology present? Yes					
Remarks:					
Remarks.					
WRG013 - PEM skunk cabbage and	carex fringe along forest	stream floodplai	 Abutting intern 	nittent	
SRG009, which drains southeast to the	ne Dining Fork. Raining	steadily during s	urvey.		
,	5 5	, ,	,		
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary	/ Indicators (minimu	m of two required)	
Primary Indicators (minimum of one is required	d, aboat all that apply)	-		in or two required)	
			e Soil Cracks (B6)		
Surface Water (A1)	True Aquatic Plants (B14)		parsely Vegetated Concave Surface (B8)		
X High Water Table (A2)	Hydrogen Sulfide Odor (C1)	X Draina	Drainage Patterns (B10)		
X Saturation (A3)	Oxidized Rhizospheres on	Moss T	Frim Lines (B16)		
Water Marks (B1)	Living Roots (C3)	Drv-Se	ason Water Table (C	2)	
Sediment Deposits (B2)	Presence of Reduced Iron (h Burrows (C8)	,	
Drift Deposits (B3)	Recent Iron Reduction in Til		tion Visible on Aerial	Imagery (C9)	
Algal Mat or Crust (B4)	Soils (C6)		d or Stressed Plants		
Iron Deposits (B5)	Thin Muck Surface (C7)		orphic Position (D2)	· · ·	
	Other (Explain in Remarks)				
Inundation Visible on Aerial			w Aquitard (D3)	、 、	
Imagery (B7)			pographic Relief (D4	·)	
X Water-Stained Leaves (B9)		FAC-N	eutral Test (D5)		
Aquatic Fauna (B13)					
Field Observations:					
Surface water present? Yes	No X Depth (inches)	:	Wetland		
	No X Depth (inches)		hydrology		
	No Depth (inches)			Y	
(includes capillary fringe)			•		
Describe recorded data (stream gauge, monite	oring well, aerial photos, pre	vious inspections), i	if available:		
Remarks:					
Floodplain of tributary to Dining Fork.					
i isouplair of inoutary to Dining Polit.					

GETATION - Use scientific names of	piants				int: DPRG017
				50/20 Thresholds	
Free Stratum Plot Size (30 ft.) Absolute	Dominant	Indicator		20% 50%
	' % Cover	Species	Status	Tree Stratum	0 0
				Sapling/Shrub Stratum	1 3
				Herb Stratum	14 35
				Woody Vine Stratum	0 0
				Dominance Test Worksho	eet
				Number of Dominant	
				Species that are OBL,	
				FACW, or FAC:	2 (A)
				Total Number of Dominant	
				Species Across all Strata:	<u> </u>
	0	 Total Cover 		Percent of Dominant	
				Species that are OBL,	
Plot Size (15 ft.) Absolute	Dominant	Indicator	FACW, or FAC:	<u>66.67%</u> (A/B)
Stratum) % Cover	Species	Status		
Prunus serotina	5	Y	FACU	Prevalence Index Worksh	neet
				Total % Cover of:	
				OBL species 30 x 1	= 30
				FACW species 10 x 2	= 20
				FAC species 30 x 3	= 90
				FACU species 5 x 4	
				UPL species 0 x 5	
				Column totals 75 (A)	
				Prevalence Index = B/A =	2.13
	5	= Total Cover			
	5			Hydrophytic Vegetation I	ndicators:
	、 Absolute	Dominant	Indicator	Rapid test for hydrophy	
erb Stratum Plot Size (5 ft.) % Cover	Species	Status	X Dominance test is >50	
Symplocarpus foetidus	30	Y	OBL	X Prevalence index is ≤3	
Carex blanda	20	Y	FAC	Morphological adaptati	
Muhlenbergia schreberi	10	N	FAC	supporting data in Rem	narks or on a
Symphyotrichum lateriflorum	10	N	FACW	separate sheet)	
				Problematic hydrophyt	ic vegetation*
				(explain)	
				*Indicators of hydric soil and wet	
				present, unless disturbed or prot	olematic
				Definitions of Vegetation	Strata:
				Tree - Woody plants 3 in. (7.6 cr	
		·		breast height (DBH), regardless	
				Sapling/shrub - Woody plants le greater than 3.28 ft (1 m) tall.	ess than 3 in. DBH and
		- Total Cover		g. outor than one or (r m) tall.	
	70	= Total Cover		Herb - All herbaceous (non-wood	
Voody Vine Plot Sizo (20 ft	、 Absolute	Dominant	Indicator	size, and woody plants less than	3.28 ft tall.
Stratum Plot Size (30 ft.) Absolute % Cover	Species	Status	Woody vines - All woody vines of	preater than 3.28 ft in
				height.	,
				L	
				Hydrophytic	
				vegetation	
	0	= Total Cover		present? Y	_
arks: (Include photo numbers here or on a	separate sheet				
arks: (Include photo numbers here or on a	separate sheet				
arks: (Include photo numbers here or on a	separate sheet)				
narks: (Include photo numbers here or on a larrow floodplain along SRG009, veg	• •	leaf litter.			

SOIL							Sa	mpling Point: DPRG017
	cription: (Descr	ibe to th				ie indica	tor or confirm the abser	nce of indicators.)
Depth (Inches)					tures Type*	Loc**	Texture	Remarks
0-3	10YR 4/1	90	7.5YR 4/4 10 C M				silty clay	
3-16	6 10YR 5/1 90 7.5YR 4/6 10 C M					М	sandy clay	
*Type: C=0	Concentration. D	=Deple	tion. RM=Reduc	ed Matr	ix. CS=	Covered	or Coated Sand Grains	3
	PL=Pore Lining			ou mai	,			
Hydric So	I Indicators:				07)		Indicators for	Problematic Hydric Soils:
Black H Hydrog Stratifie 2 cm M Deplete Thick I Sandy (LRR N Sandy Sandy Strippe *Indicators Restrictive Type:	Epipedon (A2) distic (A3) en Sulfide (A4) ed Layers (A5) luck (A10) (LRR ed Below Dark S Dark Surface (A1 Mucky Mineral (I, MLRA 147, 1 4 Gleyed Matrix (S Redox (S5) d Matrix (S6) of hydrophytic v Layer (if observ	Surface (2) S1) 18) S4) vegetatio	Deplete Redox I Iron-Ma Umbric Piedmo Red Pa	ue Belo 147, 14 irk Surfa 147, 14 Gleyed d Matri: Dark Su d Dark Depress Surface nt Flood rent Ma	w Surfa 18) ace (S9) 18) Matrix (x (F3) urface (F Surface sions (Fa se Masse e (F13) (dplain S uterial (F	F2) (F7) 8) es (F12) MLRA 1 oils (F19 21) (ML	Coast Prain Piedmont F (MLRA 136 Very Shallo	ow Dark Surface (TF12) lain in Remarks) problematic
Depth (inch Remarks:	nes):				-			
	ed clay in sma	ll flood	plain.					

Project/Site: Kilgore-Polo Road 138kV	Extension City	y/County:	Carroll	Sampling Date: 5	/1/2014	
Applicant/Owner: AEP		State:	ОН	Sampling Point D	PRG018	
Investigator(s): Rod Ginter, Chris Wulff		Section	, Township, Ra	ange: S17 T12N R5W		
Landform (hillslope, terrace, etc.): hillslop			ncave, convex,		Slope (%): 18%	
Subregion (LRR or MLRA): LRR N		.45663		-81.03915	Datum: WGS84	
Soil Map Unit Name Westmoreland-Cosho	cton silt loam, 15 to 2	25 % slopes	NV	VI Classification: None		
Are climatic/hydrologic conditions of the sit		-		· · · · ·	-	
Are vegetation, soil, o	r hydrology	significantly	/ disturbed?	Are "normal	Yes	
Are vegetation, soil, o	r hydrology	_naturally pr	oblematic?	circumstances" prese		
				(If needed, explain a	ny answers in remark	
SUMMARY OF FINDINGS						
Hydrophytic vegetation present? No	_					
Hydric soil present? No		Is the sam	pled area with	in a wetland? No		
Wetland hydrology present? No	_					
Remarks:						
Forested slope west of WRG013 a	nd SRG009. Rai	ining stead	lilv durina fiel	d work.		
HYDROLOGY Wetland Hydrology Indicators:			Secon	dary Indicators (minim	um of two required)	
Primary Indicators (minimum of one is requ	uired: check all that a	annly)		-	uni or two required)	
				rface Soil Cracks (B6)	0(
Surface Water (A1)	True Aquatic Pla			Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	Hydrogen Sulfic	de Odor (C1)		ainage Patterns (B10)		
Saturation (A3)	Oxidized Rhizos	spheres on	Mc	oss Trim Lines (B16)		
Water Marks (B1)	Living Roots (C		`	/-Season Water Table (C2)	
Sediment Deposits (B2)	Presence of Re			ayfish Burrows (C8)		
Drift Deposits (B3)	Recent Iron Rec	duction in Till		turation Visible on Aeria		
Algal Mat or Crust (B4)	Soils (C6)		Stu	unted or Stressed Plants	s (D1)	
Iron Deposits (B5)	Thin Muck Surfa		Ge	omorphic Position (D2)		
Inundation Visible on Aerial	Other (Explain i	n Remarks)	Sh	allow Aquitard (D3)		
Imagery (B7)			Mie	crotopographic Relief (D	94)	
Water-Stained Leaves (B9)			FA	C-Neutral Test (D5)		
Aquatic Fauna (B13)						
Field Observations:						
Surface water present? Yes		pth (inches)		Wetland		
Water table present? Yes		pth (inches)		hydrology		
Saturation present? Yes	No X De	pth (inches)		present?	N	
(includes capillary fringe)						
Describe recorded data (stream gauge, mo	onitoring well, aerial	pnotos, prev	vious inspection	is), if available:		
Remarks:						

		ants			50/20 Thresholds
ree Stratum Plot Size (30 ft.)	Absolute	Dominant	Indicator	20% 50%
Tee Stratum Flot Size (30 n.)	% Cover	Species	Status	Tree Stratum 15 38
Prunus serotina		60	Y	FACU	Sapling/Shrub Stratum 6 15
Ulmus rubra		15	Y	FAC	Herb Stratum 7 18
					Woody Vine Stratum 0 0
					Dominance Test Worksheet
					Number of Dominant
					Species that are OBL,
					FACW, or FAC: <u>1</u> (A)
					Total Number of Dominant
		75	Total Cover		Species Across all Strata: 7 (B)
		75	= Total Cover		Percent of Dominant
apling/Shrub		Absolute	Dominant	Indicator	Species that are OBL, FACW, or FAC: 14.29% (A
Stratum Plot Size (15 ft.)	% Cover	Species	Status	14.29% (A)
			•		Drevelence Index Montrehest
Rosa multiflora		<u> </u>	<u>Y</u> Y	FACU FACU	Prevalence Index Worksheet
Elaeagnus angustifolia		10	ſ	FACU	Total % Cover of: OBL species 0 x 1 = 0
					FACW species $0 \times 1 = 0$
					FAC species $15 \times 3 = 45$
		· · · · · · · · · · · · · · · · · · ·		·	FACU species $125 \times 4 = 500$
					UPL species $0 \times 5 = 0$
					Column totals 140 (A) 545 (B
					Prevalence Index = B/A = 3.89
		30	= Total Cover		
					Hydrophytic Vegetation Indicators:
lerb Stratum Plot Size (5 ft.)	Absolute	Dominant	Indicator	Rapid test for hydrophytic vegetation
Υ.	он.)	% Cover	Species	Status	Dominance test is >50%
Podophyllum peltatum			<u>Y</u>	FACU	Prevalence index is ≤3.0* Morphological adaptations* (provide
Polystichum acrostichoides Anemone guinguefolia		10	Y Y	FACU FACU	supporting data in Remarks or on a
Anemone quinqueiona		10		FACU	separate sheet)
					Problematic hydrophytic vegetation*
					(explain)
					*Indicators of hydric soil and wetland hydrology mus
					present, unless disturbed or problematic
					P
					Definitions of Vegetation Strata:
					Definitions of Vegetation Strata:
					Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height.
					Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height.
		 	Total Cover		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall.
					Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall.
PIOL SIZE (30 ft.)	Absolute	Dominant		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH is greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall.
Voody Vine Plot Size (Stratum	30 ft.)			Indicator Status	Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft
Stratum	,	Absolute	Dominant		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall.
Voody Vine Plot Size (Stratum	,	Absolute	Dominant		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft
Stratum Flot Size (,	Absolute % Cover	Dominant		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height.
Stratum Piot Size (Absolute % Cover	Dominant		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height. Hydrophytic
Stratum Flot Size (Absolute % Cover	Dominant		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless ize, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height.
Stratum Fiot Size (Absolute % Cover	Dominant Species		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height. Hydrophytic vegetation
Stratum Piot Size (Absolute % Cover	Dominant Species		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height. Hydrophytic vegetation
Stratum Fiot Size (Absolute % Cover	Dominant Species		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH is greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardles size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height. Hydrophytic vegetation
Stratum Fiot Size (re or on a sep	Absolute % Cover	Dominant Species		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH is greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardles size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height. Hydrophytic vegetation
Stratum Fiot Size (re or on a sep	Absolute % Cover	Dominant Species		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diame breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH a greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardle size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft height. Hydrophytic vegetation

SOIL							Sa	mpling Point: DPRG018		
Profile Des	cription: (Descr	ibe to th	ne depth needed	to doci	ument th	e indicat	or or confirm the abser	nce of indicators.)		
Depth	Matrix		Red	lox Feat	tures		Texture	Remarks		
(Inches)	Color (moist)	%	Color (moist)	Color (moist) % Type* Loc**						
0-2	10YR 4/3	100					silty clay loam			
2-16	10YR 5/4	100					sandy clay loam			
				ed Mat	rix, CS=0	Covered	or Coated Sand Grains	3		
**Location:	PL=Pore Lining	, M=Ma	trix							
Hydric So	I Indicators:						Indicators for	Problematic Hydric Soils:		
			Dark Si							
Histiso			•		w Surfac	ce (S8)		(A10) (MLRA 147)		
	Epipedon (A2)		(MLRA					ie Redox (A16) (MLRA 147, 148)		
	listic (A3)				ace (S9)			loodplain Soils (F19)		
	en Sulfide (A4)		(MLRA				(MLRA 136			
	ed Layers (A5)	•••			Matrix (F2)		w Dark Surface (TF12)		
	luck (A10) (LRR					(C)	Other (Expl	lain in Remarks)		
	ed Below Dark S				urface (F					
)ark Surface (A1 Mucky Mineral (Surface sions (F8					
-	I, MLRA 147, 14						(LRR N, MLRA 136)			
	Gleyed Matrix (S						36, 122)			
	Redox (S5)	.,) (MLRA 148)			
	d Matrix (S6)						RA 127, 147)			
							,,			
*Indicators	of hydrophytic v	regetatio	on and wetland h	nydrolog	gy must l	be prese	nt, unless disturbed or	problematic		
Restrictive	Layer (if observ	ed).								
	lone	00).					Hydric soil prese	nt? N		
Depth (inch					-			<u> </u>		
-1 - 1 -					-					
Remarks:										

Project/Site: Kilgore-Polo Road 138kV Extension Applicant/Owner: AEP Investigator(s): Rod Ginter, Chris Wulff Landform (hillslope, terrace, etc.): floodplain Subregion (LRR or MLRA): LRR N Soil Map Unit Name Westmoreland-Coshocton silt loam Are climatic/hydrologic conditions of the site typical for t Are vegetation , soil , or hydrology	Local relief (concave, conve : 40.45833 Long s, 15 to 25 % slopes this time of the year Yes X significantly disturbed?	g.: -81.04424 Datum: WGS84 NWI Classification: None
SUMMARY OF FINDINGS Hydrophytic vegetation present? Yes Hydric soil present? Yes Wetland hydrology present? Yes	Is the sampled area wi	ithin a wetland? Yes
Remarks: WRG010 - PEM skunk cabbage seep on hills perennial tributary of Dining Fork.	lope. Abutting intermittent S	SRG022, which drains west to a
X High Water Table (A2) Hydroge X Saturation (A3) Oxidized Water Marks (B1) Living R Sediment Deposits (B2) Presend Drift Deposits (B3) Recent Algal Mat or Crust (B4) Soils (C Iron Deposits (B5) Thin Mu	all that apply)	ondary Indicators (minimum of two required) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations: Surface water present? Yes No X Water table present? Yes X No X Saturation present? Yes X No X (includes capillary fringe) Describe recorded data (stream gauge, monitoring well Remarks: Water seeping from hillside at east end (upslot)	Depth (inches): 6 Depth (inches): 0 , aerial photos, previous inspect	Wetland hydrology present? Y ions), if available:

VEGETATION - Use scientific names of plan	ts			Sampling Point: DPRG019
Tree Stratum Plot Size(30 ft.) 1 <u>Ulmus americana</u> 23 4	Absolute % Cover 10	Dominant Species Y	Indicator Status FACW	50/20 Thresholds20%50%Tree Stratum2Sapling/Shrub Stratum3Herb Stratum923Woody Vine Stratum0
56 67 8 9 10 Sapling/Shrub		Total Cover	Indicator	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 4 Total Number of Dominant Species Across all Strata: 4 Percent of Dominant Species that are OBL, FACW, or FAC: 4 (B) Percent of Dominant Species that are OBL, FACW, or FAC: 100.00% (A/B)
Stratum Plot Size (15 ft.) 1 Sambucus nigra 2	% Cover 15 	Species Y	Status FAC	Prevalence Index WorksheetTotal % Cover of:OBL species $5 \times 1 = 5$ FACW species $10 \times 2 = 20$ FAC species $55 \times 3 = 165$ FACU species $0 \times 4 = 0$ UPL species $0 \times 5 = 0$ Column totals 70 (A)I90(B)Prevalence Index = B/A = 2.71
Herb Stratum Plot Size (5 ft.) Carex blanda Viola sororia Symplocarpus foetidus Sambucus nigra 	15 = Absolute % Cover 25 10 5 5	Total Cover Dominant Species Y Y N N N	Indicator Status FAC FAC OBL FAC	Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation X Dominance test is >50% X Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
10 11 12 13 14 15	 	Total Cover		Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of
Woody Vine Plot Size(30 ft.) Stratum 2 3	Absolute % Cover	Dominant Species	Indicator Status	size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.
4 5		Total Cover		Hydrophytic vegetation present? Y
Remarks: (Include photo numbers here or on a separ Narrow floodplain along SRG009, veg mixe		leaf litter.		

SOIL							Sa	mpling Point: DPRG019
Profile Des	cription: (Descri	be to th	ne depth needec	l to doci	ument th	ne indicat	or or confirm the abser	nce of indicators.)
Depth	Depth Matrix Redox Feature						Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Remarks			
0-4 10YR 4/1 85 7.5YR 4/6 15 C M silty clay								
*Type: C=C	Concentration, D	=Deple	tion, RM=Reduc	ed Mat	ix. CS=	Covered	or Coated Sand Grains	
	PL=Pore Lining			ou mai	,			-
	I Indicators:						Indicators for	Problematic Hydric Soils:
,			Dark S					
Histisol			•		w Surfa	ce (S8)		(A10) (MLRA 147)
	pipedon (A2)			147, 14	18) ace (S9)	\ \		rie Redox (A16) (MLRA 147, 148) Floodplain Soils (F19)
	listic (A3) en Sulfide (A4)			147, 14)	(MLRA 136	
	ed Layers (A5)				Matrix (F2)		ow Dark Surface (TF12)
	uck (A10) (LRR	N)	X Deplete			,		lain in Remarks)
	ed Below Dark S		·		urface (F	,		
	ark Surface (A1				Surface			
-	Mucky Mineral (\$ I, MLRA 147, 14				sions (Fa		(LRR N, MLRA 136)	
	Gleyed Matrix (S						36, 122)	
	Redox (S5)	.,) (MLRA 148)	
Strippe	d Matrix (S6)						RA 127, 147)	
*I. P				11.			and the Paral and the	and the second se
[*] Indicators	of hydrophytic v	egetatio	on and wetland I	nyarolog	gy must	be prese	nt, unless disturbed or	problematic
	Layer (if observe	ed):						
Type: ro Depth (inch	ock Jes): 4				-		Hydric soil prese	
Doptil (illoit					-			
Remarks:								
Deplete	d clay over ro	ck in s	seep area.					

Project/Site: Kilgore-Polo Road 138k/ Applicant/Owner: AEP Investigator(s): Rod Ginter, Chris Wulff Landform (hillslope, terrace, etc.): hillslo Subregion (LRR or MLRA): LRR N Soil Map Unit NameWestmoreland-Cosh	ppeLat.:	Local relief (co 40.45828	n, Township, R ncave, convex Long.	Sampling Date: <u>5</u> Sampling Point <u>D</u> ange: <u>S24 T12N R5W</u> , none): <u>None</u> : -81.04429 WI Classification: <u>None</u>	PRG020 Slope (%): <u>15%</u> Datum: WGS84		
Are climatic/hydrologic conditions of the s Are vegetation, soil, Are vegetation, soil, SUMMARY OF FINDINGS	or hydrology	nis time of the yea significantl naturally p	y disturbed?	Are "normal circumstances" prese	Yes		
Hydrophytic vegetation present? No Hydric soil present? No Wetland hydrology present? No	_	Is the sam	pled area with	nin a wetland? No	_		
Remarks: Forested slope south of WRG010).						
HYDROLOGY							
Wetland Hydrology Indicators:			Secor	ndary Indicators (minim	um of two required)		
Primary Indicators (minimum of one is rea	quired; check a	ll that apply)	S	urface Soil Cracks (B6)			
Surface Water (A1)	True Aqu	uatic Plants (B14)	S	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)		n Sulfide Odor (C1)		Drainage Patterns (B10)			
Saturation (A3)		Rhizospheres on		Moss Trim Lines (B16)			
Water Marks (B1)		oots (C3)		ry-Season Water Table (C2)		
Sediment Deposits (B2)		e of Reduced Iron (rayfish Burrows (C8)	02)		
Drift Deposits (B3)		ron Reduction in Til	· · · · · · · · · · · · · · · · · · ·	aturation Visible on Aeria	al Imagery (C9)		
Algal Mat or Crust (B4)	Soils (C6			unted or Stressed Plants			
Iron Deposits (B5)	Thin Mu	ck Surface (C7)	G	eomorphic Position (D2)	. ,		
Inundation Visible on Aerial		xplain in Remarks)		hallow Aquitard (D3)			
Imagery (B7)		,		icrotopographic Relief (E	04)		
Water-Stained Leaves (B9)				AC-Neutral Test (D5)	,		
Aquatic Fauna (B13)							
Field Observations:							
Surface water present? Yes	No X	Depth (inches)	:	Wetland			
Water table present? Yes	No X			hydrology			
Saturation present? Yes	No X	Depth (inches)	:	present?	N		
(includes capillary fringe)							
Describe recorded data (stream gauge, n	nonitoring well,	aerial photos, pre	vious inspectio	ns), if available:			
Remarks:							
Raining over past few days, soils	moist but no	t saturated.					

VEGETATION - Use scientific names of pla	nts			Sampling Poi	int: DPRG020
				50/20 Thresholds	
Tree Stratum Plot Size (30 ft.)	Absolute	Dominant	Indicator	Tas a Otratura	20% 50%
1 Prunuo acrotina	% Cover	Species	Status	Tree Stratum	14 35
1 Prunus serotina 2 Ostrya virginiana	<u>30</u> 20	<u> </u>	FACU FACU	Sapling/Shrub Stratum Herb Stratum	1 3 11 28
3 Ulmus rubra	10	N	FAC	Woody Vine Stratum	0 0
4 Acer saccharum	10	<u> </u>	FACU	woody vine official	0 0
5				Dominance Test Workshe	eet
6				Number of Dominant	
7				Species that are OBL,	
8				FACW, or FAC:	<u> </u>
9				Total Number of Dominant	
10	70	= Total Cover		Species Across all Strata:	<u> 5 (B)</u>
	70			Percent of Dominant	
Carling/Chruth	Abaaluta	Deminant	Indianton	Species that are OBL,	
Sapling/Shrub Plot Size (15 ft.) Stratum	Absolute % Cover	Dominant	Indicator	FACW, or FAC:	0.00% (A/B)
		Species	Status		
1 Rosa multiflora	5	Y	FACU	Prevalence Index Worksh	leet
2				Total % Cover of:	
3				OBL species 0 x 1	
4				FACW species 0 x 2 FAC species 10 x 3	
5 6		. <u> </u>		FAC species 10 x 3 FACU species 110 x 4	
7				UPL species 10 x 5	
8				Column totals 130 (A)	
9				Prevalence Index = B/A =	4.00
10					
	5	= Total Cover			
				Hydrophytic Vegetation I	
Herb Stratum Plot Size (5 ft.)	Absolute	Dominant	Indicator	Rapid test for hydrophy	U
A Daharitahan anna tiabaidan	% Cover	Species	Status	Dominance test is >50°	
Polystichum acrostichoides Podophyllum peltatum	<u>30</u> 15	<u>Y</u> Y	FACU FACU	Prevalence index is ≤3. Morphological adaptati	
3 Trillium grandiflorum	10	<u> </u>	UPL	supporting data in Rem	
4			012	separate sheet)	
5				Problematic hydrophyti	c vegetation*
6				(explain)	-
7				*Indicators of hydric soil and wetl	and hydrology must be
8				present, unless disturbed or prob	
9					-
10				Definitions of Vegetation	
11				Tree - Woody plants 3 in. (7.6 cn breast height (DBH), regardless of	
12 13		. <u> </u>		breast neight (DDH), regardless (or neight.
13 14				Sapling/shrub - Woody plants le	ss than 3 in. DBH and
15				greater than 3.28 ft (1 m) tall.	
· · ·	55	= Total Cover			hu) planta regardlaga of
				Herb - All herbaceous (non-wood size, and woody plants less than	
Woody Vine Plot Size (30 ft.)	Absolute	Dominant	Indicator		
Stratum	% Cover	Species	Status	Woody vines - All woody vines g	reater than 3.28 ft in
1				height.	
2 3		·		<u> </u>	
		·			
4		·		Hydrophytic	
5				vegetation	
	0	= Total Cover		present? N	-
Remarks: (Include photo numbers here or on a sepa	arato sheet'				
vernaixes, (include prioto numbers nere or on a sepa					
Northwest edge of forest, fallow ag field to	west.				

SOIL							Sa	mpling Point: DPRG020			
Profile Des	cription: (Descri	ibe to th	e depth needed	to doci	ument th	e indicat	or or confirm the abser	nce of indicators.)			
Depth	Matrix		Redox Features				Texture Rema				
(Inches)	Color (moist)	%	Color (moist)	Color (moist) % Type* Loc**							
0-4	10YR 4/3	100					sandy loam				
4-16	10YR 5/4	100					sandy clay loam				
				ed Mati	rix, CS=0	Covered	or Coated Sand Grains	3			
	PL=Pore Lining	, M=Ma	trix								
Hydric Soi	I Indicators:						Indicators for	Problematic Hydric Soils:			
			Dark Su			(00)	o 14 1				
Histiso	Epipedon (A2)		(MLRA		w Surfac	ce (So)		(A10) (MLRA 147) ie Redox (A16) (MLRA 147, 148)			
	listic (A3)				ace (S9)			loodplain Soils (F19)			
	en Sulfide (A4)		(MLRA				(MLRA 136				
	ed Layers (A5)				Matrix (I	F2)		w Dark Surface (TF12)			
	luck (A10) (LRR		Deplete	d Matri	x (F3)		Other (Expl	lain in Remarks)			
	ed Below Dark S				urface (F						
	Dark Surface (A1				Surface						
	Mucky Mineral (sions (F8		(LRR N, MLRA 136)				
	I, MLRA 147, 1 4 Gleyed Matrix (S						36, 122)				
	Redox (S5)	,,) (MLRA 148)				
	d Matrix (S6)						ŔĂ 127, 147)				
	. ,						· •				
*Indicators	of hydrophytic v	egetatio	on and wetland h	nydrolog	gy must l	be prese	nt, unless disturbed or	problematic			
D ootriotivo	Layer (if observe	od):									
	lone	eu).					Hydric soil prese	nt? N			
Depth (inch					-						
	/				-						
Remarks:											

Are vegetation , soil , or hydrology	
Hydrophytic vegetation present? Yes Hydric soil present? Yes Wetland hydrology present? Yes	Is the sampled area within a wetland? Yes
Remarks: WRG012 - PEM skunk cabbage and carex fr intermittent SRG015, which drains south to t	ringe from seep along forest stream floodplain. Abutting he Dining Fork.
X High Water Table (A2) Hydrog X Saturation (A3) Oxidize Water Marks (B1) Living I Sediment Deposits (B2) Presen Drift Deposits (B3) Recent Algal Mat or Crust (B4) Soils (0 Iron Deposits (B5) Thin M	Aquatic Plants (B14)Sparsely Vegetated Concave Surface (B8)gen Sulfide Odor (C1)Drainage Patterns (B10)ed Rhizospheres onMoss Trim Lines (B16)Roots (C3)Dry-Season Water Table (C2)nce of Reduced Iron (C4)Crayfish Burrows (C8)t Iron Reduction in TilledSaturation Visible on Aerial Imagery (C9)
Field Observations: Surface water present? Yes No Water table present? Yes X No Saturation present? Yes X No (includes capillary fringe) Describe recorded data (stream gauge, monitoring we	X Depth (inches): Wetland Depth (inches): 8 hydrology Depth (inches): 0 present? Y III, aerial photos, previous inspections), if available:
Remarks: Seep and small floodplain of tributary to Dini	ng Fork.

	se scientific i					Sampling Point: DPRG021 50/20 Thresholds
Tree Stratum	Plot Size (Dominant Species	Indicator Status	20%50%Tree Stratum000Sapling/Shrub Stratum0Herb Stratum1537Woody Vine Stratum00
				Total Cover	Indicator Status	Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 1 Total Number of Dominant Species Across all Strata: 1 Percent of Dominant Species that are OBL, FACW, or FAC: 100.00%
						Prevalence Index WorksheetTotal % Cover of:OBL species $50 \times 1 = 50$ FACW species $8 \times 2 = 16$ FAC species $15 \times 3 = 45$ FACU species $1 \times 4 = 4$ UPL species $0 \times 5 = 0$ Column totals 74 (A)Prevalence Index = B/A = 1.55
Herb Stratum Symplocarpus i Carex blanda Sambucus nigra Lysimachia nuri Impatiens cape Alliaria petiolata	a nmularia nsis	5 ft.	0 Absolute % Cover 50 10 5 3 1 1	Total Cover Dominant Species Y N N N N N N N	Indicator Status OBL FAC FAC FACW FACW FACU	Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation X Dominance test is >50% X Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must present, unless disturbed or problematic
Woody Vine Stratum	Plot Size (30 ft.	74 Absolute % Cover	Total Cover Dominant Species	Indicator Status	 Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH ar greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.
				- Total Cover		Hydrophytic vegetation present? Y

SOIL							Sa	mpling Point: DPRG021	
Profile Des	cription: (Descri	ibe to th	ne depth needed	to docu	ument th	e indica	or or confirm the abse	nce of indicators.)	
Depth	epth Matrix Redox Features						Texture	Remarks	
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks	
0-3	10YR 4/1	100					silty loam		
3-10	10YR 5/1	85	7.5YR 4/6	15	С	М	sandy clay		
10-16	10-16 2.5Y 5/2 80 10YR 4/6 20 C M sandy clay								
				ed Mati	ix, CS=0	Covered	or Coated Sand Grains	S	
**Location:	PL=Pore Lining	, M=Ma	trix						
Hydric Soi	I Indicators:						Indicators for	Problematic Hydric Soils:	
			Dark Su			(- -)			
Histisol			•		w Surfa	ce (S8)		(A10) (MLRA 147)	
	pipedon (A2) listic (A3)		(MLRA Thin Da		+8) ace (S9)			rie Redox (A16) (MLRA 147, 148) Floodplain Soils (F19)	
	en Sulfide (A4)		(MLRA				(MLRA 13)		
	ed Layers (A5)				Matrix (F2)		ow Dark Surface (TF12)	
	luck (A10) (LRR	N)	X Deplete			_,		lain in Remarks)	
	ed Below Dark S				ırface (F	6)	、		
	ark Surface (A1				Surface				
	Mucky Mineral (sions (F8				
	I, MLRA 147, 14						(LRR N, MLRA 136)		
	Gleyed Matrix (S Redox (S5)	54)					36, 122)) (MLRA 148)		
	d Matrix (S6)						RA 127, 147)		
	a maint (00)					, (,,		
*Indicators	of hydrophytic v	egetatio	on and wetland h	nydrolog	gy must l	be prese	nt, unless disturbed or	problematic	
Restrictive	Layer (if observe	ed):							
Туре:					_		Hydric soil prese	nt? <u>Y</u>	
Depth (inch	nes):				-				
Remarks:									
Deplete	d clay in smal	ll flood	nlain						
Dehiele	a day in sind		piani.						

Project/Site: Kilgore-Polo Road 138kV B	Extension	City/County:	Carroll	Sampling Date: 5	/2/2014	
Applicant/Owner: <u>AEP</u>		State:	OH	Sampling Point D	PRG022	
Investigator(s): Rod Ginter, Chris Wulff				ange: S23 T12N R5W		
Landform (hillslope, terrace, etc.): hillslop		Local relief (co		none): concave	Slope (%): <u>14%</u>	
Subregion (LRR or MLRA): LRR N	Lat.:	40.4557		-81.04822	Datum: WGS84	
Soil Map Unit Name Westmoreland-Coshoo	ton silt loams	, 15 to 25 % slope	<u>es</u> N\	NI Classification: None		
Are climatic/hydrologic conditions of the site				·		
Are vegetation, soil, or	hydrology	significantl	y disturbed?	Are "normal	Yes	
Are vegetation, soil, or	nyarology	naturally p	roblematic?	circumstances" prese		
SUMMARY OF FINDINGS				(ii needed, explain al	ny answers in remarks	
Hydrophytic vegetation present? No	-	la tha aam	alad area with	in a watland?		
Hydric soil present? No	-	is the same	pled area with	iin a wetland? No	_	
Wetland hydrology present? No	-					
Remarks:						
Upland forest slope east of WRG0 ²	12.					
HYDROLOGY						
Wetland Hydrology Indicators:			Socon	dary Indicators (minim	um of two required)	
Primary Indicators (minimum of one is requ	urod: chock al	that apply)		•	uni or two required)	
				Irface Soil Cracks (B6)	0 ((D0)	
Surface Water (A1)		atic Plants (B14)		Sparsely Vegetated Concave Surface (
High Water Table (A2)	Hydrogen	Sulfide Odor (C1)	Dr	Drainage Patterns (B10)		
Saturation (A3)	Oxidized	Rhizospheres on	Mo	oss Trim Lines (B16)		
Water Marks (B1)	Living Ro	ots (C3)	Dr	y-Season Water Table (C2)	
Sediment Deposits (B2)	Presence	of Reduced Iron (ayfish Burrows (C8)		
Drift Deposits (B3)	Recent Ire	on Reduction in Til		turation Visible on Aeria		
Algal Mat or Crust (B4)	Soils (C6))	St	unted or Stressed Plants	s (D1)	
Iron Deposits (B5)	Thin Muc	k Surface (C7)	Ge	Geomorphic Position (D2)		
Inundation Visible on Aerial	Other (Ex	plain in Remarks)	Sh	allow Aquitard (D3)		
Imagery (B7)			Mi	crotopographic Relief (D	(4)	
Water-Stained Leaves (B9)				C-Neutral Test (D5)	,	
Aquatic Fauna (B13)						
Field Observations:						
Surface water present? Yes	No X	Depth (inches)	:	Wetland		
Water table present? Yes	No X	Depth (inches)		hydrology		
Saturation present? Yes		Depth (inches)		present?	Ν	
(includes capillary fringe)	<u> </u>				<u> </u>	
· · · · · · · · · · · · · · · · · · ·						
Describe recorded data (stream gauge, mo	nitoring well, a	aerial photos, pre	vious inspectior	ns), if available:		
Demontro						
Remarks:						
Drier hillside east of WRG012.						

VEGETATION - Use scientific names of plant	ts			Sampling Point: DPRG022
Tree Stratum Plot Size (30 ft.) 1 Liriodendron tulipifera 2 Prunus serotina 3 Acer saccharum	Absolute % Cover 40 15 10	Dominant Species Y Y N	Indicator Status FACU FACU FACU	50/20 Thresholds20%50%Tree Stratum133333Sapling/Shrub Stratum348Herb Stratum923Woody Vine Stratum00
4 5 6 7 8 9 10	65	Total Cover		Dominance Test Worksheet Number of Dominant Species that are OBL, FACW, or FAC: 1 Total Number of Dominant Species Across all Strata: 6 Percent of Dominant Species that are OBL,
Shrub/Sapling Plot Size(15 ft.) Stratum	Absolute % Cover	Dominant Species	Indicator Status	FACW, or FAC:(A/B)
Rubus pensilvanicus Rosa multiflora 3 4 5 6 7 8 9 10		Y Y 	FAC FACU	Prevalence Index WorksheetTotal % Cover of:OBL species 0 X 1 = 0 FACW species 0 X 2 = 0 FAC species 10 X 3 = 30 FACU species 115 X 4 = 460 UPL species 0 X 5 = 0 Column totals 125 (A) 490 Prevalence Index = $B/A =$ 3.92
10	15	= Total Cover		
Herb Stratum Plot Size (5 ft.) 1 Lycopodium digitatum 2 Polystichum acrostichoides 3 Podophyllum peltatum 4	Absolute % Cover 30 10 5	Dominant Species Y Y N	Indicator Status FACU FACU FACU	Hydrophytic Vegetation Indicators: Rapid test for hydrophytic vegetation Dominance test is >50% Prevalence index is ≤3.0* Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
0 11 12 13 14 15				Definitions of Vegetation Strata: Tree - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Woody Vine Plot Size(30 ft.) Stratum 12	45 Absolute % Cover	= Total Cover Dominant Species	Indicator Status	 Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines - All woody vines greater than 3.28 ft in height.
3 4 5	0	= Total Cover		Hydrophytic vegetation present? <u>N</u>
Remarks: (Include photo numbers here or on a separ Upland veg mixed with bare leaf litter in fore	,			

							34	mpling Point: DPRG022
Profile Desci	ription: (Descri	ibe to th	ne depth needed	to docu	ument th	e indicat	or or confirm the abser	nce of indicators.)
Depth	Matrix			ox Feat			Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-2	10YR 3/3	100					sandy loam	
2-16	10YR 5/4	100					sandy clay loam	
							, ,	
├ ───┤								
				ed Matr	ix, CS=0	Covered	or Coated Sand Grains	3
**Location: F	PL=Pore Lining	, M=Ma	trix					
Hydric Soil	Indicators:						Indicators for	Problematic Hydric Soils:
			Dark Su					
Histisol (•		w Surfac	ce (S8)		(A10) (MLRA 147)
	pipedon (A2)							ie Redox (A16) (MLRA 147, 148)
Black His					ace (S9)			loodplain Soils (F19)
	en Sulfide (A4)						(MLRA 136	
	d Layers (A5)				Matrix (I	-2)		w Dark Surface (TF12)
	ıck (A10) (LRR d Below Dark S					C)	Other (Exp	lain in Remarks)
	ark Surface (A1				ırface (F Surface			
	lucky Mineral (sions (F8			
-	MLRA 147, 14						(LRR N, MLRA 136)	
	Gleyed Matrix (S						36, 122)	
	Redox (S5)	,) (MLRA 148)	
Stripped	Matrix (S6)						RA 127, 147)	
*Indicators o	of hydrophytic v	egetatio	on and wetland h	ydrolog	gy must l	pe prese	nt, unless disturbed or	problematic
Destrictive L		a d) i						
	ayer (if observe	eu).					Hydric soil prese	nt? N
Type: Depth (inche	<i>se).</i>				-		riyunc son prese	III: <u>N</u>
					-			
Remarks:								

Project/Site: Kilgore-Polo Road 138kV I Applicant/Owner: AEP	Extension	_City/County: State:	Carroll OH	Sampling Date: <u>5</u> Sampling Point D		
Investigator(s): Rod Ginter, Chris Wulff				ange: S24 T12N R5W		
Landform (hillslope, terrace, etc.): floodpl	ain			(, none): concave	Slope (%): 3%	
Subregion (LRR or MLRA): LRR N	Lat.:	40.45833		.: -81.04541	Datum: WGS84	
Soil Map Unit Name Westmoreland-Coshoo		15 to 25 % slope		WI Classification: None		
Are climatic/hydrologic conditions of the site					plain in remarks)	
Are vegetation, soil, or	r hydrology	significantl naturally p	y disturbed?	Are "normal	Yes	
Are vegetation, soil, or	r hydrology	naturally p	roblematic?	circumstances" prese		
				(If needed, explain ar	ny answers in remarks	
SUMMARY OF FINDINGS						
Hydrophytic vegetation present? Yes Hydric soil present? Yes	-	Is the sam	pled area wit	hin a wetland? Yes		
Wetland hydrology present? Yes	-	ie ine ean			<u> </u>	
res	-					
Remarks:						
WRG011 - PFO/EM along forest st the Dining Fork.	ream floodpl	ain. Abutting p	perennial stre	eam SRG014, which	drains south to	
HYDROLOGY						
Wetland Hydrology Indicators:			Seco	ndary Indicators (minim	um of two required)	
Primary Indicators (minimum of one is requ	ired; check all	that apply)	S	urface Soil Cracks (B6)		
X Surface Water (A1)	True Aqua	tic Plants (B14)	S	Sparsely Vegetated Concave Surface (B8)		
X High Water Table (A2)		Sulfide Odor (C1)		Drainage Patterns (B10)		
X Saturation (A3)		Rhizospheres on		Moss Trim Lines (B16)		
Water Marks (B1)	Living Roo	•		ry-Season Water Table (C2)	
Sediment Deposits (B2)		of Reduced Iron (rayfish Burrows (C8)	02)	
Drift Deposits (B3)		n Reduction in Til		aturation Visible on Aeria	Imagery (C9)	
Algal Mat or Crust (B4)	Soils (C6)			tunted or Stressed Plants		
Iron Deposits (B5)		Surface (C7)		eomorphic Position (D2)	(= .)	
Inundation Visible on Aerial		plain in Remarks)		hallow Aquitard (D3)		
Imagery (B7)		an in reemaney		licrotopographic Relief (D	14)	
X Water-Stained Leaves (B9)				AC-Neutral Test (D5)	(4)	
			'	AC-Neuliai Tesi (D3)		
Aquatic Fauna (B13)				1		
Field Observations:	No	Danth (inchas)		Wetland		
Surface water present? Yes X	No	_ Depth (inches)		hydrology		
Water table present? Yes X	No	_ Depth (inches)			V	
Saturation present? Yes X	No	Depth (inches)	. 0	present?	Y	
(includes capillary fringe)						
Describe recorded data (stream gauge, mo	onitoring well, a	erial photos, pre	vious inspectic	ons), if available:		
Remarks:						
Seeps entering via eph side chann channels running through floodplai		plain along ma	ajor tributary	to Dining Fork. Bra	ided shallow	

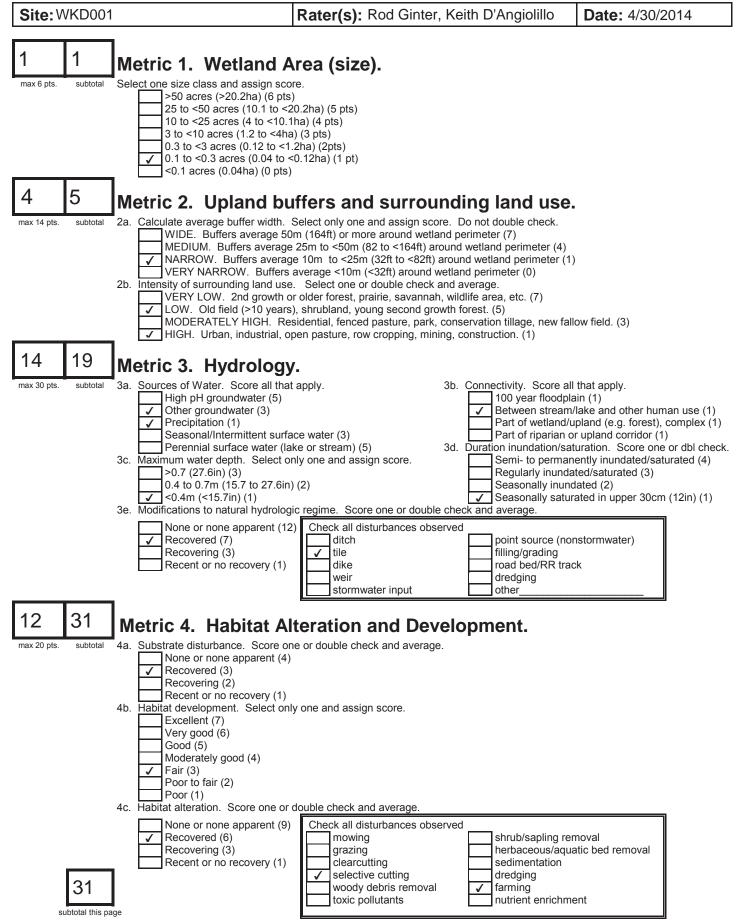
VEGETATION - Use scientific names of plan	ts			Sampling Poi	nt: DPRG023
· · · · · · · · · · · · · · · · · · ·				50/20 Thresholds	
Tree Stratum Plot Size (30 ft.)	Absolute	Dominant	Indicator		20% 50%
,	% Cover	Species	Status	Tree Stratum	9 23
1 Acer rubrum	20	Y	FAC	Sapling/Shrub Stratum	2 5
2 Quercus palustris	10	<u>Y</u>	FACW	Herb Stratum	14 35
3 Ostrya virginiana	10	<u>Y</u>	FACU	Woody Vine Stratum	0 0
4 Carpinus caroliniana	5	N	FAC	Dominance Test Workshe	
5				Number of Dominant	et
6 7				Species that are OBL,	
8				FACW, or FAC:	5 (A)
9				Total Number of Dominant	<u> </u>
10				Species Across all Strata:	6 (B)
	45	Total Cover		Percent of Dominant	(5)
				Species that are OBL,	
Shrub/Sapling	Absolute	Dominant	Indicator	FACW, or FAC:	83.33% (A/B)
Stratum Plot Size (15 ft.)	% Cover	Species	Status	FACW, OFFAC.	03.33 / (A/B)
		•			
1 Viburnum lentago	5	Y	FAC	Prevalence Index Worksh	eet
2 Carpinus caroliniana	5	Y	FAC	Total % Cover of:	
3				OBL species 40 x 1	
4				FACW species 10 x 2	
5				FAC species 45 x 3	
6				FACU species 30 x 4	
/				UPL species 0 x 5	
8 9				Column totals 125 (A) Prevalence Index = B/A =	315 (B) 2.52
9 10				Prevalence index – B/A –	2.52
	10	Total Cover			
	10			Hydrophytic Vegetation I	dicators:
	Absolute	Dominant	Indicator	Rapid test for hydrophy	
Herb Stratum Plot Size (5 ft.)	% Cover	Species	Status	X Dominance test is >50	
1 Symplocarpus foetidus	35	Y	OBL	X Prevalence index is ≤3.	
2 Erythronium albidum	10	N	FACU	Morphological adaptation	
3 Podophyllum peltatum	10	N	FACU	supporting data in Rem	
4 Viola sororia	5	N	FAC	separate sheet)	
5 Carex blanda	5	N	FAC	Problematic hydrophyti	c vegetation*
6 Galium asprellum	5	N	OBL	(explain)	
7				*Indicators of hydric soil and wetl	and hydrology must be
8				present, unless disturbed or prob	
9					
10				Definitions of Vegetation	Strata:
11				Tree - Woody plants 3 in. (7.6 cm	
12				breast height (DBH), regardless of	of height.
13				Sapling/shrub - Woody plants le	ss than 3 in DBH and
14				greater than 3.28 ft (1 m) tall.	
15	70	Total Cause			
	70	 Total Cover 		Herb - All herbaceous (non-wood	
Woody Vine Dist Size (20 ft)	Absolute	Dominant	Indicator	size, and woody plants less than	3.28 ft tall.
Stratum Plot Size (30 ft.)	% Cover	Species	Status	Woody vines - All woody vines g	restor then 2 00 ft in
1	% Cover	Species	Status	height.	
2				height	
3					
				Hydrophytic	
				Hydrophytic	
5		Tatal Osuar		vegetation	
	0	 Total Cover 		present? Y	
Remarks: (Include photo numbers here or on a sepa	rate sheet'			l	
	ale oneer				
Electric and seen 1 (1) OD0011					
Floodplain and seeps abutting SRG014.					

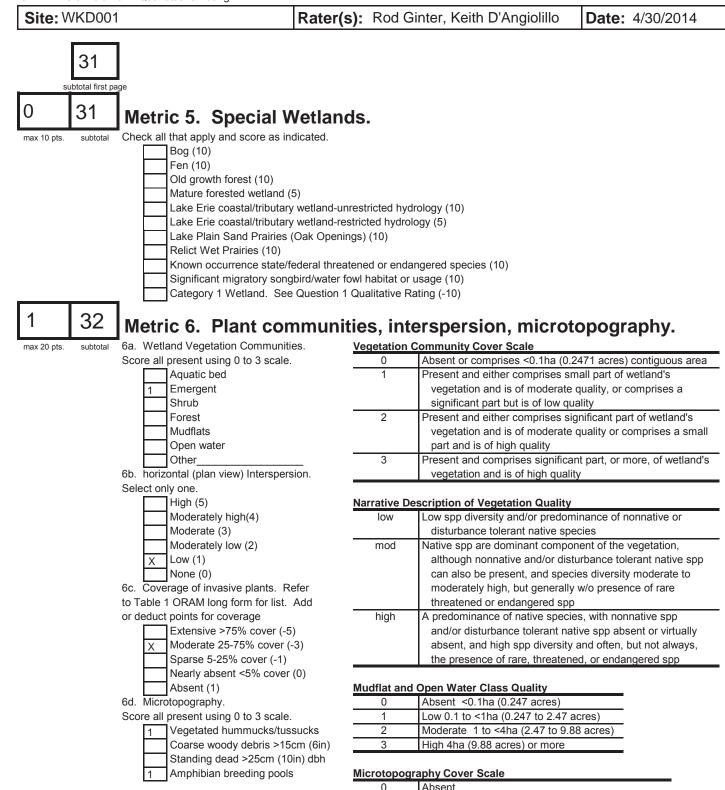
SOIL							Sa	mpling Point: DPRG023
Profile Des Depth	cription: (Descr Matrix	ibe to th		to docu ox Feat		ne indica	tor or confirm the abser	
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	Remarks
0-3	10YR 5/2	90	7.5YR 5/6	10	C	М	sandy loam	
3-16	10YR 5/1	85	7.5YR 4/6	15	С	М	sandy clay	
	Concentration, D			ed Matr	rix, CS≕	Covered	or Coated Sand Grains	3
	il Indicators:	, 101=1018					Indicators for	Problematic Hydric Soils:
	in marcators:		Dark Su	urface (S7)		indicators for	Problematic Hydric Solis:
Histiso			Polyval	ue Belo	w Surfa	ce (S8)		(A10) (MLRA 147)
	Epipedon (A2)		(MLRA					rie Redox (A16) (MLRA 147, 148)
	Histic (A3) Jen Sulfide (A4)		Thin Da (MLRA)	(MLRA 136	Floodplain Soils (F19)
	ed Layers (A5)		Loamy			F2)		ow Dark Surface (TF12)
	luck (A10) (LRR	: N)	X Deplete			12)		lain in Remarks)
	ed Below Dark S					6)		,
	Dark Surface (A1		Deplete					
-	Mucky Mineral (Redox I					
	N, MLRA 147, 14 Gleyed Matrix (S						(LRR N, MLRA 136) 36, 122)	
	Redox (S5)	34)) (MLRA 148)	
	d Matrix (S6)						RA 127, 147)	
*I. P	di la di			11.			and the second second	and the second se
[^] Indicators	of hydrophytic V	egetation (on and wetland r	nyarolog	gy must	be prese	ent, unless disturbed or	problematic
	Layer (if observ	ed):						
Type: Depth (incl	nes):				-		Hydric soil prese	ntr <u>f</u>
					-			
Remarks:								
Doplete	ed sandy clay	in floor	halain					
Depiete	su sanuy ciay	1111000	apiairi.					

Project/Site: Kilgore-Polo Road 138kV	Extension	City/County:	Carroll	Sampling Date: 5/	/2/2014	
Applicant/Owner: AEP		State:	OH	Sampling Point D	PRG024	
Investigator(s): Rod Ginter, Chris Wulff				ange: S23 T12N R5W		
Landform (hillslope, terrace, etc.): hillslop				none): convex	Slope (%): <u>14%</u>	
Subregion (LRR or MLRA): LRR N	Lat.:	40.45834		-81.04554	Datum: WGS84	
Soil Map Unit Name Westmoreland-Cosho	cton silt loams	, 15 to 25 % slope	es NV	VI Classification: None		
Are climatic/hydrologic conditions of the si		-				
Are vegetation, soil, c	or hydrology	significant	y disturbed?	Are "normal	Yes	
Are vegetation, soil, c	or hydrology	naturally p	roblematic?	circumstances" prese		
				(If needed, explain ar	by answers in remarks	
SUMMARY OF FINDINGS						
Hydrophytic vegetation present? No						
Hydric soil present? No		Is the sam	pled area with	in a wetland? No		
Wetland hydrology present? No						
Remarks:						
Toe of forest hillslope west of WR	G011.					
HYDROLOGY						
Wetland Hydrology Indicators:			Secon	dary Indicators (minim	um of two required)	
Primary Indicators (minimum of one is req	uired: check al	I that apply)		Inface Soil Cracks (B6)		
Surface Water (A1)		atic Plants (B14)			N/O Surfaco (B8)	
				Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)		n Sulfide Odor (C1)		Drainage Patterns (B10)		
Saturation (A3)		Rhizospheres on		oss Trim Lines (B16)		
Water Marks (B1)	Living Ro			Dry-Season Water Table (C2)		
Sediment Deposits (B2)		of Reduced Iron (ayfish Burrows (C8)		
Drift Deposits (B3)		on Reduction in Ti		turation Visible on Aeria		
Algal Mat or Crust (B4)	Soils (C6	,		Stunted or Stressed Plants (D1)		
Iron Deposits (B5)		k Surface (C7)		Geomorphic Position (D2)		
Inundation Visible on Aerial	Other (E)	plain in Remarks)	Sh	allow Aquitard (D3)		
Imagery (B7)			Mi	crotopographic Relief (D	4)	
Water-Stained Leaves (B9)			FA	C-Neutral Test (D5)		
Aquatic Fauna (B13)						
Field Observations:						
Surface water present? Yes	<u>No X</u>	Depth (inches)		Wetland		
Water table present? Yes	<u>No X</u>			hydrology		
Saturation present? Yes	<u>No X</u>	Depth (inches)	: <u> </u>	present?	N	
(includes capillary fringe)						
Departies reported data (attack and a	opitoring	aarial phatas are	vious increation			
Describe recorded data (stream gauge, m	onitoring well,	aenai photos, pre	vious inspection	is), il avallable:		
Remarks:						
Dry slope west of WRG011 and S	RG014.					

VEGETATION - U	se scientific	names of p	lants			Sampling Poi	int: DPRGC)24
Tree Stratum	Plot Size (30 ft.	Absolute	Dominant	Indicator	50/20 Thresholds		0%
			% Cover	Species	Status	Tree Stratum		35 10
1 Quercus rubra 2 Acer saccharun	n		<u> </u>	Y	FACU FACU	Sapling/Shrub Stratum Herb Stratum		30
3 Ostrya virginian			10	<u> </u>	FACU	Woody Vine Stratum		0
4 Carpinus caroli			10	N	FAC	treedy time endum		•
5						Dominance Test Workshe	et	
6			_			Number of Dominant		
7						Species that are OBL,		
8						FACW, or FAC: Total Number of Dominant	1	(A)
9 10				·		Species Across all Strata:	6	(B)
			70	Total Cover		Percent of Dominant	0	.(0)
						Species that are OBL,		
Shrub/Sapling Stratum	Plot Size (15 ft.	Absolute % Cover	Dominant Species	Indicator Status	FACW, or FAC:	16.67%	(A/B)
1 Rosa multiflora			15	Y	FACU	Prevalence Index Worksh	leet	
2 Rubus pensilva	nicus		5	Y	FAC	Total % Cover of:		
3	iniouo			<u> </u>	1710	OBL species 5 x 1	= 5	
4						FACW species 0 x 2		-
5						FAC species 15 x 3		_
6						FACU species 130 x 4		_
7 8						UPL species 0 x 5 Column totals 150 (A)		- (D)
8 9						Column totals <u>150</u> (A) Prevalence Index = B/A =	570 3.80	_(D)
10							0.00	•
			20 :	 Total Cover 				
		- 0	Absolute	Dominant	Indicator	Hydrophytic Vegetation In Rapid test for hydrophy		on
Herb Stratum	Plot Size (5 ft.	% Cover	Species	Status	Dominance test is >50		
1 Polystichum ac			35	Y	FACU	Prevalence index is ≤3.		
2 Erythronium alk			20	<u>Y</u>	FACU	Morphological adaptati		
3 Symplocarpus i	toetidus		5	N	OBL	supporting data in Rem	arks or on a	1
4 5						separate sheet) Problematic hydrophyti	c vegetation	*
6						(explain)	e vegetation	1
7						*Indicators of hydric soil and wet	and hydrology	must he
8						present, unless disturbed or prob		muot be
9								
10						Definitions of Vegetation		
11						Tree - Woody plants 3 in. (7.6 cn breast height (DBH), regardless of		ameter a
						breast height (DDH), regardless (Ji neight.	
13 14 15						Sapling/shrub - Woody plants le greater than 3.28 ft (1 m) tall.	ss than 3 in. Di	BH and
			60	Total Cover		Herb - All herbaceous (non-wood size, and woody plants less than		rdless of
Woody Vine	Plot Size (30 ft.	Absolute	Dominant	Indicator			
Stratum			% Cover	Species	Status	Woody vines - All woody vines g	reater than 3.2	28 ft in
1 2						height.		
3								
						Hydrophytic		
5						vegetation		
·			0	= Total Cover		present? N		
							•	
Remarks: (Include ph	oto numbers h	ere or on a se	eparate sheet					
	. .							
Upland veg and	a few skunk	cabbage m	ixed with bare	leaf litter on l	ower hillslop	be.		

SOIL							Sa	mpling Point: DPRG024
Profile Des	cription: (Descri	ibe to th	ne depth needed	to docu	ument th	e indicat	or or confirm the abser	nce of indicators.)
Depth	Matrix			ox Feat			Texture	Remarks
(Inches)	Color (moist)	%	Color (moist)	%	Type*	Loc**	Texture	rtomanto
0-3	10YR 4/3	100					silty clay loam	
3-16	10YR 5/4	100					sandy clay loam	
	Concentration D	Doplo	tion DM Boduo	od Motr		Covered	or Coated Sand Grains	
	PL=Pore Lining			ed Matr	1x, CS=0	Jovered	or Coaled Sand Grains	5
	I Indicators:	, 101–1010					Indicators for	Problematic Hydric Soils:
	indicators.		Dark Su	urface (S	S7)		indicators for	r roblematic rigune cons.
Histiso	(A1)				w Surfa	ce (S8)	2 cm Muck	(A10) (MLRA 147)
	Epipedon (A2)		(MLRA					rie Redox (A16) (MLRA 147, 148)
	listic (A3)				ace (S9)			Floodplain Soils (F19)
Hydrog	en Sulfide (A4)		(MLRA	147, 14	18)		(MLRA 136	6, 147)
	ed Layers (A5)				Matrix (F2)		ow Dark Surface (TF12)
	luck (A10) (LRR		Deplete				Other (Exp	lain in Remarks)
	ed Below Dark S				urface (F			
	Dark Surface (A1				Surface			
	Mucky Mineral (sions (F8			
	I, MLRA 147, 14						(LRR N, MLRA 136)	
	Gleyed Matrix (S Redox (S5)	54)		Surface	e (F13) (deleie S	NILKA 1 oile (E10	36, 122)) (MLRA 148)	
	d Matrix (S6)		Pieumo	ront Ma	upiain S	0115 (F19 21) (MI 1	RA 127, 147)	
Outppe							(A Z , 4)	
*Indicators	of hydrophytic v	egetatio	on and wetland h	vdroloc	y must	be prese	nt, unless disturbed or	problematic
	, , , , , , , , , , , , , , , , , , ,	- 0		,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,	
	Layer (if observe	ed):						
Type:					-		Hydric soil prese	nt? <u>N</u>
Depth (inch	nes):				-			
Remarks:								
r tomanto.								
ļ								





32 **GRAND TOTAL (max 100 pts)**

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html last revised 1 February 2001 jjm

1

2

3

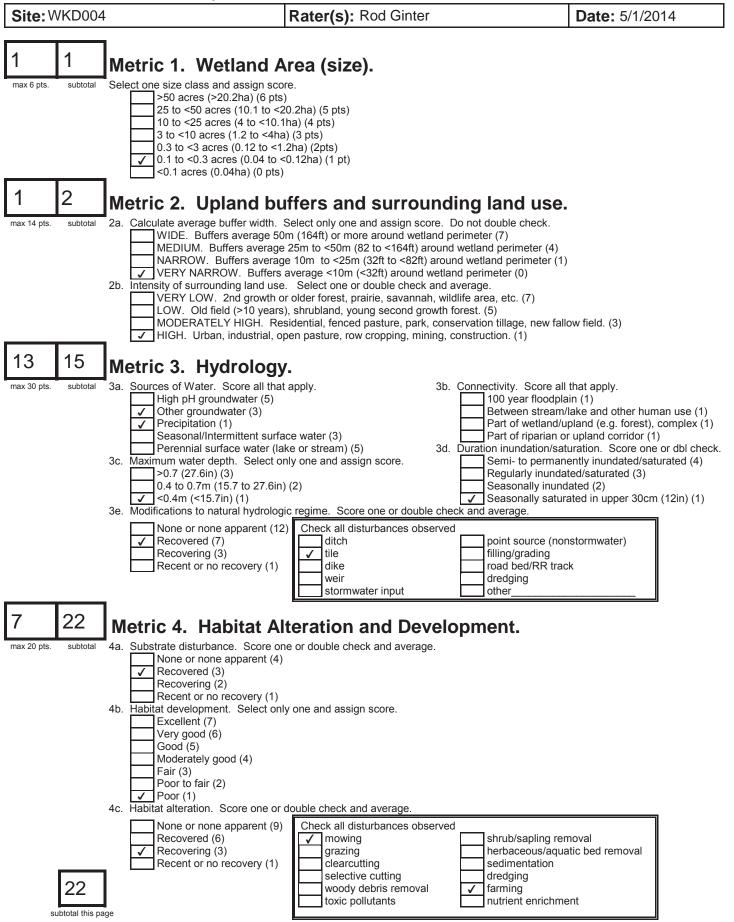
Present very small amounts or if more common

Present in moderate amounts, but not of highest guality or in small amounts of highest guality

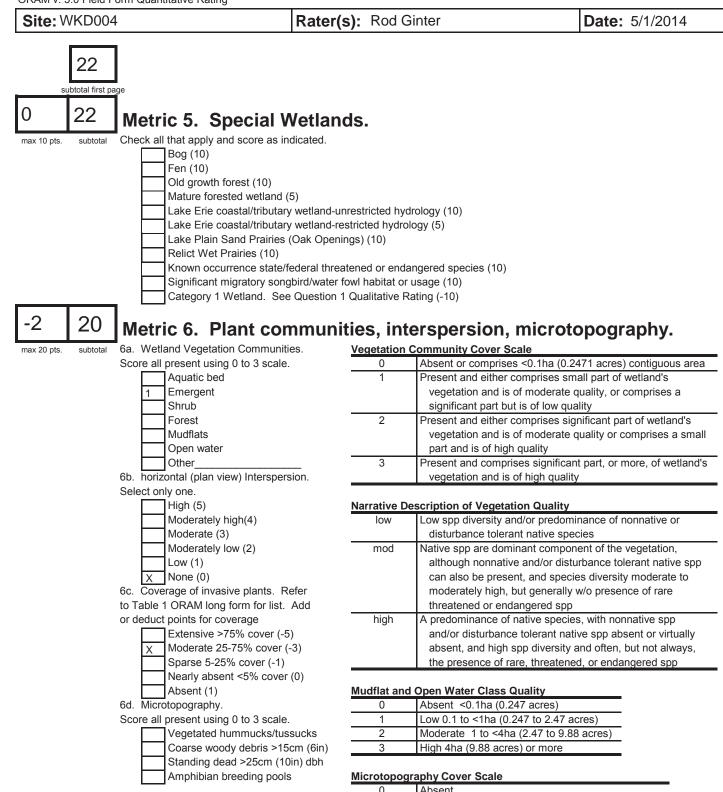
Present in moderate or greater amounts

of marginal quality

and of highest quality



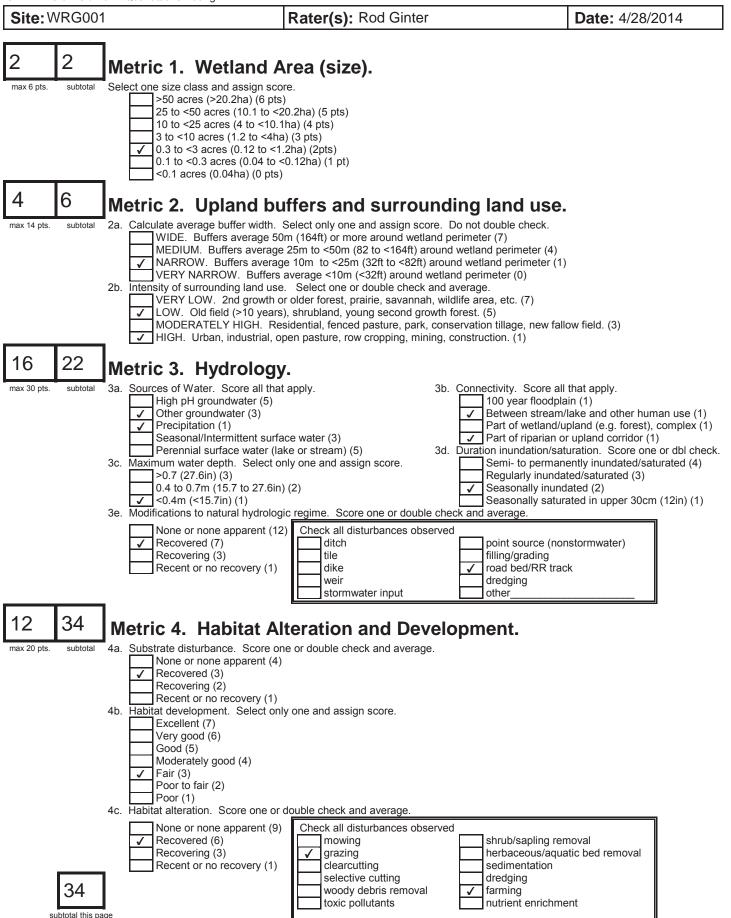
last revised 1 February 2001 jjm

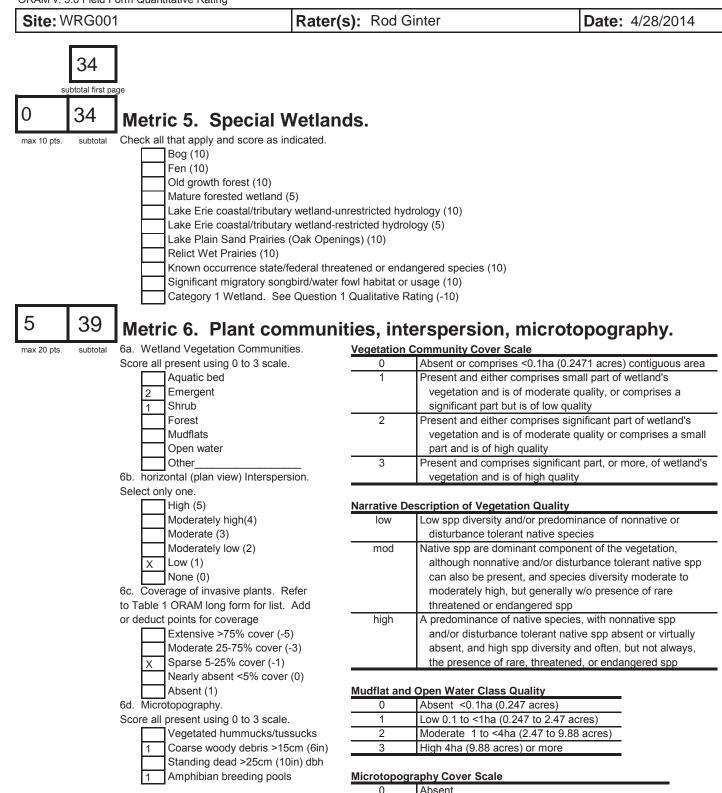


0	Aboont
1	Present very small amounts or if more common
	of marginal quality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality

20 GRAND TOTAL (max 100 pts)

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html last revised 1 February 2001 jim





Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html last revised 1 February 2001 jim

1

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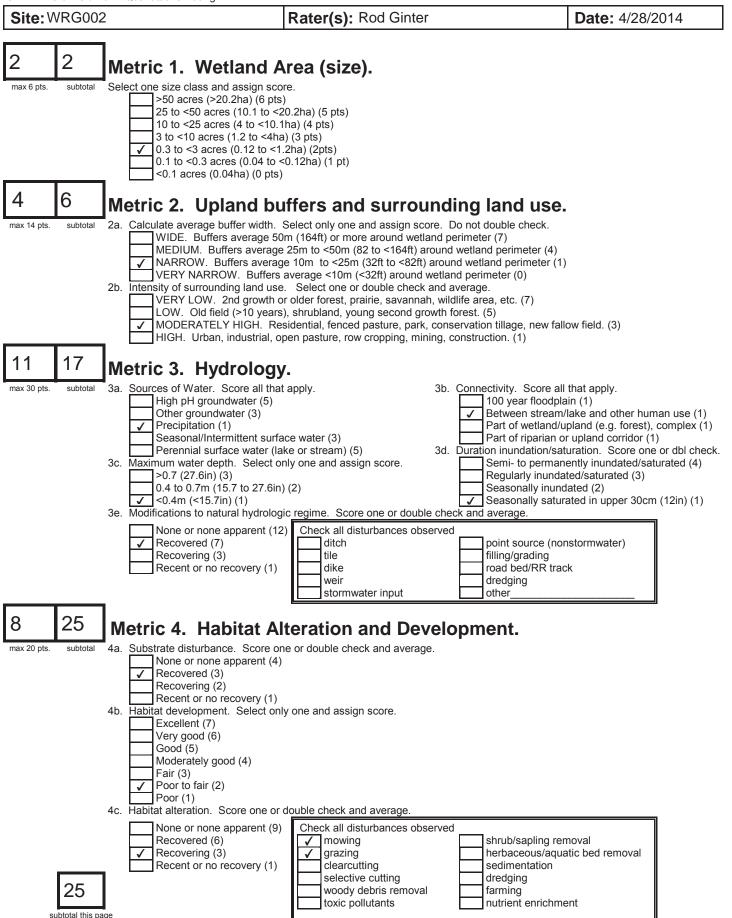
Present very small amounts or if more common

Present in moderate amounts, but not of highest guality or in small amounts of highest guality

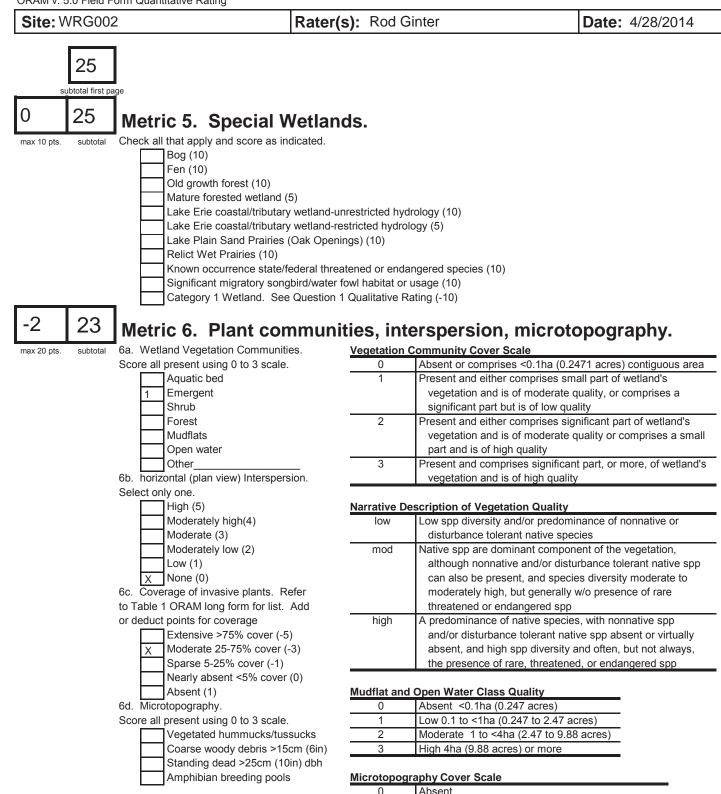
Present in moderate or greater amounts

of marginal quality

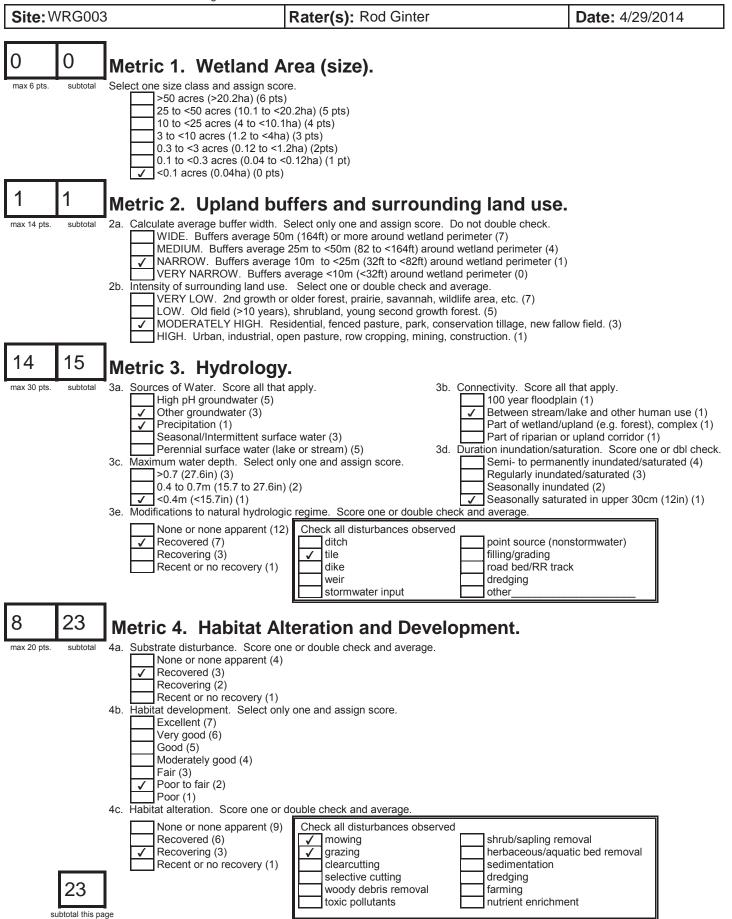
and of highest quality



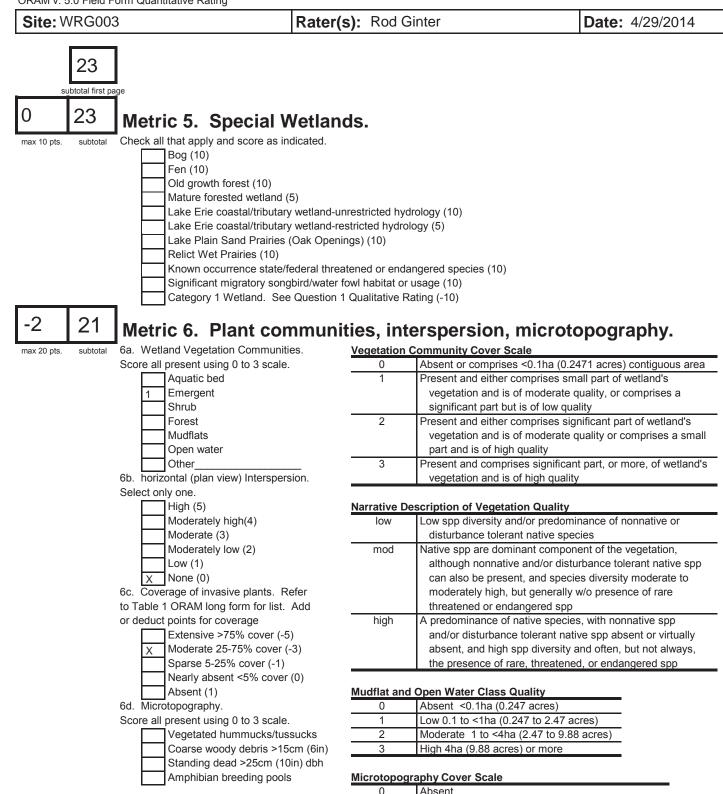
last revised 1 February 2001 jjm



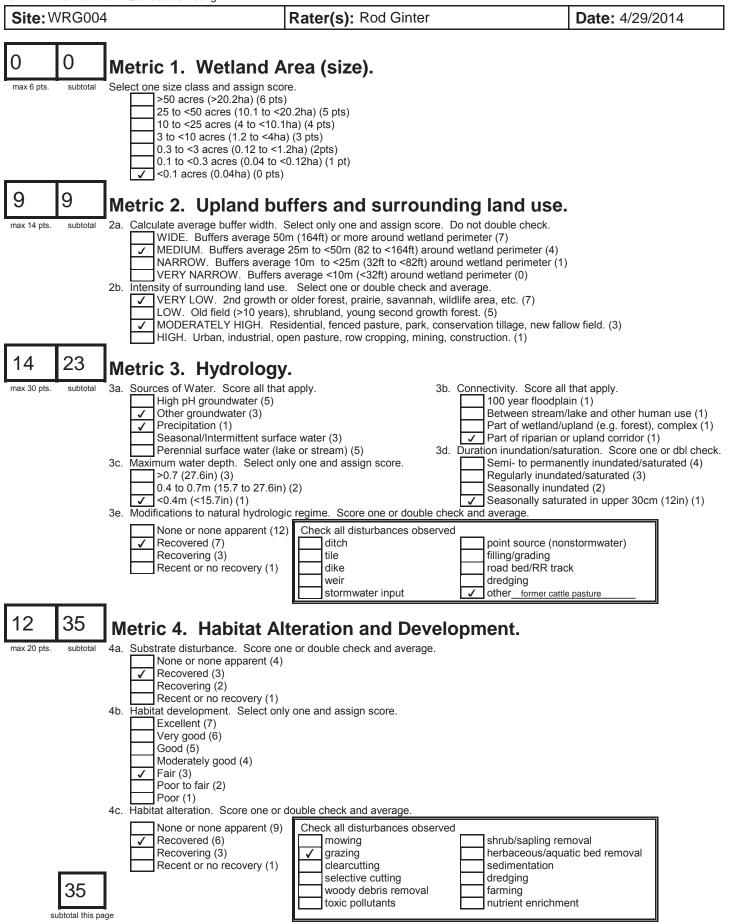
1	Present very small amounts or if more common
	of marginal quality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality



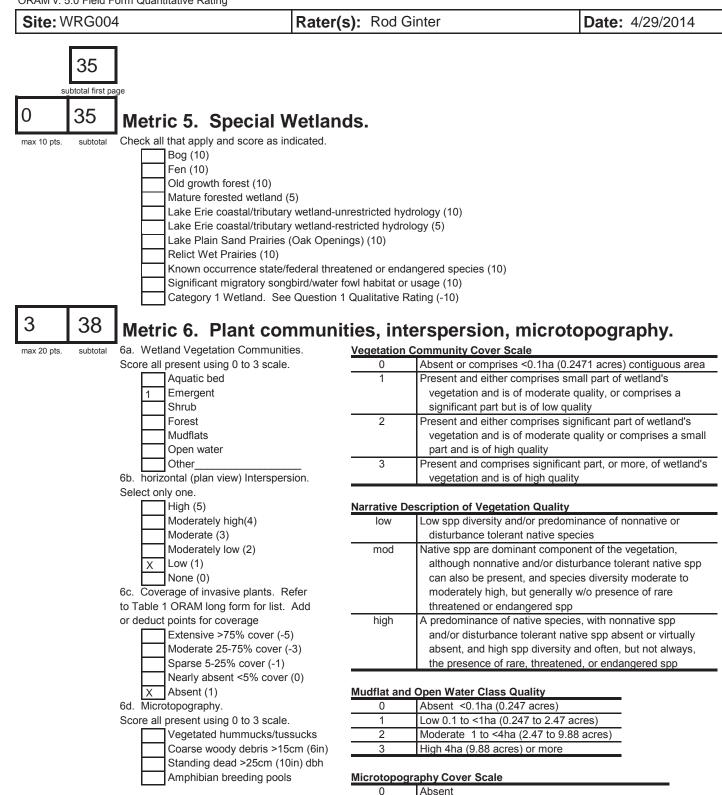
last revised 1 February 2001 jjm



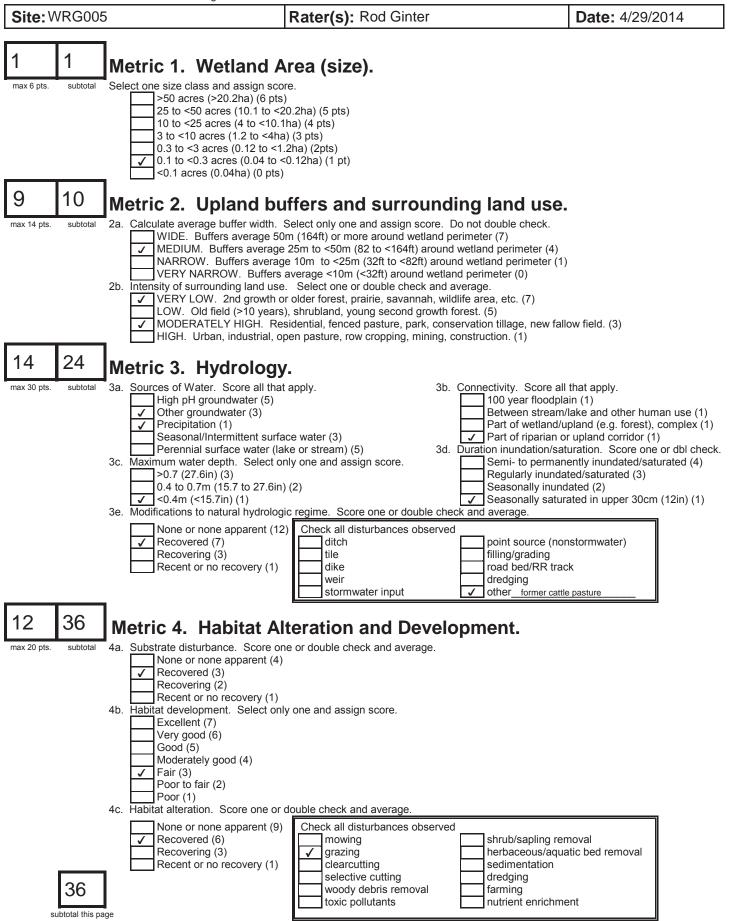
1	Present very small amounts or if more common
	of marginal quality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality



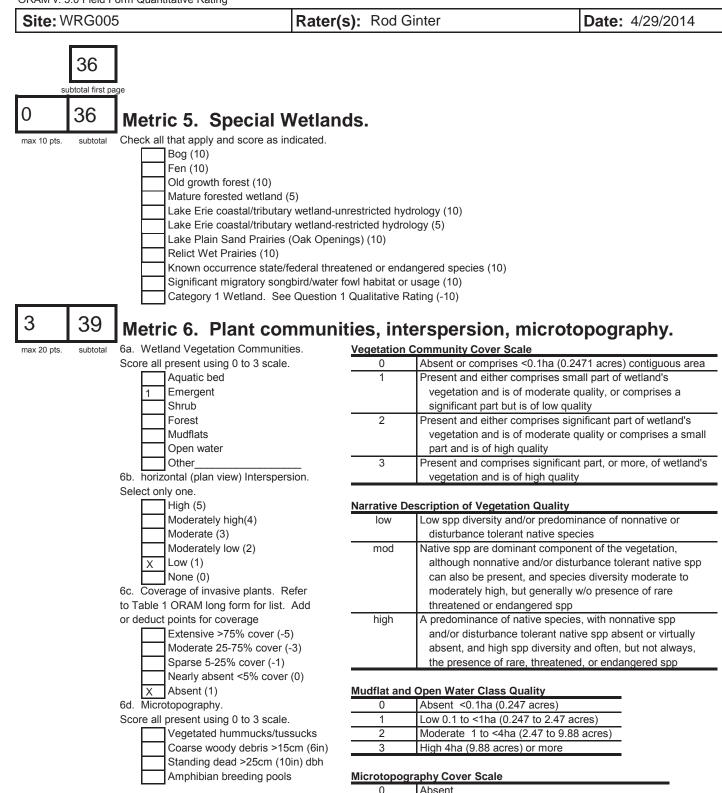
last revised 1 February 2001 jjm



1	Present very small amounts or if more common
	of marginal quality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality



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1

2

3

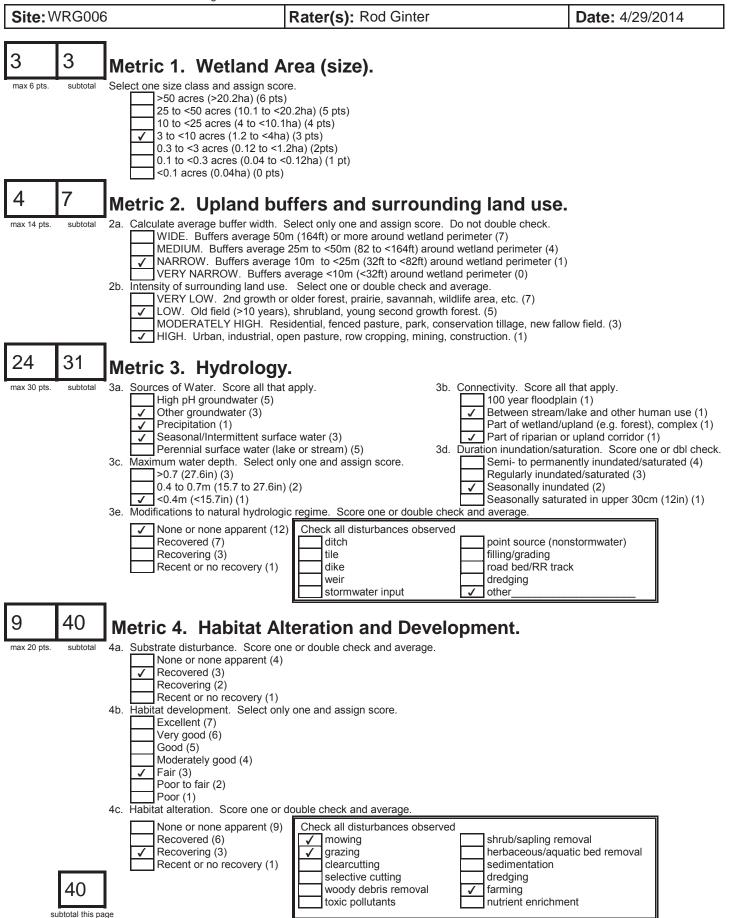
Present very small amounts or if more common

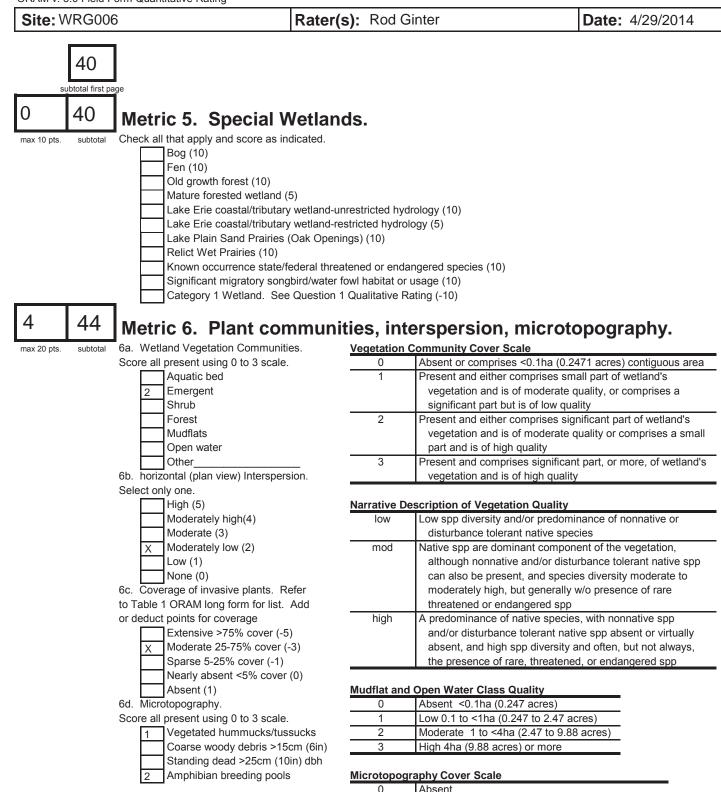
Present in moderate amounts, but not of highest guality or in small amounts of highest guality

Present in moderate or greater amounts

of marginal quality

and of highest quality





44

Refer to the most recent ORAM Score Calibration Report for the scoring breakpoints between wetland categories at the following address: http://www.epa.state.oh.us/dsw/401/401.html last revised 1 February 2001 jim

1

2

3

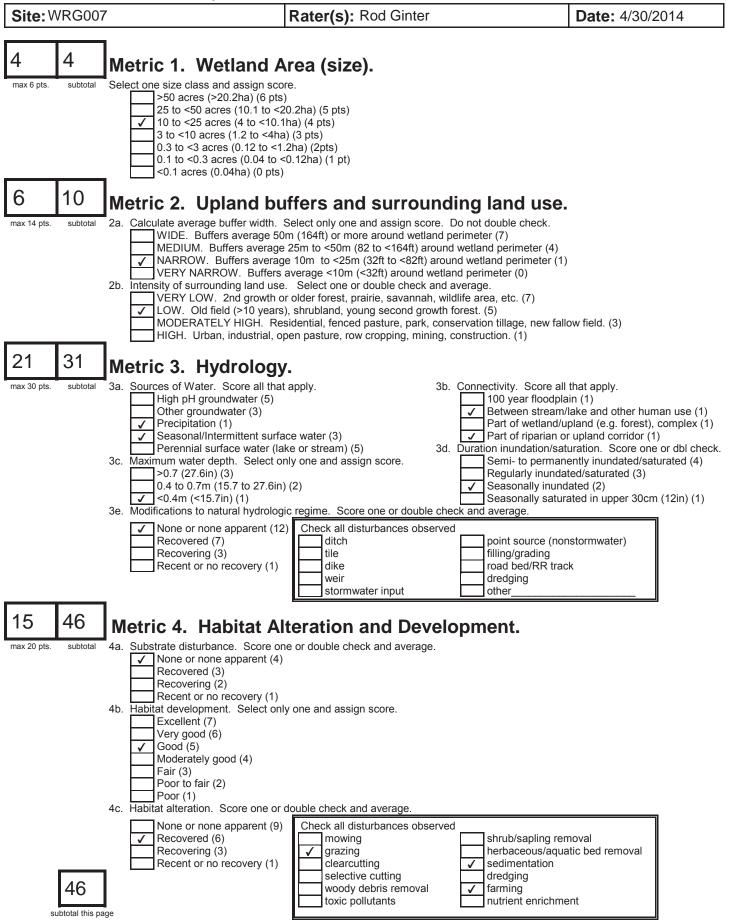
Present very small amounts or if more common

Present in moderate amounts, but not of highest guality or in small amounts of highest guality

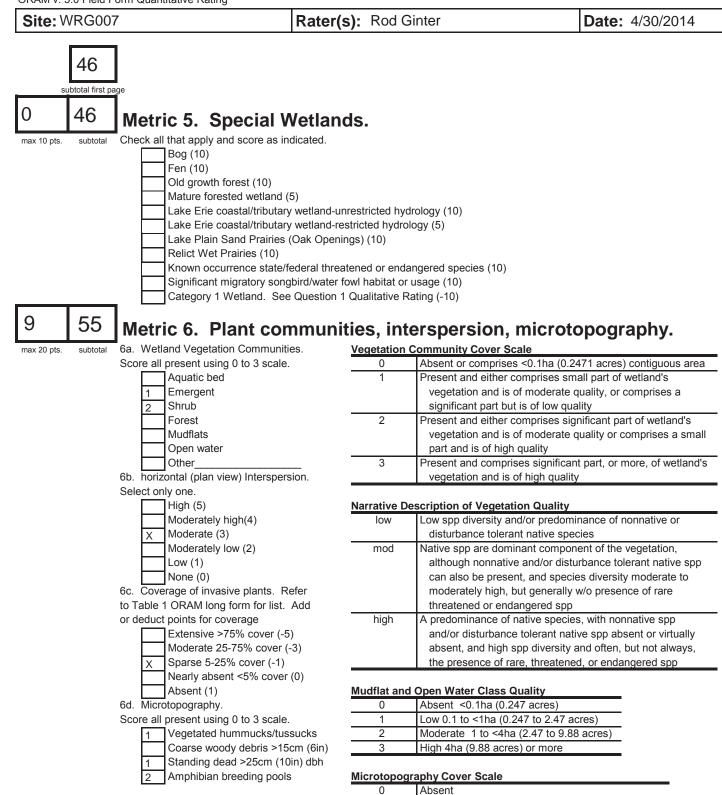
Present in moderate or greater amounts

of marginal quality

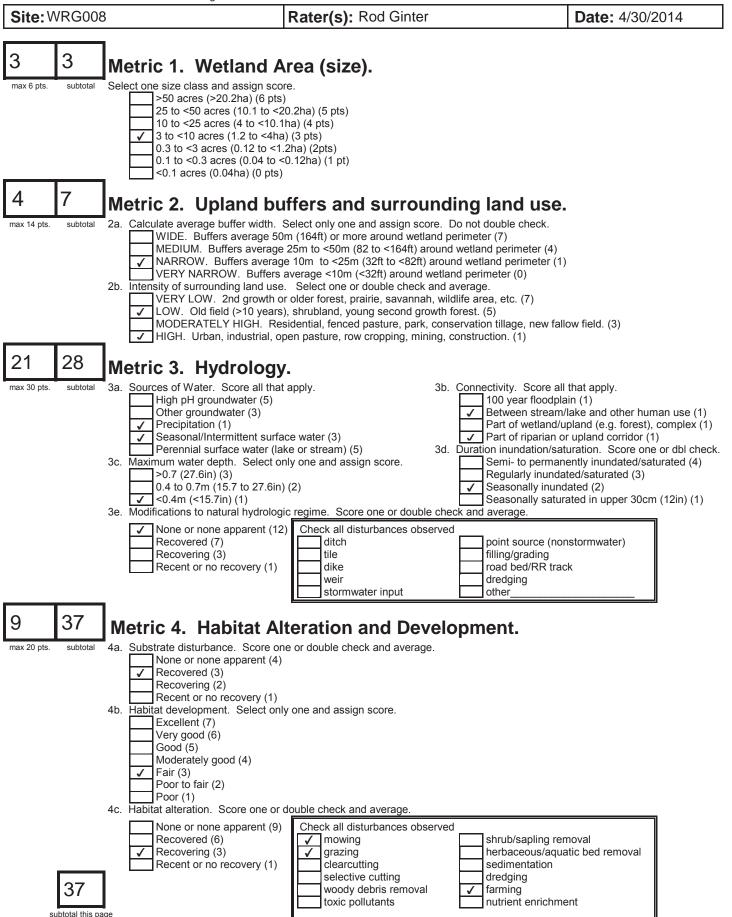
and of highest quality



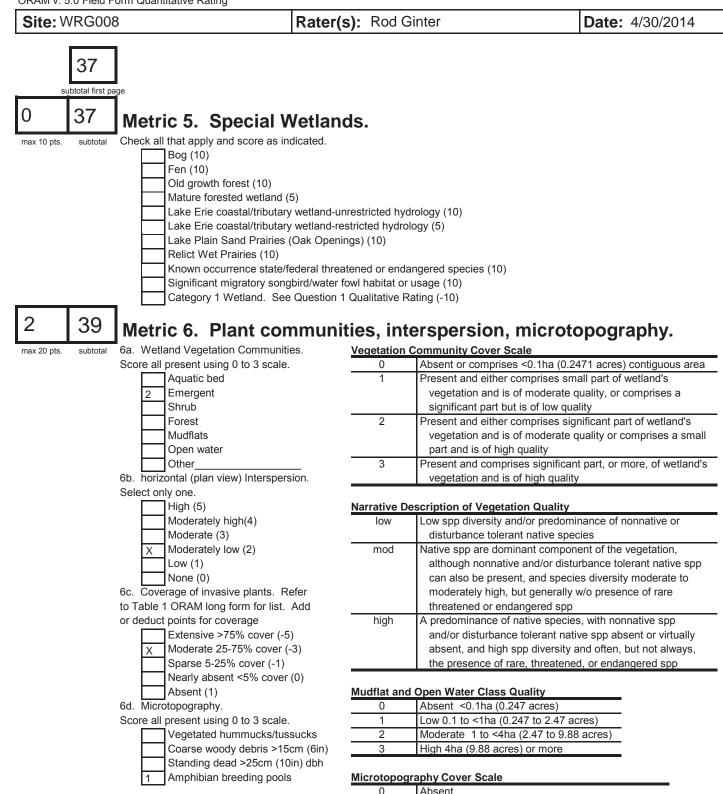
last revised 1 February 2001 jjm



1	Present very small amounts or if more commor
	of marginal quality
2	Present in moderate amounts, but not of highes
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality



last revised 1 February 2001 jjm



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1

2

3

Present very small amounts or if more common

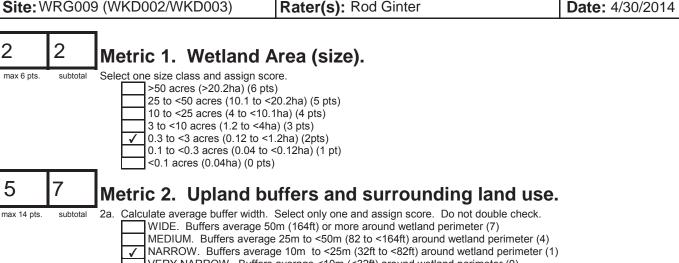
Present in moderate amounts, but not of highest guality or in small amounts of highest guality

Present in moderate or greater amounts

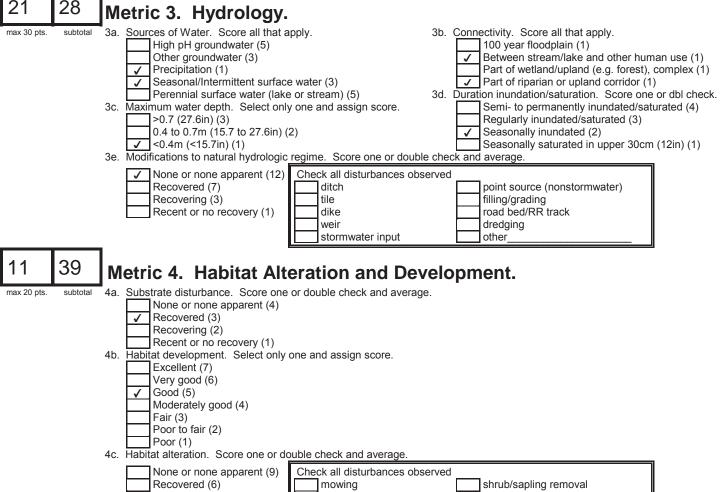
of marginal quality

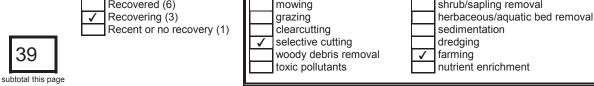
and of highest quality

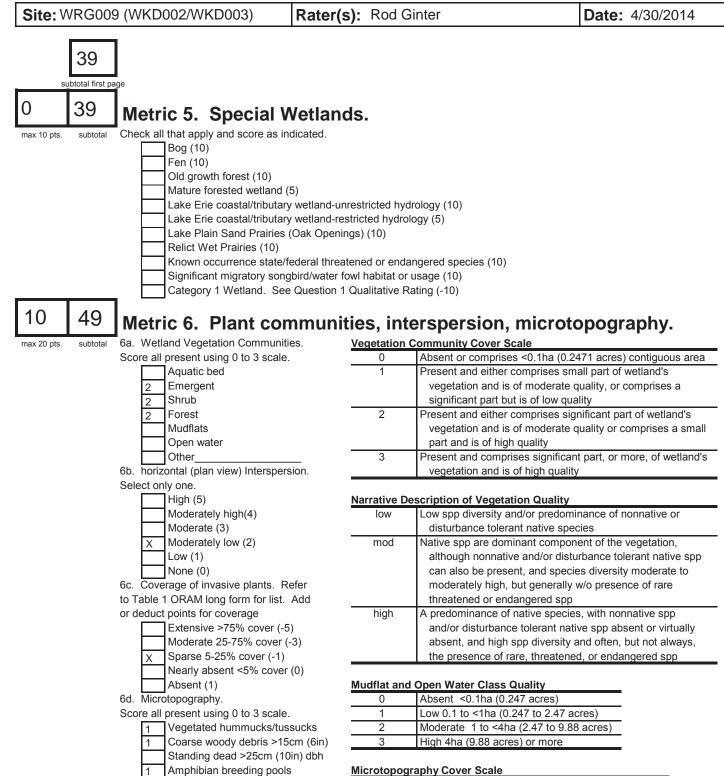
2



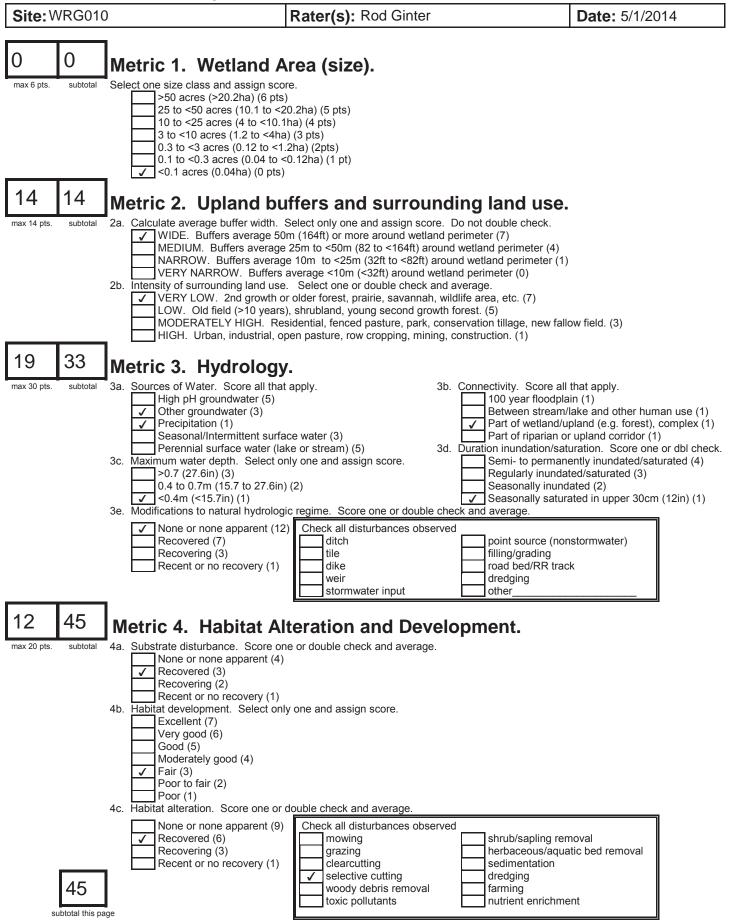
- VERY NARROW. Buffers average <10m (<32ft) around wetland perimeter (0)
- 2b. Intensity of surrounding land use. Select one or double check and average.
 - VERY LOW. 2nd growth or older forest, prairie, savannah, wildlife area, etc. (7)
 - LOW. Old field (>10 years), shrubland, young second growth forest. (5)
 - MODERATELY HIGH. Residential, fenced pasture, park, conservation tillage, new fallow field. (3)
 - ✓ HIGH. Urban, industrial, open pasture, row cropping, mining, construction. (1)



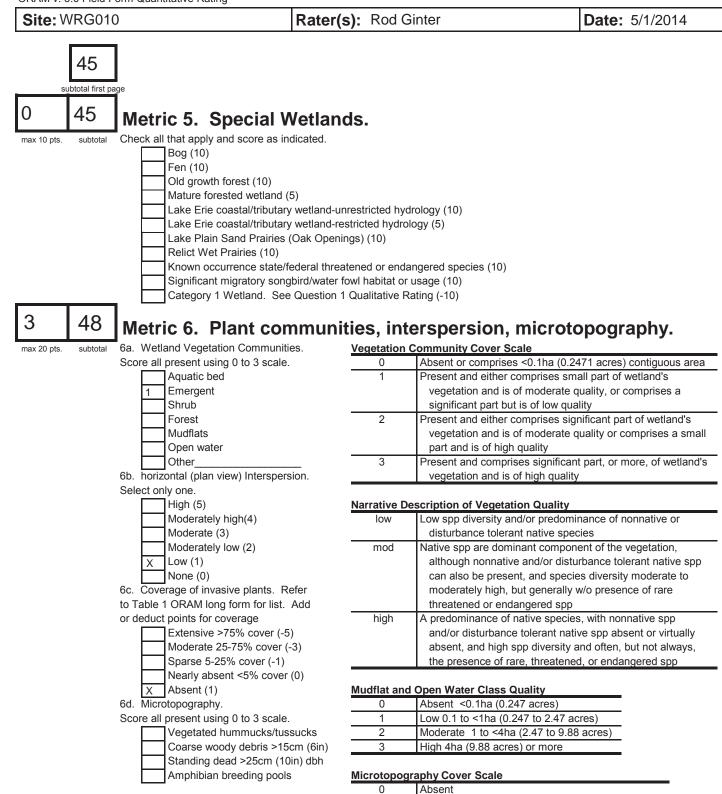




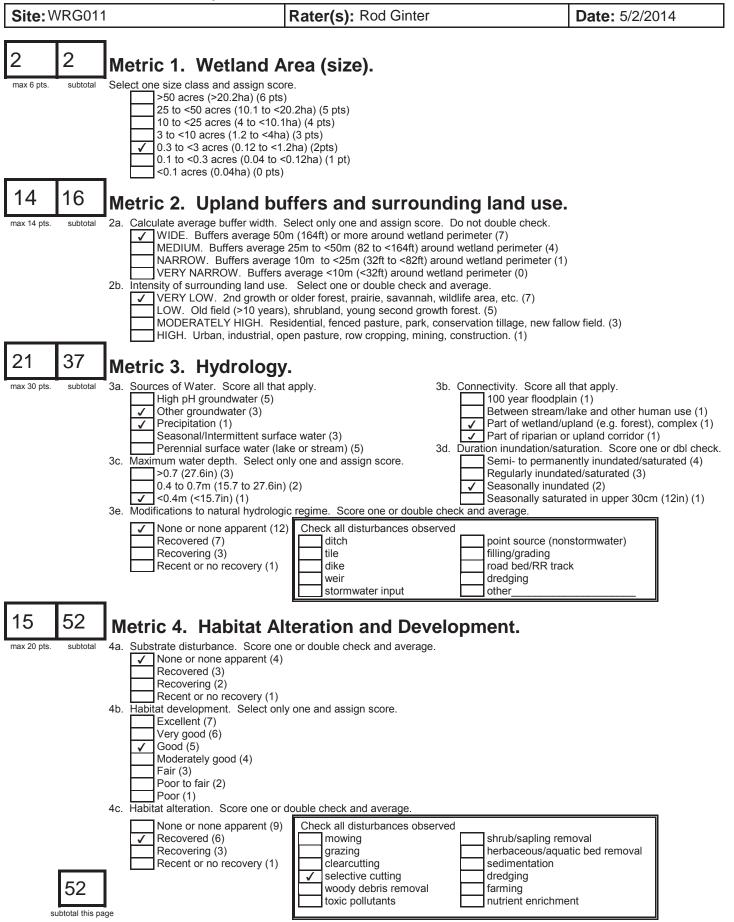
0	Absent
1	Present very small amounts or if more common
	of marginal quality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality



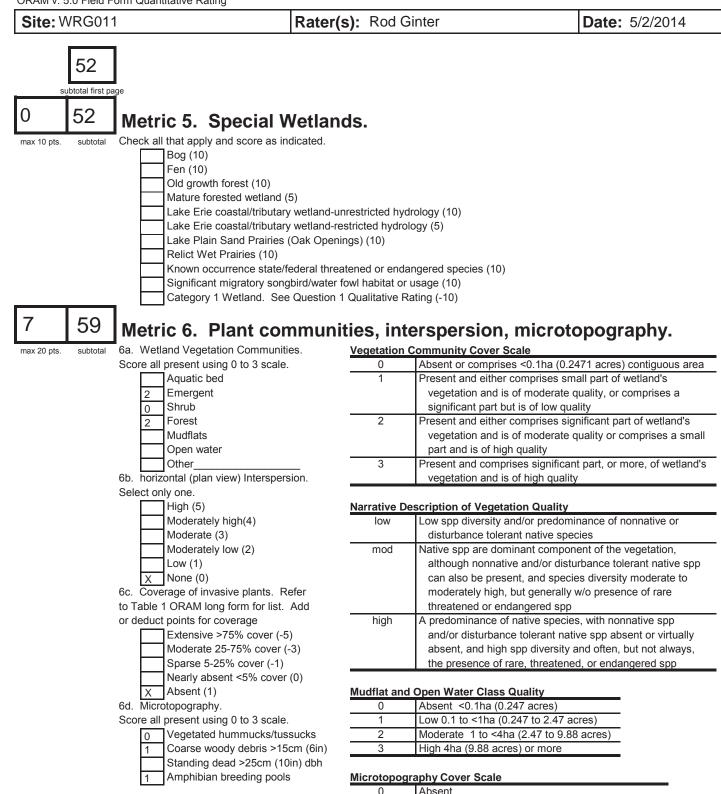
last revised 1 February 2001 jjm



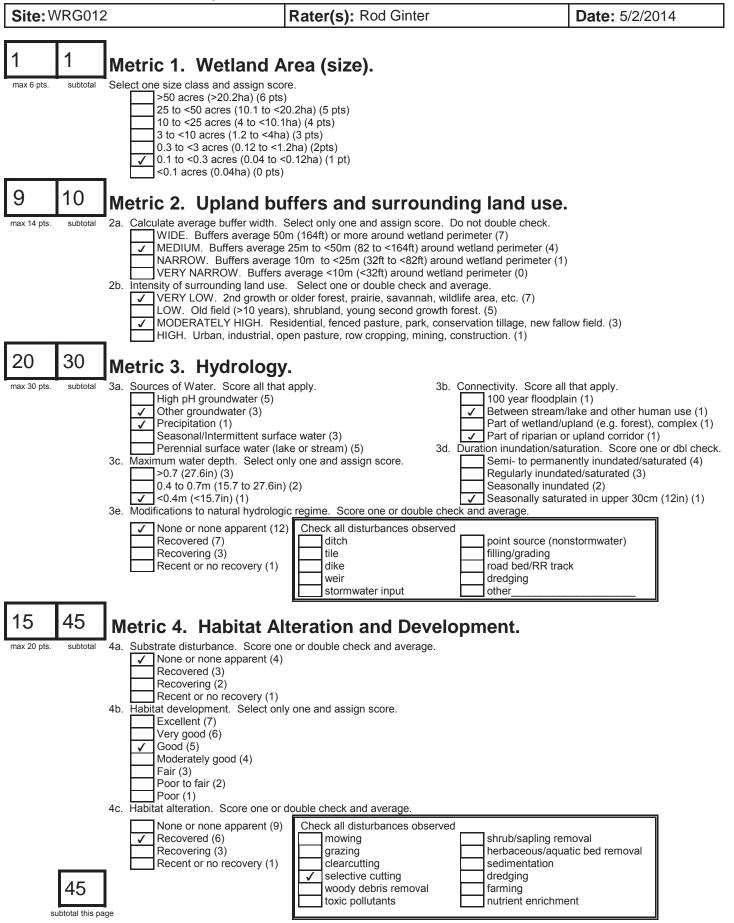
-	
1	Present very small amounts or if more common
	of marginal quality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality

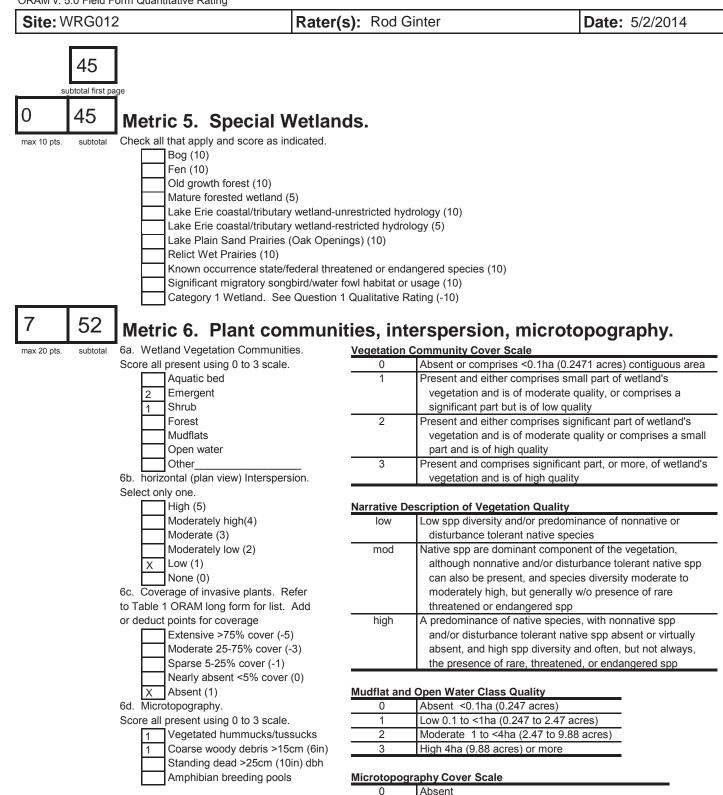


last revised 1 February 2001 jjm

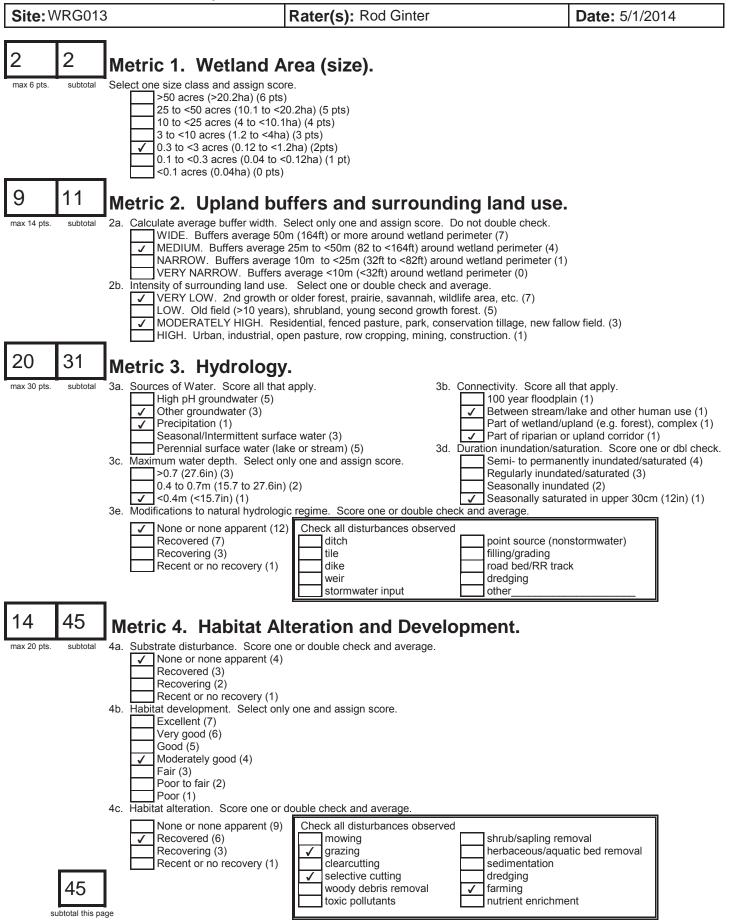


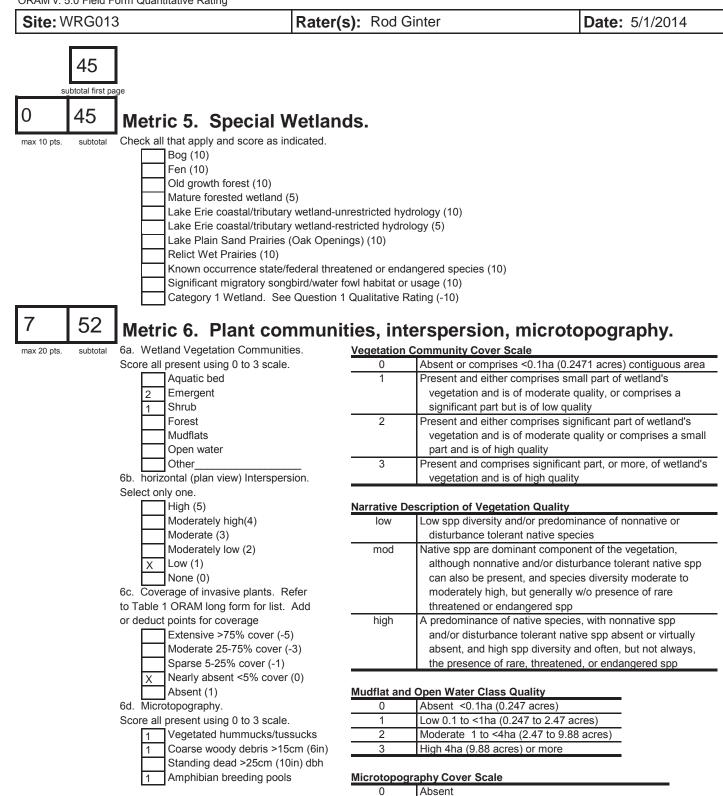
0	Absent
1	Present very small amounts or if more common
	of marginal quality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality





-	
1	Present very small amounts or if more common
	of marginal quality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality





1	Present very small amounts or if more common
	of marginal quality
2	Present in moderate amounts, but not of highest
	quality or in small amounts of highest quality
3	Present in moderate or greater amounts
	and of highest quality

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WATERBODY DATA SHEETS

APPENDIX C

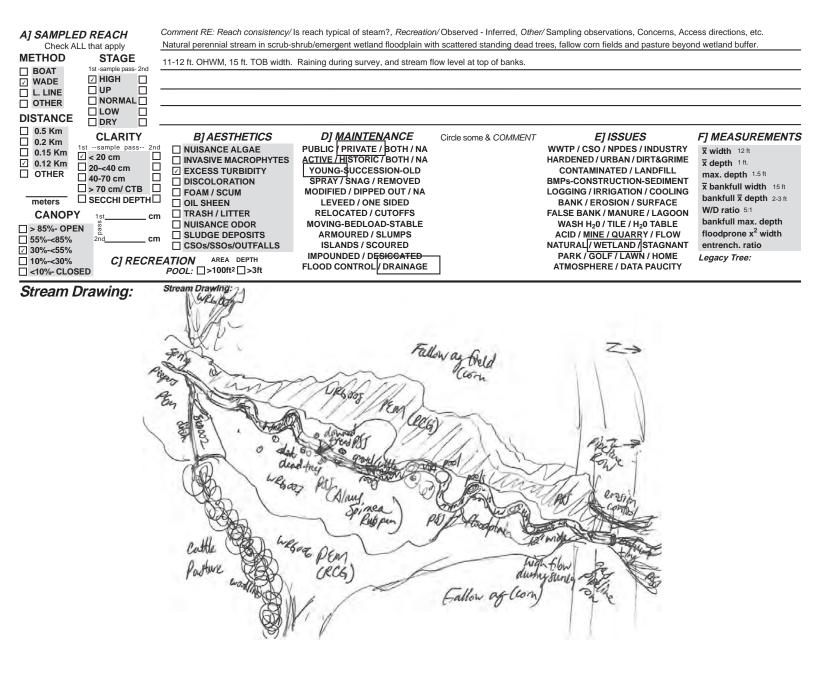


Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

Stream & Location: SRG001 (Dining Fork of Conotton Creek) RM: Date: 04 / 29 / 14 Scorers Full Name & Affiliation: ROD GINTER, CH2MHILL Lat./Long.: 40 (NAD 83 - decimal °) — — Office verified 45758 **/8** 1 . 03330 River Code: STORET #: location 1] SUBSTRATE Check ONLY Two substrate TYPE BOXES: Check ONE (Or 2 & average) estimate % or note every type present OTHER TYPES POOL RIFFLE **BEST TYPES** ORIGIN QUALITY POOL RIFFLE HEAVY [-2] 🗌 🗌 HARDPAN [4] LIMESTONE [1] BLDR /SLABS [10] 20 TILLS [1] MODERATE [-1] Substrate BOULDER [9] DETRITUS [3] SILT WETLANDS [0] COBBLE [8] 10 10 NORMAL [0] **MUCK** [2] HARDPAN [0] GRAVEL [7] 20 40 🗌 🗹 SILT [2] 40 20 FREE [1] 6 MODERAL MODERAL [0] EXTENSIVE [-2] SANDSTONE [0] SAND [6] 10 10 □ □ ARTIFICIAL [0] RIP/RAP [0] MODERATE [-1] BEDROCK [5] (Score natural substrates; ignore Maximum NUMBER OF BEST TYPES: 4 or more [2] sludge from point-sources) 20 SHALE [-1] ✓ 3 or less [0] Comments COAL FINES [-2] Estimated substrate with shovel probe due to high flow at time of survey 2] INSTREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest AMOUNT quality; 3-Highest quality in moderate or greater amounts (e.g., very large boulders in deep or fast water, large diameter log that is stable, well developed rootwad in deep / fast water, or deep, well-defined, functional pools. Check ONE (Or 2 & average) EXTENSIVE >75% [11] MODERATE 25-75% [7] 1 **UNDERCUT BANKS [1]** OXBOWS, BACKWATERS [1] POOLS > 70cm [2] __ 2 **OVERHANGING VEGETATION** [1] 1 **ROOTWADS** [1] **AQUATIC MACROPHYTES [1]** SPARSE 5-<25% [3] SHALLOWS (IN SLOW WATER) [1] □ NEARLY ABSENT <5% [1]</p> **BOULDERS** [1] 2 LOGS OR WOODY DEBRIS [1] **ROOTMATS** [1] 1 Cover Comments Maximum 12 20 3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average) SINUOSITY DEVELOPMENT **CHANNELIZATION** STABILITY EXCELLENT [7] \checkmark **NONE [6]** HIGH [3] MODERATE [3] ✓ GOOD [5] \Box **RECOVERED** [4] $\overline{}$ MODERATE [2] LOW [2] **FAIR** [3] **RECOVERING** [3] LOW [1] Channel **NONE** [1] POOR [1] RECENT OR NO RECOVERY [1] Maximum 16 Comments 20 4] BANK EROSION AND RIPARIAN ZONE Check ONE in each category for EACH BANK (Or 2 per bank & average) River right looking downstream **RIPARIAN WIDTH** FLOOD PLAIN QUALITY EROSION 🗋 🗋 WIDE > 50m [4] FOREST, SWAMP [3] CONSERVATION TILLAGE [1] 🖸 🖸 NONE / LITTLE [3] □ □ SHRUB OR OLD FIELD [2] URBAN OR INDUSTRIAL [0] ✓ ✓ MODERATE 10-50m [3] □ □ MODERATE [2] □ □ NARROW 5-10m [2] ☑ I RESIDENTIAL, PARK, NEW FIELD [1] □ □ MINING / CONSTRUCTION [0] □ □ HEAVY / SEVERE [1] ☑ ☑ VERY NARROW < 5m [1] □ □ FENCED PASTURE [1] Indicate predominant land use(s) OPEN PASTURE, ROWCROP [0] past 100m riparian. Riparian Comments Maximum Buffered by PSS/PEM wetlands in the floodplain, with fallow ag fields (Corn) and pastures beyond. 10 51 POOL / GLIDE AND RIFFLE / RUN QUALITY Recreation Potential MAXIMUM DEPTH **CHANNEL WIDTH CURRENT VELOCITY** Check ONE (ONLY!) Check ONE (Or 2 & average) Check ALL that apply Primary Contact ✓ POOL WIDTH > RIFFLE WIDTH [2] □ TORRENTIAL [-1] □ SLOW [1] 🗌 > 1m [6] Secondary Contact VERY FAST [1] 0.7-<1m [4] POOL WIDTH = RIFFLE WIDTH [1] □ INTERSTITIAL [-1] (circle one and comment on back) ☑ 0.4-<0.7m [2] POOL WIDTH < RIFFLE WIDTH [0]</p> 🗹 FAST [1] INTERMITTENT [-2] 0.2-<0.4m [1] MODERATE [1] EDDIES [1] Pool / □ < 0.2m [0] Indicate for reach - pools and riffles. Current 6 Maximum Comments High flow from rain at time of survey, max pool depth estimated based on assumed base level. 12 Indicate for functional riffles; Best areas must be large enough to support a population NO RIFFLE [metric=0] of riffle-obligate species: Check ONE (Or 2 & average). **RIFFLE DEPTH RUN DEPTH RIFFLE / RUN SUBSTRATE RIFFLE / RUN EMBEDDEDNESS** MAXIMUM > 50cm [2] STABLE (e.g., Cobble, Boulder) [2] BEST AREAS > 10cm [2] **NONE** [2] MAXIMUM < 50cm [1] MOD. STABLE (e.g., Large Gravel) [1] BEST AREAS 5-10cm [1] LOW [1] Riffle / BEST AREAS < 5cm UNSTABLE (e.g., Fine Gravel, Sand) [0] MODERATE [0] [metric=0] Run 3 Comments 8 6] GRADIENT (23.5 VERY LOW - LOW [2-4] ft/mi) 30 %POOL %GLIDE: Gradient **MODERATE** [6-10] 6 **DRAINAGE AREA** Maximum 40 %RIFFLE HIGH - VERY HIGH [10-6] %RUN: 30 mi²) (3.1 10

56

QHEI Score:



ChioEPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3):

SITE NAME/LOCATION SKD001	
SITE NUMBER AEP Kilgore RIVER BASIN 050400010703 DRAINAGE AREA (mi²) 0.0	01
LENGTH OF STREAM REACH (ft) 150 LAT. 40.45833 LONG81.02938 RIVER CODE RIVER MILE	
DATE 04/29/14 SCORER Rod Ginter COMMENTS Steep eph rill from seep, connects to SRG002	
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instru	ctions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING	VERY
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.	HHEI
TYPE PERCENT TYPE PERCENT BLDR SLABS [16 pts] 0% SILT [3 pt] 10%	Metric Points
BOULDER (>256 mm) [16 pts] LEAF PACK/WOODY DEBRIS [3 pts]	Substrate
BEDROCK [16 pt] 0% FINE DETRITUS [3 pts] 0% COBBLE (65-256 mm) [12 pts] 10% CLAY or HARDPAN [0 pt] 0%	Max = 40
GRAVEL (2-64 mm) [9 pts] 0% MUCK [0 pts] 0%	9
SAND (<2 mm) [6 pts]	
Total of Percentages of 10.00% (A) Substrate Percentage 100% (B)	A + B
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 TOTAL NUMBER OF SUBSTRATE TYPES: 3	
2. Maximum Pool Depth (<i>Measure the maximum pool depth within the 61 meter (200 ft)</i> evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check <i>ONLY</i> one box):	Pool Depth Max = 30
> 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	
 > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts] 	5
COMMENTS steady rain, flow higher than normal MAXIMUM POOL DEPTH (centimeters): 4	
3. BANK FULL WIDTH (Measured as the average of 3-4 measurements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Width
$ = 3.0 \text{ m} - 4.0 \text{ m} (> 9' 7" - 13') [25 \text{ pts}] \\ > 1.5 \text{ m} - 3.0 \text{ m} (> 9' 7" - 4' 8") [20 \text{ pts}] \\ = 4.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [5 \text{ pts}] \\ = 3.0 \text{ m} (<=3' 3") [$	Max=30
COMMENTS 0.5 ft OHWM, 1.5 ft. ToBW AVERAGE BANKFULL WIDTH (meters): 0.50	5
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ☆NOTE: River Left (L) and Right (R) as looking downstream ☆	
RIPARIAN WIDTH FLOODPLAIN QUALITY	
L R (Per Bank) L R (Most Predominant per Bank) L R V Wide >10m V Mature Forest, Wetland Conservation Tillage	
Moderate 5-10m Immature Forest, Shrub or Old Urban or Industrial	
Narrow <5m Residential, Park, New Field Open Pasture, Row Crop)
None Fenced Pasture Mining or Construction	
COMMENTS open forest on both sides and new field pasture upslope.	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Moist Channel, isolated pools, no flow (Intermittent)	
Subsurface flow with isolated pools (Interstitial) Dry channel, no water (Ephemeral)	
COMMENTS Flowing during survey due to steady rain.	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): None 1.0 2.0 3.0	
STREAM GRADIENT ESTIMATE	2.60

	DOWNSTREAM DESIGNATED USE(S)	
	Name: Dining Fork of Conotton Creek	Distance from Evaluated Stream
	Name:	Distance from Evaluated Stream Distance from Evaluated Stream
	MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE	
		CS Soil Map Page: NRCS Soil Map Stream Orc
County:	Carroll Township / C	City: Loudon/Kilgore
	MISCELLANEOUS	
Base Flov	v Conditions? (Y/N):_N Date of last precipitation:_ 04/2	/29/14 Quantity: 2.45
Photograp	bh Information: Up, Dn SKD001	
Elevated -	Turbidity? (Y/N): Y Canopy (% open): 20%	1
Were sam	pples collected for water chemistry? (Y/N): _N (Note lab same	nple no. or id. and attach results) Lab Number:
Field Mea		pH (S.U.) Conductivity (µmhos/cm)
	appling reach representative of the stream (Y/N)	
	s from tile along edge of gas pipeline ROW.	
	show the along edge of gas pipeline row.	
1	······································	
Agricultu	ral runoff from former cattle pasture.	
Frogs or I	ID number. Include appropriate field data sheet erved? (Y/N) N Salamanders Observed Tadpoles Observed? (Y/N) N Voucher? (Y/N) Aquatic Mat s Regarding Biology:	ections optional. NOTE: all voucher samples must be labele ets from the Primary Headwater Habitat Assessment Manua ved? (Y/N) N Voucher? (Y/N) N acroinvertebrates Observed? (Y/N) Voucher? (Y/N)
No aqua	tic creatures observed, potential amphibian habitat.	
	DRAWING AND NARRATIVE DESCRIPTION OF S	STDEAM DEACH (This must be completed
Incl	ude important landmarks and other features of interest for site e	· <u> </u>
	78	
11	PHEMORAL N WAA	1
E	WUUDLANDS 7]	DEEPLY
	RULLET DV	& CUTANNEL /
w ->		STRAIGTENS & CUTANNEL
vv 🗢		
		$(\setminus$
	WOODLANDS	

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ChioEPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3):

SITE NAME/LOCATION SKD002 	1
LENGTH OF STREAM REACH (ft) 200 LAT. 40.45659 LONG81.03402 RIVER CODE RIVER MILE	
DATE 04/29/14 SCORER Rod Ginter COMMENTS fenceline ditch from WRG006, connects to SRG001	1
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instruct	tions
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVER MODIFICATIONS:	ERY
	HHEI Metric
BOULDER (>256 mm) [16 pts] 0% Image: Constraint of the state	Points Substrate Max = 40
GRAVEL (2-64 mm) [9 pts] 0% SAND (<2 mm) [6 pts]	9
Total of Percentages of Bidr Slabs, Boulder, Cobble, Bedrock 0.00% (A) Substrate Percentage 100% (B) SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 6 TOTAL NUMBER OF SUBSTRATE TYPES: 3	A + B
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):	ool Depti Max = 30
> 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts] > 22.5 - 30 cm [30 pts] < 5 cm [5 pts]	5
COMMENTS steady rain, flow higher than normal MAXIMUM POOL DEPTH (centimeters): 8	
······································	
= 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	Bankfull Width Max=30
	Width
$ \begin{array}{ c c c c c } \hline & & & & & & & & & & & & & & & & & & $	Width Max=30
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Width Max=30
> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 1.5 ft OHWM, 3.5 ft. ToBW AVERAGE BANKFULL WIDTH (meters): 1.40 Image: State of the state of	Width Max=30
> 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7" - 4' 8") [20 pts] COMMENTS 1.5 ft OHWM, 3.5 ft. ToBW AVERAGE BANKFULL WIDTH (meters): I.40 This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ShortE: River Left (L) and Right (R) as looking downstream ☆ RIPARIAN WIDTH FLOODPLAIN QUALITY L R (Per Bank) L R Moderate 5-10m Immature Forest, Wetland Conservation Tillage Moderate 5-10m Immature Forest, Shrub or Old Urban or Industrial Mature Some (Smother Completed) Field Open Pasture, Row Crop None Yenced Pasture Mining or Construction	Width Max=30
> 3.0 m - 4.0 m (> 9' 7' - 13') [25 pts] > 1.5 m - 3.0 m (> 9' 7' - 4' 8") [20 pts] COMMENTS Ist OHWM, 3.5 ft. ToBW AVERAGE BANKFULL WIDTH (meters): I.40 Intis information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY AVERAGE BANKFULL WIDTH (meters): 1.40 Image: Participation must also be completed RIPARIAN WIDTH FLOOPLAIN QUALITY AVORTE: River Left (L) and Right (R) as looking downstream A RIPARIAN WIDTH FLOODPLAIN QUALITY Image: Participation must also be completed Conservation Tillage Image: Participation must also be completed Image: Participation must also be completed RIPARIAN WIDTH FLOODPLAIN QUALITY AVORTE: River Left (L) and Right (R) as looking downstream A Image: Participation must also be completed Image: Participation must also be completed Image: Participation must also be completed Image: Participation must also be completed RIPARIAN WIDTH FLOOPLAIN QUALITY Image: Participation must also be conservation Tillage Image: Participation must also be completed Image: Participation must also be conservation of Image: Participation of Participation of Participation Image: Participation	Width Max=30

DOWNSTREAM D	ESIGNATED USE(S)				
WWH Name: Dining For	• •		Distance f	rom Evaluated Stream	0.0
			Distance fr	om Evaluated Stream	
EWH Name:			Distance fr	om Evaluated Stream	
MAPPING: ATTAC	H COPIES OF MAPS, INCLUDIN	G THE ENTIRE WAT	RSHED AREA. CLE	ARLY MARK THE SITE L	осатю
USGS Quadrangle Name: S	cio	NRCS So	I Map Page:	NRCS Soil Map Strean	ו Order
County: Carroll		Township / City:	Loudon/Kilgore		
MISCELLANEOUS	3				
		tion: 04/29/1	1 0	· 2.45	
Base Flow Conditions? (Y/N)			• Quantity	2.40	
Photograph Information: _Up	o, Dn SKD002				
Elevated Turbidity? (Y/N):	Y Canopy (% open):	60%			
Were samples collected for v	water chemistry? (Y/N):	(Note lab sample no	. or id. and attach res	sults) Lab Number:	
Field Measures: Temp (°0			S.U.) Cond	ductivity (µmhos/cm)	
	v]			
	entative of the stream (Y/N)	If not, please exp			
Drains PEM wetland W	RG006 to Dining Fork. Ditch a	long pasture fencel	ne, cattle excluded.		
Additional comments/descrip	tion of pollution impacts:				
Agricultural runoff from so					
BIOTIC EVALUAT	_ (If Yes, Record all observations				
Ν	. (If Yes, Record all observations ID number. Include appropriate Voucher? (Y/N) N Salam ? (Y/N) N Voucher? (Y/N) N	e field data sheets fror anders Observed? (`	the Primary Headwa	ter Habitat Assessment M ? (Y/N) N	anual) N
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observed Comments Regarding Biolog	. (If Yes, Record all observations ID number. Include appropriate Voucher? (Y/N) N Salam ? (Y/N) N Voucher? (Y/N) N	e field data sheets fror anders Observed? (` Aquatic Macroinv	n the Primary Headwa //N)N Voucher ertebrates Observed	ter Habitat Assessment M ? (Y/N) N	anual)
Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observed Comments Regarding Biolog	(If Yes, Record all observations ID number. Include appropriate Voucher? (Y/N) N Salam ? (Y/N) N Voucher? (Y/N) N y:	e field data sheets fror anders Observed? (` Aquatic Macroinv	n the Primary Headwa //N)N Voucher ertebrates Observed	ter Habitat Assessment M ? (Y/N) N	anual)
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Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observed Comments Regarding Biolog	(If Yes, Record all observations ID number. Include appropriate Voucher? (Y/N) N Salam ? (Y/N) N Voucher? (Y/N) N y:	e field data sheets fror anders Observed? (Aquatic Macroinv itat. Spring peepers	the Primary Headwa (/N) N Voucher ertebrates Observed s singing nearby.	ter Habitat Assessment M ? (Y/N) N ? (Y/N) N Voucher?	anual) (Y/N)
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Performed? (Y/N): N Fish Observed? (Y/N) Frogs or Tadpoles Observed Comments Regarding Biolog No aquatic creatures obse DRAWING A Include Important land SMRF	If Yes, Record all observations ID number. Include appropriate Voucher? (Y/N) N Salam ? (Y/N) N Voucher? (Y/N) N y: rved, potential amphibian habi	IPTION OF STR Rest for site evaluation Aze and a sheets from Aquatic Macroins itat. Spring peepers IPTION OF STR Rest for site evaluation AZED AS F INTERMIT	A the Primary Headwa (/N) Voucher ertebrates Observed a singing nearby. EAM REACH (The m and a narrative de ASMRC-	ter Habitat Assessment M ? (Y/N) N ? (Y/N) N Voucher?	anual) (Y/N) •ted):

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ChioEPA Primary Headwater Habitat Evaluation Form HHEI Score (sum of metrics 1, 2, 3):

SITE NAME/LOCATION SKD003							
SITE NUMBER AEP Kilgore RIVER BASIN 050400010703 DRAINAGE AREA (mi²) 0.	.15						
LENGTH OF STREAM REACH (ft) 200 LAT. 40.45749 LONG81.03532 RIVER CODE RIVER MILE							
DATE 04/30/14 SCORER KD,RGinter COMMENTS PFO/PEM WRG009 abutting, connects to SRG00	1						
NOTE: Complete All Items On This Form - Refer to "Field Evaluation Manual for Ohio's PHWH Streams" for Instru-	uctions						
STREAM CHANNEL NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO RECOVERING	OVERY						
1. SUBSTRATE (Estimate percent of every type of substrate present. Check ONLY two predominant substrate TYPE boxes (Max of 32). Add total number of significant substrate types found (Max of 8). Final metric score is sum of boxes A & B.	HHEI						
TYPE PERCENT TYPE PERCENT	Metric Points						
BLDR SLABS [16 pts] 0% SILT [3 pt] 10% BOULDER (>256 mm) [16 pts] 0% LEAF PACK/WOODY DEBRIS [3 pts] 10%	FUIIIS						
BEDROCK [16 pt] 0% FINE DETRITUS [3 pts] 0%	Substrate Max = 40						
COBBLE (65-256 mm) [12 pts] 10% CLAY or HARDPAN [0 pt] 40% GRAVEL (2-64 mm) [9 pts] 30% MUCK [0 pts] 0%							
SAND (<2 mm) [6 pts]	14						
Total of Percentages of 10.00% (A) Substrate Percentage 100% (B)	A + B						
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 9 TOTAL NUMBER OF SUBSTRATE TYPES: 5							
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 ft) evaluation reach at the time of	Pool Depth						
evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts] > 5 cm - 10 cm [15 pts]	Max = 30						
 > 22.5 - 30 cm [30 pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0 pts] 	15						
COMMENTS steady rain, flow higher than normal MAXIMUM POOL DEPTH (centimeters): 9							
	Bankfull						
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts]	Width						
> $3.0 \text{ m} - 4.0 \text{ m} (> 9' 7" - 13') [25 \text{ pts}]$ > $1.5 \text{ m} - 3.0 \text{ m} (> 9' 7" - 4' 8") [20 \text{ pts}]$ > $1.5 \text{ m} - 3.0 \text{ m} (> 9' 7" - 4' 8") [20 \text{ pts}]$	Max=30						
COMMENTS Culverts under pipeline access lane, two stream AVERAGE BANKFULL WIDTH (meters): 1.60	20						
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY 상 NOTE: River Left (L) and Right (R) as looking downstream 삶							
RIPARIAN WIDTH FLOODPLAIN QUALITY							
L R (Per Bank) L R (Most Predominant per Bank) L R V Wide >10m V Mature Forest, Wetland Conservation Tillage							
Moderate 5-10m Immature Forest, Shrub or Old Urban or Industrial							
Narrow <5m Residential, Park, New Field Open Pasture, Row Cro	φ						
None Fenced Pasture Mining or Construction							
COMMENTS PFO/PEM wetland abutting, forest and fallow corn field/pasture beyond. Access road.							
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Moist Channel, isolated pools, no flow (Intermittent)							
Subsurface flow with isolated pools (Interstitial) Dry channel, no water (Ephemeral) COMMENTS Flowing heavily during survey due to steady rain.							
None 1.0 2.0 3.0 0.5 1.5 2.5 7 >3							
STREAM GRADIENT ESTIMATE							

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Commission of Ohio Docketing Information System on

5/21/2014 2:08:24 PM

in

Case No(s). 14-0787-EL-BLN

Summary: Letter of Notification Kilgore-Polo Road 138 kV Transmission Line Project (Part 3 of 4) electronically filed by Mr. Yazen Alami on behalf of AEP Ohio Transmission Company