Site: Wetland LP-039	ater(s): MJA		Date: 2021-10-20
29.5 subtotal first page			
0 29.5 Metric 5. Special Wet	tlands.		
max 10 pts. subtotal Check all that apply and score as indicate			
Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary wet Lake Erie coastal/tributary wet Lake Plain Sand Prairies (Oak Relict Wet Prairies (10) Known occurrence state/feder. Significant migratory songbird/ Category 1 Wetland. See Que	cland-unrestricted hydro cland-restricted hydro copenings) (10) al threatened or enda (water fowl habitat or	angered species (10) usage (10)	
3 32.5 Metric 6. Plant comm	nunities int	erspersion microto	nogranhy
max 20 pts. subtotal 6a. Wetland Vegetation Communities.	•	Community Cover Scale	opograpny.
Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	471 acres) contiguous area
0 Aquatic bed	1	Present and either comprises sm	
1 Emergent 0 Shrub		vegetation and is of moderate of significant part but is of low qua	
0 Forest	2	Present and either comprises sig	
0 Mudflats		vegetation and is of moderate of	quality or comprises a small
O Open water O Other	3	part and is of high quality Present and comprises significan	t part or more of wetland's
6b. horizontal (plan view) Interspersion.	3	vegetation and is of high quality	
Select only one.			
High (5)		escription of Vegetation Quality	
Moderately high(4) Moderate (3)	low	Low spp diversity and/or predomi disturbance tolerant native spec	
Moderate (5) Moderately low (2)	mod	Native spp are dominant compon	
X Low (1)		although nonnative and/or distu	•
None (0)		can also be present, and specie	•
6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add		moderately high, but generally threatened or endangered spp	
or deduct points for coverage	high	A predominance of native species	
Extensive >75% cover (-5)		and/or disturbance tolerant nati	
Moderate 25-75% cover (-3)		absent, and high spp diversity a	
Sparse 5-25% cover (-1) Nearly absent <5% cover (0)		the presence of rare, threatener	a, or endangered spp
X Absent (1)	Mudflat and	Open Water Class Quality	
6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
Score all present using 0 to 3 scale.	1 .s 2	Low 0.1 to <1ha (0.247 to 2.47 ac Moderate 1 to <4ha (2.47 to 9.88	
0 Vegetated hummucks/tussuck 0 Coarse woody debris >15cm (High 4ha (9.88 acres) or more	acres)
0 Standing dead >25cm (10in) d	- ,	(c.c.)	
0 Amphibian breeding pools		raphy Cover Scale	
	0	Absent Procent yeary small amounts or if	more common
	1	Present very small amounts or if of marginal quality	more common
	2	Present in moderate amounts, bu	it not of highest
	-	quality or in small amounts of h	ighest quality
	3	Present in moderate or greater ar and of highest quality	mounts
32.5 GRAND TOTAL (max 100 pts)		and or highout quality	

Site: V	Vetlan	d LP-040	Rater(s): MJA		Date: 2021-10-21
1	1	Metric 1. Wetland	Area (size)		
max 6 pts.	subtotal	Select one size class and assign so >50 acres (>20.2ha) (6 p 25 to <50 acres (10.1 to 10 to <25 acres (4 to <10 3 to <10 acres (1.2 to <4 0.3 to <3 acres (0.12 to < 0.1 to <0.3 acres (0.04 to <0.1 acres (0.04 to <0.1 acres (0.04ha) (0 pt	core. ts) <20.2ha) (5 pts) 0.1ha) (4 pts) ha) (3 pts) c1.2ha) (2pts) o <0.12ha) (1 pt)		
8	9	Metric 2. Upland b	uffers and surroun	ding land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width WIDE. Buffers average X MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers average VERY NARROW. Buffers average VERY LOW. Old field (>10 year X MODERATELY HIGH. First	Select only one and assign score. 50m (164ft) or more around wetland ge 25m to <50m (82 to <164ft) around age 10m to <25m (32ft to <82ft) around wetland compared to <25m (32ft to <82ft) around wetland se. Select one or double check and or older forest, prairie, savannah, wrs), shrubland, young second growth tesidential, fenced pasture, park, coopen pasture, row cropping, mining	Do not double check. perimeter (7) nd wetland perimeter (4) bund wetland perimeter (1) land perimeter (0) d average. vildlife area, etc. (7) n forest. (5) nservation tillage, new fallo	
15.5	24.5	Metric 3. Hydrolog	1 1 1 0 0	, construction. (1)	
max 30 pts.	subtotal	3a. Sources of Water. Score all the High pH groundwater (5) Other groundwater (3) X Precipitation (1)	at apply. 3t	Part of wetland/up	in (1) lake and other human use (1) pland (e.g. forest), complex (1)
		X Seasonal/Intermittent sur Perennial surface water (3c. Maximum water depth. Select >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6 X <0.4m (<15.7in) (1)	lake or stream) (5) 30 only one and assign score.	d. Duration inundation/satu Semi- to permane Regularly inundat X Seasonally inundat	
		3e. Modifications to natural hydrolo None or none apparent (Recovered (7) Recovering (3) Recent or no recovery (1	ditch tile		, and the second
7	31.5	Metric 4. Habitat <i>A</i>	Alteration and Deve	lopment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score None or none apparent (x Recovered (3) Recovering (2) Recent or no recovery (1	one or double check and average. 4)	•	
		4b. Habitat development. Select of Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) X Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one of	nly one and assign score.		
SI	31.5	None or none apparent (Recovered (6) X Recovering (3) X Recent or no recovery (1	x mowing grazing	x shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: Wetland LP-040	Rater(s): MJA		Date: 2021-10-21
31.5			
0 31.5 Metric 5. Special We	etlands		
Metric 5. Special Wo max 10 pts. subtotal Check all that apply and score as indice Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary was Lake Plain Sand Prairies (O Relict Wet Prairies (10) Known occurrence state/fed Significant migratory songbi Category 1 Wetland. See Co	retland-unrestricted hydrology retland-restricted hydrology ak Openings) (10) eral threatened or endanger rd/water fowl habitat or usa	ered species (10) ge (10)	
2 33.5 Metric 6. Plant com			pography.
max 20 pts. subtotal 6a. Wetland Vegetation Communities	•	nmunity Cover Scale	L-2. ab
Score all present using 0 to 3 scale.		bsent or comprises <0.1ha (0.24	71 acres) contiguous area
0 Aquatic bed1 Emergent		resent and either comprises sma vegetation and is of moderate qu	•
0 Shrub		significant part but is of low qual	ity
0 Forest		resent and either comprises sign	
0 Mudflats 0 Open water		vegetation and is of moderate quart and is of high quality	uality or comprises a small
0 Open water 0 Other		resent and comprises significant	part, or more, of wetland's
6b. horizontal (plan view) Interspersio		vegetation and is of high quality	F ,
Select only one.	-		
High (5)		ription of Vegetation Quality	
Moderately high(4) Moderate (3)		ow spp diversity and/or predomin disturbance tolerant native spec	
Moderately low (2)		ative spp are dominant compone	_
Low (1)		although nonnative and/or distur	· · ·
X None (0) 6c. Coverage of invasive plants. Refe		can also be present, and specie moderately high, but generally w	•
to Table 1 ORAM long form for list. A		threatened or endangered spp	,,, o p. 0001100 0. 10.0
or deduct points for coverage	high A	predominance of native species	
Extensive >75% cover (-5)		and/or disturbance tolerant nativ	
Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)		absent, and high spp diversity at the presence of rare, threatened	
Nearly absent <5% cover (0		the presence of fare, threatened	i, or endangered spp
X Absent (1)		en Water Class Quality	
6d. Microtopography.		bsent <0.1ha (0.247 acres)	
Score all present using 0 to 3 scale.		ow 0.1 to <1ha (0.247 to 2.47 ac	
0 Vegetated hummucks/tussu 0 Coarse woody debris >15cm		oderate 1 to <4ha (2.47 to 9.88 igh 4ha (9.88 acres) or more	acres)
0 Standing dead >25cm (10in)	. ,	gir and (5.55 deres) or more	
0 Amphibian breeding pools	Microtopograp	ny Cover Scale	
		bsent	
	1 P	resent very small amounts or if n	nore common
	2 P	of marginal quality resent in moderate amounts, but	not of highest
		quality or in small amounts of high	_
		resent in moderate or greater an	
00.5		and of highest quality	
33.5 GRAND TOTAL (max 100 pts)			

Site: Wetland LP-041		Rater(s): MJA		Date: 2021-10-21	
1	1	Metric 1. Wetland A	rea (size).		
max 6 pts.	subtotal	Select one size class and assign score	e. .2ha) (5 pts) .a) (4 pts) (3 pts) .tha) (2pts)		
4	5	Metric 2. Upland but	fers and surrour	nding land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width. S WIDE. Buffers average 50m MEDIUM. Buffers average 2 X NARROW. Buffers average VERY NARROW. Buffers a 2b. Intensity of surrounding land use. VERY LOW. 2nd growth or LOW. Old field (>10 years), X MODERATELY HIGH. Resi	elect only one and assign score on (164ft) or more around wetlan 25m to <50m (82 to <164ft) arou 10m to <25m (32ft to <82ft) ar verage <10m (<32ft) around we	e. Do not double check. d perimeter (7) und wetland perimeter (4) round wetland perimeter (1) etland perimeter (0) nd average. wildlife area, etc. (7) th forest. (5) conservation tillage, new fallo	ow field. (3)
10	15	Metric 3. Hydrology.			
max 30 pts.	subtotal	3a. Sources of Water. Score all that a High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface Perennial surface water (lak 3c. Maximum water depth. Select onl >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (1) X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrologic None or none apparent (12) X Recovered (7) Recovering (3) Recent or no recovery (1)	e water (3) e or stream) (5) y one and assign score. (2) regime. Score one or double or	Part of wetland/up Part of riparian or 3d. Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat X Seasonally satura check and average.	in (1) ake and other human use (1) bland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ed/saturated (3) ated (2) ated in upper 30cm (12in) (1) stormwater)
5	20	Metric 4. Habitat Alt	eration and Deve	elopment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score one None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one or development.	or double check and average. one and assign score.		
	20	None or none apparent (9) Recovered (6) Recovering (3) X Recent or no recovery (1)	Check all disturbances obser x mowing grazing clearcutting selective cutting woody debris removal toxic pollutants	x shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: Wetland LP-041	Rater(s): MJA	Rater(s): MJA	
20 subtotal first page			
0 20 Metric 5. Sr	pecial Wetlands.		
max 10 pts. subtotal Check all that apply an Bog (10) Fen (10) Old growth for Mature fores Lake Erie co Lake Plain S Relict Wet P Known occur Significant m Category 1 V	orest (10) ted wetland (5) astal/tributary wetland-unrestricted h astal/tributary wetland-restricted hyd and Prairies (Oak Openings) (10)	rology (5) dangered species (10) or usage (10)	
-2 18 Metric 6. Pl	ant communities, in	terspersion, microto	opography.
max 20 pts. subtotal 6a. Wetland Vegetatio	•	n Community Cover Scale	- 1 - J - 1 - J
Score all present using		Absent or comprises <0.1ha (0.24	471 acres) contiguous area
0 Aquatic bed 1 Emergent 0 Shrub	1	Present and either comprises sm vegetation and is of moderate of significant part but is of low qua	quality, or comprises a
0 Forest 0 Mudflats 0 Open water	2	Present and either comprises sign vegetation and is of moderate of part and is of high quality	nificant part of wetland's
O Other6b. horizontal (plan vie	ew) Interspersion.	Present and comprises significan vegetation and is of high quality	
Select only one. High (5)	Norrotivo	Description of Vegetation Quality	
Moderately h Moderate (3)	nigh(4) low	Low spp diversity and/or predomi disturbance tolerant native spec	
Moderately to Low (1) X None (0)	ow (2) mod	Native spp are dominant compon although nonnative and/or distu can also be present, and specie	rbance tolerant native spp
6c. Coverage of invasi to Table 1 ORAM long		moderately high, but generally threatened or endangered spp	w/o presence of rare
X Moderate 25 Sparse 5-25	75% cover (-5) -75% cover (-3) % cover (-1)	A predominance of native species and/or disturbance tolerant nati- absent, and high spp diversity a the presence of rare, threatener	ve spp absent or virtually and often, but not always,
Nearly abser Absent (1)	nt <5% cover (0)	nd Open Water Class Quality	
6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
Score all present using		Low 0.1 to <1ha (0.247 to 2.47 ac	cres)
	ummucks/tussucks 2	Moderate 1 to <4ha (2.47 to 9.88	
0 Coarse wood	dy debris >15cm (6in) 3	High 4ha (9.88 acres) or more	
	ad >25cm (10in) dbh reeding pools Microtopo	ography Cover Scale	
o runpriibleir b	0	Absent	
	1	Present very small amounts or if of marginal quality	more common
	2	Present in moderate amounts, bu quality or in small amounts of h	_
	3	Present in moderate or greater ar and of highest quality	
18 GRAND TOTAL (max	100 pts)	and or hightest quality	

Site: V	Vetlan	nd LP-042	Rater(s): MJA		Date: 2021-10-19
2	2	Metric 1. Wetland	Area (size).		
max 6 pts.	subtotal	Select one size class and assign s >50 acres (>20.2ha) (6 p 25 to <50 acres (10.1 to 10 to <25 acres (4 to <10 3 to <10 acres (1.2 to <4 × 0.3 to <3 acres (0.12 to < 0.1 to <0.3 acres (0.04 to <0.1 acres (0.04ha) (0 pi	core. ts) <20.2ha) (5 pts) 0.1ha) (4 pts) ha) (3 pts) <1.2ha) (2pts) 0 <0.12ha) (1 pt)		
9	11	Metric 2. Upland b	uffers and surroun	ding land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width WIDE. Buffers average X MEDIUM. Buffers avera NARROW. Buffers aver VERY NARROW. Buffers 2b. Intensity of surrounding land u VERY LOW. 2nd growth X LOW. Old field (>10 year MODERATELY HIGH. F	Select only one and assign score. 50m (164ft) or more around wetland ge 25m to <50m (82 to <164ft) arou age 10m to <25m (32ft to <82ft) arours average <10m (<32ft) around wet se. Select one or double check and or older forest, prairie, savannah, wars), shrubland, young second growt Residential, fenced pasture, park, coopen pasture, row cropping, mining	Do not double check. d perimeter (7) und wetland perimeter (4) ound wetland perimeter (1) tland perimeter (0) d average. wildlife area, etc. (7) th forest. (5) onservation tillage, new fallo	
8	19	Metric 3. Hydrolog	IV.		
max 30 pts.	subtotal	3a. Sources of Water. Score all the High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent su Perennial surface water 3c. Maximum water depth. Select >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6 X <0.4m (<15.7in) (1)	rface water (3) (lake or stream) (5) 3 only one and assign score.	Part of wetland/up Part of riparian or d. Duration inundation/satu Semi- to permane x Regularly inundat Seasonally inundat Seasonally satura	in (1) lake and other human use (1) pland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl checl ently inundated/saturated (4) ted/saturated (3)
8	27	None or none apparent (Recovered (7) X Recovering (3) Recent or no recovery (1	ditch tile dike weir stormwater input	point source (non filling/grading x road bed/RR tracd dredging other	, and the second
max 20 pts.	subtotal	Metric 4. Habitat A 4a. Substrate disturbance. Score	Alteration and Deve one or double check and average.	lopment.	
		None or none apparent (X Recovered (3) Recovering (2) Recent or no recovery (1 4b. Habitat development. Select of Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) X Poor to fair (2))		
		Poor (1) 4c. Habitat alteration. Score one of			
SI	27	None or none apparent (Recovered (6) X Recovering (3) Recent or no recovery (1	mowing grazing	shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: V	Vetlan	d LP-042	Rater(s): MJA		Date: 2021-10-19
su	27	age			
0	27	Metric 5. Special W	etlands.		
max 10 pts.	subtotal	Check all that apply and score as ind Bog (10)			
		Fen (10) Old growth forest (10) Mature forested wetland (5 Lake Erie coastal/tributary Lake Erie coastal/tributary Lake Plain Sand Prairies (0 Relict Wet Prairies (10) Known occurrence state/fe Significant migratory songb	wetland-unrestricted hydro wetland-restricted hydro Dak Openings) (10) deral threatened or enda bird/water fowl habitat or	angered species (10) usage (10)	
2	29	Metric 6. Plant com	munities int	erspersion microto	onography
max 20 pts.	subtotal	6a. Wetland Vegetation Communitie	-	Community Cover Scale	opograpny.
max 20 pts.	Subtotal	Score all present using 0 to 3 scale.	0	Absent or comprises <0.1ha (0.24	471 acres) contiguous area
		Aquatic bed	1	Present and either comprises sm	all part of wetland's
		1 Emergent		vegetation and is of moderate of	
		0 Shrub 0 Forest	2	significant part but is of low qua Present and either comprises sig	
		0 Mudflats	2	vegetation and is of moderate of	
		0 Open water		part and is of high quality	
		0 Other	_ 3	Present and comprises significan	
		6b. horizontal (plan view) Interspersi Select only one.	on.	vegetation and is of high quality	1
		High (5)	Narrative Do	escription of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predomi	nance of nonnative or
		Moderate (3)		disturbance tolerant native spec	
		Moderately low (2) Low (1)	mod	Native spp are dominant compon although nonnative and/or distu	_
		X None (0)		can also be present, and specie	• • • • • • • • • • • • • • • • • • • •
		6c. Coverage of invasive plants. Re	fer	moderately high, but generally	-
		to Table 1 ORAM long form for list. A		threatened or endangered spp	
		or deduct points for coverage Extensive >75% cover (-5)	high	A predominance of native species	
		Moderate 25-75% cover (-3)	3)	and/or disturbance tolerant nati absent, and high spp diversity a	
		Sparse 5-25% cover (-1)		the presence of rare, threatene	•
		X Nearly absent <5% cover (Absent (1)	•	I Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	cres)
		0 Vegetated hummucks/tuss		Moderate 1 to <4ha (2.47 to 9.88	acres)
		1 Coarse woody debris >15c	` '	High 4ha (9.88 acres) or more	
		Standing dead >25cm (10ing)Amphibian breeding pools		raphy Cover Scale	
		7 mpmblan brooding pools	0	Absent	
			1	Present very small amounts or if	more common
				of marginal quality	a man and helphone
			2	Present in moderate amounts, bu quality or in small amounts of h	_
			3	Present in moderate or greater ar	
				and of highest quality	
29	GRAN	ND TOTAL (max 100 pts)			

Site: V	Vetlar	id L	.P-043	Rater(s): MJA		Date : 2021-10-19
0	0] _M	etric 1. Wetland A	Area (size).		
max 6 pts.	subtotal	Sele	ect one size class and assign sc	s) :20.2ha) (5 pts) 1ha) (4 pts) :a) (3 pts) 1.2ha) (2pts) <0.12ha) (1 pt)		
8	8	M	etric 2. Upland b	uffers and surround	ling land use.	
max 14 pts.	subtotal	2a.	Calculate average buffer width. WIDE. Buffers average 5 X MEDIUM. Buffers averag NARROW. Buffers avera VERY NARROW. Buffers Intensity of surrounding land us VERY LOW. 2nd growth X LOW. Old field (>10 years X MODERATELY HIGH. Re	Select only one and assign score. Om (164ft) or more around wetland pee 25m to <50m (82 to <164ft) around ge 10m to <25m (32ft to <82ft) around severage <10m (<32ft) around wetland pees select one or double check and or older forest, prairie, savannah, will sold shrubland, young second growth desidential, fenced pasture, park, con open pasture, row cropping, mining,	Do not double check. Doerimeter (7) d wetland perimeter (4) and wetland perimeter (1) and perimeter (0) average. Idlife area, etc. (7) forest. (5) servation tillage, new fallo	
10	18	lм	etric 3. Hydrolog	V.		
max 30 pts.	subtotal		Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) × Precipitation (1) Seasonal/Intermittent surf Perennial surface water (la	at apply. 3b. face water (3)	Part of wetland/up Part of riparian or	
			Maximum water depth. Select of >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in x <0.4m (<15.7in) (1) Modifications to natural hydrological selections.	only one and assign score.	Semi- to permane Regularly inundat Seasonally inund X Seasonally satura	ently inundated/saturated (4) ted/saturated (3)
			None or none apparent (1 x Recovered (7) Recovering (3) Recent or no recovery (1)	2) Check all disturbances observe ditch tile dike weir stormwater input	d point source (non filling/grading x road bed/RR trac dredging other_	·
7	25	lм	etric 4. Habitat A	Iteration and Develo	opment.	
max 20 pts.	subtotal			one or double check and average.)	•	
			Habitat development. Select or Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1)	nly one and assign score.		
	25]	Habitat alteration. Score one or None or none apparent (9 Recovered (6) X Recovering (3) Recent or no recovery (1)	Check all disturbances observe mowing grazing	x shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: V	Vetlan	d LP-043	Rater(s): MJA		Date: 2021-10-19
su	25 ubtotal first pa	age			
0	25	Metric 5. Special W	letlands.		
max 10 pts.	subtotal	Check all that apply and score as inc			
		Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5 Lake Erie coastal/tributary Lake Erie coastal/tributary Lake Plain Sand Prairies (10) Known occurrence state/fe Significant migratory songl Category 1 Wetland. See	wetland-unrestricted hyd wetland-restricted hydro Oak Openings) (10) deral threatened or enda bird/water fowl habitat or	angered species (10) usage (10)	
0	25	Metric 6. Plant com	munities int	erenersion microt	nography
	subtotal	6a. Wetland Vegetation Communities	-	Community Cover Scale	opograpity.
max 20 pts.	Subiolai	Score all present using 0 to 3 scale.	os. <u>vegetation</u>	Absent or comprises <0.1ha (0.24	471 acres) contiguous area
		0 Aquatic bed	1	Present and either comprises sm	, ,
		1 Emergent		vegetation and is of moderate of	
		0 Shrub		significant part but is of low qua	
		0 Forest 0 Mudflats	2	Present and either comprises sig vegetation and is of moderate of	
		Open water		part and is of high quality	quality of comprises a small
		0 Other	_ 3	Present and comprises significan	t part, or more, of wetland's
		6b. horizontal (plan view) Interspers	on.	vegetation and is of high quality	1
		Select only one. High (5)	Norrativa D	accription of Vagatation Quality	
		Moderately high(4)	low	escription of Vegetation Quality Low spp diversity and/or predomi	nance of nonnative or
		Moderate (3)		disturbance tolerant native spec	
		Moderately low (2)	mod	Native spp are dominant compon	_
		Low (1)		although nonnative and/or distu	• • • • • • • • • • • • • • • • • • • •
		X None (0) 6c. Coverage of invasive plants. Re	.fer	can also be present, and specie moderately high, but generally	•
		to Table 1 ORAM long form for list.		threatened or endangered spp	m/o procented of fair
		or deduct points for coverage	high	A predominance of native species	
		Extensive >75% cover (-5)		and/or disturbance tolerant nati	• •
		Moderate 25-75% cover (-3	3)	absent, and high spp diversity a the presence of rare, threatene	-
		Nearly absent <5% cover (0)	the presence of fare, threatene	u, or endangered spp
		Absent (1)	•	Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	
		Vegetated hummucks/tussCoarse woody debris >150		Moderate 1 to <4ha (2.47 to 9.88 High 4ha (9.88 acres) or more	acres)
		0 Standing dead >25cm (10i	` '	Trigit and (0.00 dores) of more	
		0 Amphibian breeding pools		raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if	more common
			2	of marginal quality Present in moderate amounts, but	ut not of highest
			4	quality or in small amounts of h	=
			3	Present in moderate or greater a	
25				and of highest quality	
25	GRAN	ND TOTAL (max 100 pts)			

Site: V	Vetlan	nd LP-044	Rater(s): MJA		Date: 2021-10-19
0	0	 Metric 1. Wetland	Area (size).		
max 6 pts.	subtotal	Select one size class and assign >50 acres (>20.2ha) (6 25 to <50 acres (10.1 to 10 to <25 acres (4 to < 3 to <10 acres (1.2 to < 0.3 to <3 acres (0.12 to 0.1 to <0.3 acres (0.04 × <0.1 acres (0.04ha) (0 p	score. pts) o <20.2ha) (5 pts) 10.1ha) (4 pts) 4ha) (3 pts) <1.2ha) (2pts) to <0.12ha) (1 pt)		
8	8	Metric 2. Upland I	ouffers and surrou	nding land use.	
max 14 pts.	subtotal	2a. Calculate average buffer widt WIDE. Buffers average X MEDIUM. Buffers aver NARROW. Buffers aver VERY NARROW. Buffers 2b. Intensity of surrounding land VERY LOW. 2nd grow X LOW. Old field (>10 ye X MODERATELY HIGH.	h. Select only one and assign score 50m (164ft) or more around wetland age 25m to <50m (82 to <164ft) arctrage 10m to <25m (32ft to <82ft) are average <10m (<32ft) around wuse. Select one or double check at or older forest, prairie, savannahmars), shrubland, young second grown Residential, fenced pasture, park, (I, open pasture, row cropping, minim	re. Do not double check. nd perimeter (7) bund wetland perimeter (4) around wetland perimeter (1) vetland perimeter (0) and average. , wildlife area, etc. (7) wth forest. (5) conservation tillage, new fallo	
6	14	Metric 3. Hydrolo	gy.		
max 30 pts.	subtotal	3a. Sources of Water. Score all High pH groundwater (5 Other groundwater (3) X Precipitation (1) Seasonal/Intermittent s Perennial surface water 3c. Maximum water depth. Select >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27. X <0.4m (<15.7in) (1)	that apply. b) urface water (3) (lake or stream) (5) ct only one and assign score.	Part of wetland/up Part of riparian or 3d. Duration inundation/sate Semi- to permane Regularly inundat Seasonally inundat X Seasonally satura	in (1) lake and other human use (1) pland (e.g. forest), complex (1) r upland corridor (1) uration. Score one or dbl checl ently inundated/saturated (4) ted/saturated (3)
7	21	None or none apparent Recovered (7) Recovering (3) Recent or no recovery (ditch tile dike weir stormwater input	point source (non filling/grading x road bed/RR trac dredging other	, and the second second
max 20 pts.	subtotal		Alteration and Develone one or double check and average	•	
		None or none apparent X Recovered (3) Recovering (2) Recent or no recovery (4) 4b. Habitat development. Select Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2)	1)		
		x Poor (1) 4c. Habitat alteration. Score one			
ci	21	None or none apparent Recovered (6) X Recovering (3) Recent or no recovery (mowing grazing	shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	ttic bed removal

Site: Wetland LP-044	Rater(s): MJA	Date: 2021-10-19
21 subtotal first page		
0 24	nocial Wotlands	
	pecial Wetlands.	
Bog (10) Fen (10) Old growth Mature fore Lake Erie c Lake Plain Relict Wet Known occ Significant	forest (10) ested wetland (5) coastal/tributary wetland-unrestricted hydrology sand Prairies (Oak Openings) (10) Prairies (10) urrence state/federal threatened or endange migratory songbird/water fowl habitat or usag Wetland. See Question 1 Qualitative Rating	red species (10) ge (10)
1 22 Metric 6. P	lant communities inter	spersion, microtopography.
mound on a	•	
max 20 pts. subtotal 6a. Wetland Vegetat Score all present usir		nmunity Cover Scale osent or comprises <0.1ha (0.2471 acres) contiguous area
0 Aquatic bed	<u> </u>	resent and either comprises small part of wetland's
1 Emergent		vegetation and is of moderate quality, or comprises a
0 Shrub		significant part but is of low quality
0 Forest		resent and either comprises significant part of wetland's
0 Mudflats 0 Open water		vegetation and is of moderate quality or comprises a small part and is of high quality
0 Other		resent and comprises significant part, or more, of wetland's
6b. horizontal (plan v		vegetation and is of high quality
Select only one.		
High (5)		iption of Vegetation Quality
Moderately Moderate (ow spp diversity and/or predominance of nonnative or disturbance tolerant native species
Moderately	,	ative spp are dominant component of the vegetation,
Low (1)		although nonnative and/or disturbance tolerant native spp
X None (0)		can also be present, and species diversity moderate to
6c. Coverage of inva	•	moderately high, but generally w/o presence of rare
to Table 1 ORAM long or deduct points for co		threatened or endangered spp predominance of native species, with nonnative spp
·	-	and/or disturbance tolerant native spp absent or virtually
		absent, and high spp diversity and often, but not always,
		the presence of rare, threatened, or endangered spp
X Nearly absorption (1)	ent <5% cover (0) Mudflat and One	en Water Class Quality
6d. Microtopography		osent <0.1ha (0.247 acres)
Score all present usir		ow 0.1 to <1ha (0.247 to 2.47 acres)
		oderate 1 to <4ha (2.47 to 9.88 acres)
<u> </u>	ody debris >15cm (6in) 3 Hi ead >25cm (10in) dbh	gh 4ha (9.88 acres) or more
	breeding pools Microtopograph	ny Cover Scale
<u>o jpinoian</u>		psent
		resent very small amounts or if more common
		of marginal quality
		resent in moderate amounts, but not of highest
		quality or in small amounts of highest quality esent in moderate or greater amounts
		and of highest quality
22 GRAND TOTAL (ma	x 100 pts)	

Site: Wetl	and L	.P-045	Rater(s): MJA		Date : 2021-10-19
0 0	Пм	etric 1. Wetland A	rea (size).		
max 6 pts. subto		ect one size class and assign sco	re.) 20.2ha) (5 pts) ha) (4 pts) a) (3 pts) .2ha) (2pts) :0.12ha) (1 pt)		
7 7	Ім	etric 2. Upland bu	iffers and surround	ding land use.	
max 14 pts. subto	otal 2a.	Calculate average buffer width. WIDE. Buffers average 50 X MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers Intensity of surrounding land use VERY LOW. 2nd growth of LOW. Old field (>10 years X MODERATELY HIGH. Re	Select only one and assign score. Im (164ft) or more around wetland to 25m to <50m (82 to <164ft) around to 10m to <25m (32ft to <82ft) around average <10m (<32ft) around wetlar. Select one or double check and or older forest, prairie, savannah, with, shrubland, young second growth sidential, fenced pasture, park, corpen pasture, row cropping, mining,	Do not double check. perimeter (7) Id wetland perimeter (4) und wetland perimeter (1) and perimeter (0) average. Idlife area, etc. (7) forest. (5) Inservation tillage, new fallo	
6 13	3 M	etric 3. Hydrology	<i>1</i> .		
max 30 pts. subto	3a. 3c.	Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surfa Perennial surface water (la Maximum water depth. Select or >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) X <0.4m (<15.7in) (1)	tapply. 3b ace water (3) ke or stream) (5) 3d ally one and assign score. b) (2) ic regime. Score one or double ch	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat X Seasonally satura eck and average.	in (1) lake and other human use (1) cland (e.g. forest), complex (1) cupland corridor (1) uration. Score one or dbl check ently inundated/saturated (4) led/saturated (3)
13 26	∷	None or none apparent (12 Recovered (7) X Recovering (3) Recent or no recovery (1)	ditch tile dike weir stormwater input	point source (non filling/grading road bed/RR track dredging X other_ T-line structure and control of the structure and control of t	k
max 20 pts. subto		letric 4. Habitat Al Substrate disturbance. Score or	teration and Develoe or double check and average.	opment.	
		None or none apparent (4) Recovered (3) X Recovering (2) Recent or no recovery (1) Habitat development. Select onl Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3)			
	4c.	Poor to fair (2) Poor (1) Habitat alteration. Score one or	double check and average.		
26	5	x None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)		x shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: W	etland L	P-045	Rater((s): MJA		Date: 2021-10-19
subt	26					
[0]2	26 _M	etric 5. Sp	ecial Wetlan	ds.		
max 10 pts.		ck all that apply and Bog (10) Fen (10) Old growth for Mature foreste Lake Erie coa Lake Erie coa Lake Plain Sa Relict Wet Pra Known occurr Significant mig	rest (10) ed wetland (5) stal/tributary wetland-ustal/tributary wetland-rendered Prairies (Oak Open	inrestricted hydro estricted hydro ings) (10) atened or enda fowl habitat or	angered species (10) usage (10)	
-4	22 m					an a granday
				-	erspersion, microto	opograpny.
max 20 pts.		Wetland Vegetation re all present using (vegetation 0	Community Cover Scale Absent or comprises <0.1ha (0.2)	471 acres) contiguous area
		0 Aquatic bed		1	Present and either comprises sm	
		1 Emergent			vegetation and is of moderate of	
		0 Shrub 0 Forest		2	significant part but is of low qua Present and either comprises sig	
		0 Forest 0 Mudflats		2	vegetation and is of moderate of	
		0 Open water			part and is of high quality	,
		0 Other		3	Present and comprises significan	
		horizontal (plan vievect only one.	v) Interspersion.		vegetation and is of high quality	У
	3616	High (5)		Narrative D	escription of Vegetation Quality	
		Moderately hig Moderate (3)	gh(4)	low	Low spp diversity and/or predomition disturbance tolerant native spe	
		Moderately lov	w (2)	mod	Native spp are dominant compor	•
		Low (1) X None (0)			although nonnative and/or distuction also be present, and speci-	• • • • • • • • • • • • • • • • • • • •
	6c.	Coverage of invasiv	e plants. Refer		moderately high, but generally	
	to T	able 1 ORAM long fo	orm for list. Add		threatened or endangered spp	
	or d	educt points for cove	•	high	A predominance of native specie	
		X Extensive >75 Moderate 25-7	75% cover (-5)		and/or disturbance tolerant nati absent, and high spp diversity	
		Sparse 5-25%	, ,		the presence of rare, threatene	
			<5% cover (0)			
	64	Absent (1) Microtopography.		Mudflat and	Absent <0.1ha (0.247 acres)	
		re all present using (0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 a	cres)
			mmucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	
			debris >15cm (6in)	3	High 4ha (9.88 acres) or more	
			d >25cm (10in) dbh	Microtopoo	ranhy Cover Scale	
		0 Amphibian bre	caing pools	0	Absent	
				1	Present very small amounts or if	more common
					of marginal quality	
				2	Present in moderate amounts, bu	_
				3	quality or in small amounts of h Present in moderate or greater a	
					and of highest quality	
22	GRAND 1	ΓΟΤΑL (max	100 pts)			

Site: V	Vetlan	d LP-046	Rater(s): MJA		Date: 2021-10-19
	0	Market A National A			
0)	Metric 1. Wetland A	• •		
max 6 pts.	subtotal	Select one size class and assign sco) 20.2ha) (5 pts) ha) (4 pts) a) (3 pts) .2ha) (2pts) :0.12ha) (1 pt)		
7	7	Metric 2. Upland bu	iffers and surround	ing land use.	
max 14 pts.	subtotal	x MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers 2b. Intensity of surrounding land use VERY LOW. 2nd growth of LOW. Old field (>10 years x MODERATELY HIGH. Re	om (164ft) or more around wetland per 25m to <50m (82 to <164ft) around 1e 10m to <25m (32ft to <82ft) around 1e average <10m (<32ft) around wetlar	erimeter (7) wetland perimeter (4) nd wetland perimeter (1) nd perimeter (0) everage. dlife area, etc. (7) everst. (5) ervation tillage, new fallo	ow field. (3)
6.5	13.5	Metric 3. Hydrology	/.		
max 30 pts.	subtotal	3a. Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surfa Perennial surface water (la	tapply. 3b. ace water (3)	Part of wetland/up Part of riparian or	
		3c. Maximum water depth. Select of >0.7 (27.6in) (3)) (2)	Regularly inundat X Seasonally inundat Seasonally satura	
		None or none apparent (12 Recovered (7) Recovering (3) Recent or no recovery (1)	Check all disturbances observed ditch tile dike weir stormwater input	point source (non filling/grading X road bed/RR track dredging X other_Wetland at base of	k
6	19.5	Metric 4. Habitat Al	teration and Develo	pment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score or None or none apparent (4) Recovered (3) X Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select only	•		
		Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1)			
		4c. Habitat alteration. Score one or None or none apparent (9) Recovered (6)	Check all disturbances observed		poval
	19.5	x Recovered (6) x Recovering (3) Recent or no recovery (1)	mowing grazing clearcutting selective cutting woody debris removal	herbaceous/aqua sedimentation dredging farming	tic bed removal
01	ibtotal this na		toxic pollutants	nutrient enrichme	nt

Site: Wetland LP-046	Rater(s): MJA	Date: 2021-10-19
19.5		
0 19.5 Metric 5. Special	Wetlands.	
max 10 pts. subtotal Check all that apply and score as Bog (10) Fen (10) Old growth forest (10) Mature forested wetlan Lake Erie coastal/tribut Lake Plain Sand Prairie Relict Wet Prairies (10)	indicated. d (5) ary wetland-unrestricted hydrology (10 ary wetland-restricted hydrology (5) s (Oak Openings) (10)	
	e/federal threatened or endangered sp ngbird/water fowl habitat or usage (10	
	ee Question 1 Qualitative Rating (-10)
<u> </u>	· · · · · · · · · · · · · · · · · · ·	ersion, microtopography.
max 20 pts. subtotal 6a. Wetland Vegetation Commu		
Score all present using 0 to 3 sca		or comprises <0.1ha (0.2471 acres) contiguous area t and either comprises small part of wetland's
1 Emergent	, , , , , , , , , , , , , , , , , , , ,	ation and is of moderate quality, or comprises a
0 Shrub	signif	icant part but is of low quality
0 Forest		t and either comprises significant part of wetland's
0 Mudflats	_	ation and is of moderate quality or comprises a small
0 Open water 0 Other		and is of high quality t and comprises significant part, or more, of wetland's
6b. horizontal (plan view) Intersp		ation and is of high quality
Select only one.		<u> </u>
High (5)		n of Vegetation Quality
Moderately high(4)		p diversity and/or predominance of nonnative or
Moderate (3) Moderately low (2)		bance tolerant native species spp are dominant component of the vegetation,
Low (1)		ugh nonnative and/or disturbance tolerant native spp
X None (0)		Iso be present, and species diversity moderate to
6c. Coverage of invasive plants.		rately high, but generally w/o presence of rare
to Table 1 ORAM long form for lis or deduct points for coverage		tened or endangered spp ominance of native species, with nonnative spp
Extensive >75% cover X Moderate 25-75% cover Sparse 5-25% cover (-	(-5) and/o abser	or disturbance tolerant native spp absent or virtually only and high spp diversity and often, but not always, resence of rare, threatened, or endangered spp
Nearly absent <5% cov		,
Absent (1)	Mudflat and Open W	
6d. Microtopography.		<0.1ha (0.247 acres)
Score all present using 0 to 3 sca		te 1 to <4ha (2.47 to 2.47 acres)
0 Coarse woody debris >		na (9.88 acres) or more
0 Standing dead >25cm	, ,	
0 Amphibian breeding po		
	0 Absent	
		t very small amounts or if more common orginal quality
		t in moderate amounts, but not of highest
		y or in small amounts of highest quality
	3 Present	t in moderate or greater amounts
17.5 GRAND TOTAL (max 100 pt	and o	f highest quality
T TO A GRAND TO LAT (Max 100 b)	.5 <i>)</i>	

Site: V	Vetlan	d LP-04/	Rater(s): MJA		Date: 2021-10-19
	\cap	1			
U	U	Metric 1. Wetland A	•		
max 6 pts.	subtotal	Select one size class and assign sco >50 acres (>20.2ha) (6 pts 25 to <50 acres (10.1 to <2 10 to <25 acres (4 to <10.1 3 to <10 acres (1.2 to <4ha 0.3 to <3 acres (0.12 to <1 0.1 to <0.3 acres (0.04 to < × <0.1 acres (0.04ha) (0 pts)) 20.2ha) (5 pts) ha) (4 pts) a) (3 pts) .2ha) (2pts) :0.12ha) (1 pt)		
7	7	Metric 2. Upland bu	iffers and surround	ing land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width. WIDE. Buffers average 50 X MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers 2b. Intensity of surrounding land use VERY LOW. 2nd growth of LOW. Old field (>10 years X MODERATELY HIGH. Re	Select only one and assign score. It im (164ft) or more around wetland per 25m to <50m (82 to <164ft) around the 10m to <25m (32ft to <82ft) arourd average <10m (<32ft) around wetlar	Do not double check. erimeter (7) wetland perimeter (4) nd wetland perimeter (1) nd perimeter (0) everage. dlife area, etc. (7) ervation tillage, new fallo	ow field. (3)
15	22	Metric 3. Hydrology	/.		
max 30 pts.	subtotal	3a. Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface Perennial surface water (la 3c. Maximum water depth. Select or >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) (1) 3e. Modifications to natural hydrolog X None or none apparent (12 Recovered (7) Recovering (3)	tapply. 3b. since water (3) ke or stream) (5) 3d. nly one and assign score. 1) (2) ic regime. Score one or double che	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat X Seasonally saturack and average.	in (1) lake and other human use (1) lake and other human use (1) land (e.g. forest), complex (1) lupland corridor (1) luration. Score one or dbl check. lently inundated/saturated (4) led/saturated (3) lated (2) lated in upper 30cm (12in) (1)
7	29	Recent or no recovery (1) Metric 4. Habitat Al	dike weir stormwater input	road bed/RR traced dredging other	ζ
max 20 pts.	subtotal	4a. Substrate disturbance. Score or None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select on Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one or None or none apparent (9)	to be or double check and average. The or double check and average. The check all disturbances observed.		
	29	Recovered (6) X Recovering (3) Recent or no recovery (1)	mowing grazing clearcutting selective cutting woody debris removal toxic pollutants	x shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: Wetland LP-047		Rater(s): MJA	Date: 2021-10-19		
su	29 btotal first p	age			
0	29	Metric 5. Special	Wetlands.		
max 10 pts.	subtotal	Check all that apply and score as i			
		Bog (10) Fen (10) Old growth forest (10) Mature forested wetland Lake Erie coastal/tributa Lake Erie coastal/tributa Lake Plain Sand Prairies Relict Wet Prairies (10) Known occurrence state Significant migratory sor	(5) ry wetland-unrestricted hydro ry wetland-restricted hydro	angered species (10)	
-4	25	Motrio 6 Plant as	mmunities int	archardian miarat	onography
				erspersion, microt	opograpny.
max 20 pts.	subtotal	6a. Wetland Vegetation Communi Score all present using 0 to 3 scale		Community Cover Scale Absent or comprises < 0.1ha (0.2)	2/71 acres) contiguous area
		O Aquatic bed	e. <u> </u>	Present and either comprises sn	
		1 Emergent	,	vegetation and is of moderate	•
		0 Shrub		significant part but is of low qu	
		0 Forest	2	Present and either comprises sign	
		0 Mudflats		vegetation and is of moderate	quality or comprises a small
		Open water		part and is of high quality	
		0 Other	3	Present and comprises significa	
		6b. horizontal (plan view) Interspe	rsion.	vegetation and is of high qualit	У
		Select only one. High (5)	Narrative D	escription of Vegetation Quality	
		Moderately high(4)	low	Low spp diversity and/or predom	inance of nonnative or
		Moderate (3)		disturbance tolerant native spe	
		Moderately low (2)	mod	Native spp are dominant compo	nent of the vegetation,
		Low (1)		although nonnative and/or dist	urbance tolerant native spp
		X None (0)		can also be present, and spec	ies diversity moderate to
		6c. Coverage of invasive plants. I		moderately high, but generally	
		to Table 1 ORAM long form for list		threatened or endangered spp	
		or deduct points for coverage	high	A predominance of native specie	
		X Extensive >75% cover (-	,	and/or disturbance tolerant na	• • • • • • • • • • • • • • • • • • • •
		Moderate 25-75% cover Sparse 5-25% cover (-1)	` '	absent, and high spp diversity the presence of rare, threaten	-
		Nearly absent <5% cover		the presence of rare, threatene	eu, or endangered spp
		Absent (1)	` '	d Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scale	e. 1	Low 0.1 to <1ha (0.247 to 2.47 a	icres)
		0 Vegetated hummucks/tu		Moderate 1 to <4ha (2.47 to 9.8	8 acres)
		O Coarse woody debris >1		High 4ha (9.88 acres) or more	
		0 Standing dead >25cm (1			
		Amphibian breeding poor		graphy Cover Scale	
			0	Absent Present very small amounts or it	more common
			I	Present very small amounts or it of marginal quality	more common
			2	Present in moderate amounts, b	ut not of highest
			_	quality or in small amounts of	
			3	Present in moderate or greater a	
				and of highest quality	
25	GRAN	ND TOTAL (max 100 pts	s)		
•		-			

Site: V	Vetlan	d LP-048	Rater(s): MJA		Date: 2021-10-19
0	0	Matria 1 Watland A	(rec (circ)		
)	Metric 1. Wetland A	•		
max 6 pts.	subtotal	Select one size class and assign sco >50 acres (>20.2ha) (6 pts 25 to <50 acres (10.1 to <2 10 to <25 acres (4 to <10.7) 3 to <10 acres (1.2 to <4ha 0.3 to <3 acres (0.12 to <1 0.1 to <0.3 acres (0.04 to <1 × <0.1 acres (0.04ha) (0 pts)) 20.2ha) (5 pts) Iha) (4 pts) a) (3 pts) .2ha) (2pts) :0.12ha) (1 pt)		
7	7	Metric 2. Upland bu	iffers and surround	ing land use.	
max 14 pts.	subtotal	x MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers 2b. Intensity of surrounding land use VERY LOW. 2nd growth of LOW. Old field (>10 years x MODERATELY HIGH. Re	om (164ft) or more around wetland posts to <50m (82 to <164ft) around pe 10m to <25m (32ft to <82ft) arour average <10m (<32ft) around wetlar	erimeter (7) I wetland perimeter (4) nd wetland perimeter (1) nd perimeter (0) average. dlife area, etc. (7) forest. (5) servation tillage, new fallo	ow field. (3)
10	17	Metric 3. Hydrology	/.		
max 30 pts.	subtotal	3a. Sources of Water. Score all tha High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surface Perennial surface water (la 3c. Maximum water depth. Select or >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrology	t apply. 3b. ace water (3) ke or stream) (5) nly one and assign score. 3d.	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat X Seasonally satura	in (1) lake and other human use (1) pland (e.g. forest), complex (1) rupland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ted/saturated (3)
7	24	None or none apparent (12 X Recovered (7) Recovering (3) Recent or no recovery (1)	Check all disturbances observed ditch tile dike weir stormwater input	point source (non filling/grading x road bed/RR track dredging other_	
1	24	Metric 4. Habitat Al	teration and Develo	opment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score or None or none apparent (4) X Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select on Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one or	ly one and assign score. double check and average.		
	24	None or none apparent (9) Recovered (6) X Recovering (3) Recent or no recovery (1)	Check all disturbances observed mowing grazing clearcutting selective cutting woody debris removal toxic pollutants	x shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: Wetland LP-048	ter(s): MJA		Date: 2021-10-19
24			
subtotal first page			
0 24 Metric 5. Special Wet	lands.		
max 10 pts. subtotal Check all that apply and score as indicate	ed.		
Bog (10)			
Fen (10) Old growth forest (10)			
Mature forested wetland (5)			
Lake Erie coastal/tributary wetla	•		
Lake Erie coastal/tributary wetla		logy (5)	
Lake Plain Sand Prairies (Oak (Openings) (10)		
Known occurrence state/federa	I threatened or enda	angered species (10)	
Significant migratory songbird/v			
Category 1 Wetland. See Ques	stion 1 Qualitative R	ating (-10)	
-4 20 Metric 6. Plant comm	!(!!		
mound of Flank domini	-	•	opograpny.
max 20 pts. subtotal 6a. Wetland Vegetation Communities.		Community Cover Scale	474\tim
Score all present using 0 to 3 scale. O Aquatic bed	0	Absent or comprises <0.1ha (0.24) Present and either comprises small	, ,
1 Emergent	•	vegetation and is of moderate of	
0 Shrub		significant part but is of low qua	
0 Forest	2	Present and either comprises sign	
0 Mudflats 0 Open water		vegetation and is of moderate of part and is of high quality	juality or comprises a small
O Open water O Other	3	Present and comprises significan	t part, or more, of wetland's
6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	
Select only one.			
High (5) Moderately high(4)	Narrative D	escription of Vegetation Quality Low spp diversity and/or predomin	nance of nannative or
Moderate (3)	IOW	disturbance tolerant native spec	
Moderately low (2)	mod	Native spp are dominant component	
Low (1)		although nonnative and/or distu	• • • • • • • • • • • • • • • • • • • •
X None (0)		can also be present, and species moderately high, but generally was	•
6c. Coverage of invasive plants. Refer to Table 1 ORAM long form for list. Add		threatened or endangered spp	w/o presence or rare
or deduct points for coverage	high	A predominance of native species	s, with nonnative spp
X Extensive >75% cover (-5)		and/or disturbance tolerant nativ	• •
Moderate 25-75% cover (-3)		absent, and high spp diversity a	-
Sparse 5-25% cover (-1) Nearly absent <5% cover (0)	-	the presence of rare, threatened	a, or endangered spp
Absent (1)	Mudflat and	d Open Water Class Quality	
6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	
0 Vegetated hummucks/tussucks 0 Coarse woody debris >15cm (6		Moderate 1 to <4ha (2.47 to 9.88 High 4ha (9.88 acres) or more	acres)
0 Standing dead >25cm (10in) db	·	Trigit ma (e.ee deree) et mere	
0 Amphibian breeding pools	Microtopog	raphy Cover Scale	
	0	Absent	
	1	Present very small amounts or if of marginal quality	more common
	2	Present in moderate amounts, bu	t not of highest
		quality or in small amounts of h	_
	3	Present in moderate or greater ar	nounts
20 CRAND TOTAL (****** 400 **(*)		and of highest quality	
20 GRAND TOTAL (max 100 pts)			

Site: V	Vetlan	d LP-049	Rater(s): MJA		Date: 2021-10-19
0	0	Metric 1. Wetland A	roa (sizo)		
<u> </u>			• •		
max 6 pts.	subtotal	Select one size class and assign sco) 20.2ha) (5 pts) ha) (4 pts) ı) (3 pts) .2ha) (2pts)		
10	10	Metric 2. Upland bu	iffers and surround	ing land use.	
max 14 pts.	subtotal	MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers 2b. Intensity of surrounding land use VERY LOW. 2nd growth of LOW. Old field (>10 years X MODERATELY HIGH. Re	m (164ft) or more around wetland point (25m to <50m (82 to <164ft) around the 10m to <25m (32ft to <82ft) around average <10m (<32ft) around wetlard. Select one or double check and are older forest, prairie, savannah, wild), shrubland, young second growth fisidential, fenced pasture, park, consider forest.	erimeter (7) wetland perimeter (4) nd wetland perimeter (1) nd perimeter (0) everage. dlife area, etc. (7) everyation tillage, new fallo	ow field. (3)
			pen pasture, row cropping, mining, c	construction. (1)	
16.5	16.5	Metric 3. Hydrology	1_		
max 30 pts.	subtotal	3a. Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) X Precipitation (1)	apply. 3b.		117
		Seasonal/Intermittent surfare Perennial surface water (la 3c. Maximum water depth. Select of >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in)	ke or stream) (5) 3d. nly one and assign score.	Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat X Seasonally inundation	upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ed/saturated (3) ated (2)
		x <0.4m (<15.7in) (1) 3e. Modifications to natural hydrolog None or none apparent (12 Recovered (7) X Recovering (3) Recent or no recovery (1)		ck and average.	k
7	23.5	Metric 4. Habitat Al	teration and Develo	pment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score or None or none apparent (4) Recovered (3) X Recovering (2) Recent or no recovery (1)	ne or double check and average.		
		4b. Habitat development. Select onl Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) X Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or	•		
		None or none apparent (9) Recovered (6) X Recovering (3) Recent or no recovery (1)	Check all disturbances observed mowing grazing clearcutting	x shrub/sapling rem herbaceous/aqua sedimentation	
	23.5		selective cutting woody debris removal toxic pollutants	dredging farming nutrient enrichme	nt

Site: Wetland LP-049	Rater(s): MJA	Date: 2021-10-19
23.5 subtotal first page		
0 23.5 Metric 5. Special V	Vetlands.	
max 10 pts. subtotal Check all that apply and score as in Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (Lake Erie coastal/tributary Lake Plain Sand Prairies Relict Wet Prairies (10)	dicated. 5) 7 wetland-unrestricted hydrology (10) 7 wetland-restricted hydrology (5) (Oak Openings) (10)	
	ederal threatened or endangered species (10) pbird/water fowl habitat or usage (10)	
2 20.5	e Question 1 Qualitative Rating (-10) nmunities, interspersion	, microtopography.
max 20 pts. subtotal 6a. Wetland Vegetation Communiti		
Score all present using 0 to 3 scale. O Aquatic bed 1 Emergent	1 Present and either	es <0.1ha (0.2471 acres) contiguous area comprises small part of wetland's s of moderate quality, or comprises a
0 Shrub 0 Forest 0 Mudflats	2 Present and either	ut is of low quality comprises significant part of wetland's s of moderate quality or comprises a small
0 Open water 0 Other		rises significant part, or more, of wetland's
Select only one.	Namedia Bassinia of Vand	attan Ovalita
High (5) Moderately high(4) Moderate (3)		ation Quality and/or predominance of nonnative or rant native species
Moderately low (2) Low (1) X None (0)	although nonnati	minant component of the vegetation, ive and/or disturbance tolerant native sppetent, and species diversity moderate to
6c. Coverage of invasive plants. R to Table 1 ORAM long form for list.	efer moderately high, Add threatened or en	but generally w/o presence of rare dangered spp
or deduct points for coverage X Extensive >75% cover (-5 Moderate 25-75% cover (Sparse 5-25% cover (-1)	and/or disturbanda) absent, and high	f native species, with nonnative spp ce tolerant native spp absent or virtually spp diversity and often, but not always, rare, threatened, or endangered spp
Nearly absent <5% cover Absent (1)	(0) Mudflat and Open Water Class	Quality
6d. Microtopography.	0 Absent <0.1ha (0.	
Score all present using 0 to 3 scale.		0.247 to 2.47 acres)
0 Vegetated hummucks/tus 0 Coarse woody debris >15		na (2.47 to 9.88 acres) res) or more
0 Standing dead >25cm (10	•	
1 Amphibian breeding pools		
		amounts or if more common
		ity ite amounts, but not of highest Il amounts of highest quality
	3 Present in modera	te or greater amounts
20.5 GRAND TOTAL (max 100 pts)	

Site: V	Vetlan	<u>d L</u>	P-050	Rater(s): MJA		Date: 2021-10-19
2	2	Me	etric 1. Wetland A	rea (size).		
max 6 pts.	subtotal	4	>50 acres (>20.2ha) (6 pts) >50 acres (>20.2ha) (6 pts) 25 to <50 acres (10.1 to <2) 10 to <25 acres (4 to <10.1 3 to <10 acres (1.2 to <4ha x 0.3 to <3 acres (0.12 to <1 0.1 to <0.3 acres (0.04 to < <0.1 acres (0.04ha) (0 pts)	re.) (0.2ha) (5 pts) ha) (4 pts) () (3 pts) (2ha) (2pts)		
13	15	lме	etric 2. Upland bu	ffers and surround	ling land use.	
max 14 pts.	subtotal	2a.	Calculate average buffer width. X WIDE. Buffers average 50 MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers Intensity of surrounding land use X VERY LOW. 2nd growth o X LOW. Old field (>10 years MODERATELY HIGH. Res	Select only one and assign score. Im (164ft) or more around wetland p 25m to <50m (82 to <164ft) around e 10m to <25m (32ft to <82ft) around average <10m (<32ft) around wetland. Select one or double check and a rolder forest, prairie, savannah, will, shrubland, young second growth sidential, fenced pasture, park, conspen pasture, row cropping, mining, one	Do not double check. berimeter (7) d wetland perimeter (4) nd wetland perimeter (1) nd perimeter (0) average. dlife area, etc. (7) forest. (5) servation tillage, new fallo	
17	32] М4	etric 3. Hydrology	, , , , , , , , , , , , , , , , , , , ,		
max 30 pts.	subtotal		Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) Precipitation (1) Seasonal/Intermittent surfa	apply. 3b.	x Part of wetland/up	
		3c.	Perennial surface water (la Maximum water depth. Select or >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) X <0.4m (<15.7in) (1)	ke or stream) (5) 3d. nly one and assign score.	Duration inundation/satu Semi- to permane X Regularly inundat Seasonally inund	uration. Score one or dbl checkently inundated/saturated (4) ed/saturated (3)
		3e.	Modifications to natural hydrolog None or none apparent (12 Recovered (7) Recovering (3) Recent or no recovery (1)	cic regime. Score one or double che Check all disturbances observed ditch tile dike weir stormwater input		, <u> </u>
9	41] М	etric 4. Habitat Al	teration and Develo	opment	
max 20 pts.	subtotal	4	Substrate disturbance. Score on None or none apparent (4) Recovered (3) Recovering (2)			
			Recent or no recovery (1) Habitat development. Select onl Excellent (7) Very good (6) Good (5) Moderately good (4) X Fair (3) Poor to fair (2) Poor (1)			
٩	41]	Habitat alteration. Score one or None or none apparent (9) Recovered (6) X Recovering (3) Recent or no recovery (1)	Check all disturbances observed mowing grazing X clearcutting selective cutting woody debris removal toxic pollutants	shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: Wetland LP-050 R			Rater(s): MJA	Rater(s): MJA		
	41					
subto	otal first pa	age				
0 4	11	Metric 5. Special V	Vetlands.			
max 10 pts.	subtotal	Check all that apply and score as in	dicated.			
		Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (Lake Erie coastal/tributary Lake Erie coastal/tributary Lake Plain Sand Prairies Relict Wet Prairies (10) Known occurrence state/f Significant migratory song Category 1 Wetland. See	wetland-unrestricted hydrowetland-restricted hydrometric (Oak Openings) (10) ederal threatened or enclosing/water fowl habitat of	dangered species (10) or usage (10)		
2 4	43		•.•			
	+0			terspersion, microto	opography.	
max 20 pts.	subtotal	6a. Wetland Vegetation Communiti		Community Cover Scale	474	
		Score all present using 0 to 3 scale. O Aquatic bed	0	Absent or comprises <0.1ha (0.2 Present and either comprises sm		
		1 Emergent	•	vegetation and is of moderate of		
		0 Shrub		significant part but is of low qua		
		0 Forest	2	Present and either comprises sig		
		0 Mudflats		vegetation and is of moderate of	quality or comprises a small	
		Open water Other	3	part and is of high quality Present and comprises significan	t nart or more of wetland's	
		6b. horizontal (plan view) Interspers		vegetation and is of high quality		
		Select only one.				
		High (5)		Description of Vegetation Quality		
		Moderate (3)	low	Low spp diversity and/or predomi		
		Moderate (3) Moderately low (2)	mod	Native spp are dominant compon		
		Low (1)	mod	although nonnative and/or distu	_	
		X None (0)		can also be present, and specie	•	
		6c. Coverage of invasive plants. R		moderately high, but generally	w/o presence of rare	
		to Table 1 ORAM long form for list. or deduct points for coverage	Add high	threatened or endangered spp A predominance of native specie	s with nannative enn	
		Extensive >75% cover (-5		and/or disturbance tolerant nati	• • • • • • • • • • • • • • • • • • • •	
		Moderate 25-75% cover (absent, and high spp diversity a		
		Sparse 5-25% cover (-1)		the presence of rare, threatene	d, or endangered spp	
		Nearly absent <5% cover	• •	d Ones Weter Oless Ossilites		
		Absent (1) 6d. Microtopography.	<u>Mudilat ar</u> 0	Absent <0.1ha (0.247 acres)		
		Score all present using 0 to 3 scale.		Low 0.1 to <1ha (0.247 to 2.47 ac	cres)	
		0 Vegetated hummucks/tus		Moderate 1 to <4ha (2.47 to 9.88		
		O Coarse woody debris >15		High 4ha (9.88 acres) or more		
		O Standing dead >25cm (10				
		1 Amphibian breeding pools	o <u>Microtopo</u>	graphy Cover Scale Absent		
			1	Present very small amounts or if	more common	
				of marginal quality		
			2	Present in moderate amounts, bu		
				quality or in small amounts of h		
			3	Present in moderate or greater at and of highest quality	mounts	
43 la	RAN	ID TOTAL (max 100 pts		and or highlost quality		
		(,			

Site: VV	etian	d LP-051	Rater(s): MJA		Date: 2021-10-18
	0	Matria 4 Matlered A	(-i)		
		Metric 1. Wetland A	• •		
max 6 pts.	subtotal	Select one size class and assign sco >50 acres (>20.2ha) (6 pts 25 to <50 acres (10.1 to <2 10 to <25 acres (4 to <10.1 3 to <10 acres (1.2 to <4ha 0.3 to <3 acres (0.12 to <1 0.1 to <0.3 acres (0.04 to < × <0.1 acres (0.04ha) (0 pts)) 20.2ha) (5 pts) ha) (4 pts) a) (3 pts) .2ha) (2pts) :0.12ha) (1 pt)		
11	11	Metric 2. Upland bu	iffers and surround	ing land use.	
max 14 pts.	subtotal	MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers 2b. Intensity of surrounding land use VERY LOW. 2nd growth of X LOW. Old field (>10 years X MODERATELY HIGH. Re	Im (164ft) or more around wetland p 25m to <50m (82 to <164ft) around 1e 10m to <25m (32ft to <82ft) around average <10m (<32ft) around wetla	erimeter (7) I wetland perimeter (4) nd wetland perimeter (1) nd perimeter (0) average. dlife area, etc. (7) forest. (5) servation tillage, new fallo	ow field. (3)
8	19	Metric 3. Hydrology	<i>1</i> .		
max 30 pts.	subtotal	3a. Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surfa Perennial surface water (la 3c. Maximum water depth. Select o X >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in <0.4m (<15.7in) (1) 3e. Modifications to natural hydrolog None or none apparent (12 Recovered (7) X Recovering (3) Recent or no recovery (1)	ide tapply. Index water (3) Index or stream) (5) Index or stream) (6) Index or stream) (7) I	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat X Seasonally saturatick and average. point source (non filling/grading road bed/RR track dredging	in (1) lake and other human use (1) cland (e.g. forest), complex (1) cupland corridor (1) curation. Score one or dbl check. ently inundated/saturated (4) led/saturated (3) lated (2) lated in upper 30cm (12in) (1) stormwater)
6	25	Metric 4. Habitat Al	teration and Develo	pment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score or None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select on Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one or None or none apparent (9) Recovered (6) X Recovering (3)	double check and average. Check all disturbances observed mowing grazing	x shrub/sapling rem herbaceous/aqua	
	25	Recent or no recovery (1)	clearcutting selective cutting woody debris removal toxic pollutants	sedimentation dredging farming nutrient enrichme	nt

Site: Wetland LP-051	Rater(s): MJA	Date: 2021-10-18
25		
subtotal first page		
0 25 Metric 5. Special We	etlands.	
max 10 pts. subtotal Check all that apply and score as indic	ated.	
Bog (10)		
Fen (10) Old growth forest (10)		
Mature forested wetland (5)		
	etland-unrestricted hydrology (10)	
Lake Erie coastal/tributary w Lake Plain Sand Prairies (O	etland-restricted hydrology (5)	
Relict Wet Prairies (10)	ak Opermigs) (10)	
	eral threatened or endangered species (10)
	rd/water fowl habitat or usage (10)	
Category 1 Wetland. See Q	uestion 1 Qualitative Rating (-10)	
I-4 21 Metric 6 Plant com	munities, interspersio	n microtonography
max 20 pts. subtotal 6a. Wetland Vegetation Communities	•	
Score all present using 0 to 3 scale.		prises <0.1ha (0.2471 acres) contiguous area
0 Aquatic bed		her comprises small part of wetland's
1 Emergent 0 Shrub	_	d is of moderate quality, or comprises a
0 Shrub 0 Forest		rt but is of low quality her comprises significant part of wetland's
0 Mudflats		d is of moderate quality or comprises a small
Open water	part and is of	
0 Other6b. horizontal (plan view) Interspersion		mprises significant part, or more, of wetland's d is of high quality
Select only one.	vogotation an	a to or riight quality
High (5)	Narrative Description of Veg	
Moderately high(4) Moderate (3)		ty and/or predominance of nonnative or plerant native species
Moderately low (2)		dominant component of the vegetation,
Low (1)		native and/or disturbance tolerant native spp
X None (0)		resent, and species diversity moderate to
6c. Coverage of invasive plants. Refe to Table 1 ORAM long form for list. Ac		gh, but generally w/o presence of rare endangered spp
or deduct points for coverage		e of native species, with nonnative spp
X Extensive >75% cover (-5)		pance tolerant native spp absent or virtually
Moderate 25-75% cover (-3) Sparse 5-25% cover (-1)		igh spp diversity and often, but not always, of rare, threatened, or endangered spp
Nearly absent <5% cover (0)		or rare, tilleateried, or endangered spp
Absent (1)	Mudflat and Open Water Cla	ss Quality
6d. Microtopography.	0 Absent <0.1ha	
Score all present using 0 to 3 scale. O Vegetated hummucks/tussu		a (0.247 to 2.47 acres) <4ha (2.47 to 9.88 acres)
0 Coarse woody debris >15cm		· · · · · · · · · · · · · · · · · · ·
0 Standing dead >25cm (10in)		
Amphibian breeding pools	Microtopography Cover Sca	le
	0 Absent 1 Present very sn	nall amounts or if more common
	of marginal qu	
		erate amounts, but not of highest
		mall amounts of highest quality
	and of highes	erate or greater amounts t quality
21 GRAND TOTAL (max 100 pts)		

Site: V	Vetlan	d LP-052	Rater(s): MJA		Date: 2021-10-18
0	0	Metric 1. Wetland	Area (size).		
max 6 pts.	subtotal	Select one size class and assign si >50 acres (>20.2ha) (6 p 25 to <50 acres (10.1 to 10 to <25 acres (4 to <10 3 to <10 acres (1.2 to <4 0.3 to <3 acres (0.12 to < 0.1 to <0.3 acres (0.04 to <0.1 acres (0.	core. tts) <20.2ha) (5 pts) 0.1ha) (4 pts) ha) (3 pts) <1.2ha) (2pts) o <0.12ha) (1 pt)		
11	11	Metric 2. Upland b	uffers and surround	ding land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width X WIDE. Buffers average MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers average VERY NARROW. Buffers average VERY LOW. Old field (>10 year X MODERATELY HIGH. First	Select only one and assign score. 50m (164ft) or more around wetland ge 25m to <50m (82 to <164ft) arour age 10m to <25m (32ft to <82ft) arours average <10m (<32ft) around wetlese. Select one or double check and or older forest, prairie, savannah, wars), shrubland, young second growth Residential, fenced pasture, park, coropen pasture, row cropping, mining	Do not double check. If perimeter (7) Ind wetland perimeter (4) Dound wetland perimeter (1) Itland perimeter (0) Itland perimeter (0) Itland average. Itland area, etc. (7) Itland forest. (5) Inservation tillage, new fallo	
12	23	Metric 3. Hydrolog	IV.		
max 30 pts.	subtotal	3a. Sources of Water. Score all the High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent sure Perennial surface water (3) 3c. Maximum water depth. Select x >0.7 (27.6in) (3)	rface water (3) (lake or stream) (5) 30 only one and assign score.	Part of wetland/up Part of riparian or d. Duration inundation/sate Semi- to permane Regularly inundat	in (1) lake and other human use (1) pland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl checl ently inundated/saturated (4) ted/saturated (3)
		0.4 to 0.7m (15.7 to 27.6 <0.4m (<15.7in) (1) 3e. Modifications to natural hydrole	in) (2) ogic regime. Score one or double ch		ated (2) ated in upper 30cm (12in) (1)
		None or none apparent (X Recovered (7) Recovering (3) Recent or no recovery (1	12) Check all disturbances observed ditch tile		, and the second
7	30	Metric 4. Habitat <i>A</i>	Alteration and Devel	lopment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score None or none apparent (Recovered (3) Recovering (2) Recent or no recovery (1 4b. Habitat development. Select of Excellent (7) Very good (6)	4)		
		Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one of			
ci	30	None or none apparent (Recovered (6) Recovering (3) Recent or no recovery (1	mowing grazing	x shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: Wetland LP-052	Rater(s): MJA	Date: 2021-10-18
30 subtotal first page		
0 30 Metric 5. Special W	/etlands.	
max 10 pts. subtotal Check all that apply and score as income Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5) Lake Erie coastal/tributary Lake Plain Sand Prairies (10) Known occurrence state/fe	dicated. i) wetland-unrestricted hydrology (10) wetland-restricted hydrology (5)	
-4 26 Metric 6. Plant com	nmunities, interspersion, n	nicrotopography.
max 20 pts. subtotal 6a. Wetland Vegetation Communitie	•	. • • •
Score all present using 0 to 3 scale.		:0.1ha (0.2471 acres) contiguous area
0 Aquatic bed		nprises small part of wetland's
1 Emergent	vegetation and is of	moderate quality, or comprises a
0 Shrub	significant part but is	of low quality
0 Forest	2 Present and either cor	nprises significant part of wetland's
0 Mudflats	vegetation and is of	moderate quality or comprises a small
0 Open water	part and is of high qu	
0 Other	The state of the s	s significant part, or more, of wetland's
6b. horizontal (plan view) Interspers	ion. vegetation and is of	high quality
Select only one.		.
High (5)	Narrative Description of Vegetation	
Moderately high(4) Moderate (3)		or predominance of nonnative or
Moderately low (2)	disturbance tolerant mod Native spp are domina	ant component of the vegetation,
Low (1)	* *	and/or disturbance tolerant native spp
X None (0)		and species diversity moderate to
6c. Coverage of invasive plants. Re	· · · · · · · · · · · · · · · · · · ·	generally w/o presence of rare
to Table 1 ORAM long form for list.		
or deduct points for coverage		tive species, with nonnative spp
X Extensive >75% cover (-5)	·	olerant native spp absent or virtually
Moderate 25-75% cover (-		o diversity and often, but not always,
Sparse 5-25% cover (-1)		, threatened, or endangered spp
Nearly absent <5% cover ((0)	
Absent (1)	Mudflat and Open Water Class Qua	
6d. Microtopography.	0 Absent <0.1ha (0.247	acres)
Score all present using 0 to 3 scale.	1 Low 0.1 to <1ha (0.24)	·
0 Vegetated hummucks/tuss		
O Coarse woody debris >15c		or more
0 Standing dead >25cm (10i		
0 Amphibian breeding pools	Microtopography Cover Scale	
	0 Absent 1 Present very small am	ounts or if more common
	-	ounts or if more common
	of marginal quality Present in moderate a	mounts, but not of highest
		_
	3 Present in moderate o	nounts of highest quality
	and of highest qualit	-
26 GRAND TOTAL (max 100 pts)		y

Site: V	Vetlan	d LP-053	Rater(s): MJA		Date: 2021-10-18
2	2	Metric 1. Wetland A	Area (size).		
max 6 pts.	subtotal	Select one size class and assign scores (>20.2ha) (6 pts 25 to <50 acres (10.1 to < 10 to <25 acres (4 to <10. 3 to <10 acres (0.12 to <4h × 0.3 to <3 acres (0.04 to <0.1 acres (0.04ha) (0 pts <0.1 acres (0.04ha) (0 pts	ore. s) 20.2ha) (5 pts) 1ha) (4 pts) a) (3 pts) 1.2ha) (2pts) <0.12ha) (1 pt)		
11	13	Metric 2. Upland bu	uffers and surrou	nding land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width. X	Select only one and assign sco 0m (164ft) or more around wetla e 25m to <50m (82 to <164ft) ar ge 10m to <25m (32ft to <82ft) a average <10m (<32ft) around w	re. Do not double check. Ind perimeter (7) Ind perimeter (4) Ind wetland perimeter (4) Ind wetland perimeter (1) Ind wetland perimeter (0) Ind average. Ind wildlife area, etc. (7) Ind with forest. (5) Ind conservation tillage, new fallo	ow field. (3)
15	28	Metric 3. Hydrolog	V		
max 30 pts.	subtotal	3a. Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surf Perennial surface water (li	at apply.	Part of wetland/up Part of riparian or 3d. Duration inundation/satu	in (1) ake and other human use (1) bland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check.
		3c. Maximum water depth. Select of x >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in <0.4m (<15.7in) (1) 3e. Modifications to natural hydrological control of the control of	n) (2)	Regularly inundat Seasonally inundat Seasonally satura	` ,
		None or none apparent (1 X Recovered (7) Recovering (3) Recent or no recovery (1)			·
8	36	Metric 4. Habitat A	Iteration and Dev	elopment.	
max 20 pts.	subtotal	4a. Substrate disturbance. Score o None or none apparent (4 Recovered (3) Recovering (2)	ne or double check and average	-	
		Recent or no recovery (1) 4b. Habitat development. Select or Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) X Poor to fair (2) Poor (1) 4c. Habitat alteration. Score one or			
	36	None or none apparent (9 Recovered (6) X Recovering (3) Recent or no recovery (1)		x shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: V	/etlan	d LP-0)53	Rater(s	s): MJA		Date: 2021-10-18
sul	36 btotal first pa	age					
0	36	 Metri	ic 5. Special V	Vetland	ds.		
max 10 pts.	subtotal		that apply and score as inc Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (stake Erie coastal/tributary Lake Erie coastal/tributary Lake Plain Sand Prairies (Relict Wet Prairies (10) Known occurrence state/ft Significant migratory song Category 1 Wetland. See	5) y wetland-un y wetland-res (Oak Openir ederal threat bird/water fo	restricted hydro stricted hydro igs) (10) tened or enda owl habitat or	angered species (10) usage (10)	
-3	33	Metri	ic 6. Plant con	nmunit	ies, int	erspersion, microto	opography.
max 20 pts.	subtotal	4	and Vegetation Communition		-	Community Cover Scale	
			present using 0 to 3 scale.		0	Absent or comprises <0.1ha (0.2	471 acres) contiguous area
		0	Aquatic bed		1	Present and either comprises sm	
		1	Emergent			vegetation and is of moderate of	quality, or comprises a
		0	Shrub			significant part but is of low qua	ality
		0	Forest		2	Present and either comprises sig	nificant part of wetland's
		0	Mudflats			vegetation and is of moderate of	quality or comprises a small
		0	Open water			part and is of high quality	
		0	Other	_	3	Present and comprises significan	
			ontal (plan view) Interspers	sion.		vegetation and is of high quality	У
		Select on	·				
			High (5)			escription of Vegetation Quality	
			Moderately high(4)		low	Low spp diversity and/or predomi	
			Moderate (3)			disturbance tolerant native spe	
			Moderately low (2) Low (1)		mod	Native spp are dominant compon although nonnative and/or distu	
		V	None (0)			can also be present, and specie	• • • • • • • • • • • • • • • • • • • •
		6c Cove	rage of invasive plants. Re	efer		moderately high, but generally	•
			1 ORAM long form for list.			threatened or endangered spp	
			points for coverage	7144	high	A predominance of native specie	
		X	Extensive >75% cover (-5)	9	and/or disturbance tolerant nati	
			Moderate 25-75% cover (-			absent, and high spp diversity	
			Sparse 5-25% cover (-1)	-,		the presence of rare, threatene	
			Nearly absent <5% cover	(0)			
			Absent (1)		Mudflat and	d Open Water Class Quality	
		6d. Micro	otopography.		0	Absent <0.1ha (0.247 acres)	
		Score all	present using 0 to 3 scale.		1	Low 0.1 to <1ha (0.247 to 2.47 ac	cres)
		0	Vegetated hummucks/tus		2	Moderate 1 to <4ha (2.47 to 9.88	3 acres)
		0	Coarse woody debris >15		3	High 4ha (9.88 acres) or more	
		0	Standing dead >25cm (10				
		1	Amphibian breeding pools	;		raphy Cover Scale	
					0	Absent	
					1	Present very small amounts or if	more common
						of marginal quality	that of high sai
					2	Present in moderate amounts, bu	_
						quality or in small amounts of h	
					3	Present in moderate or greater a	mounts
22	OD 44	וח דמד	"Al /ma ass 400 sa4 = 1			and of highest quality	
၂၁၁	GKAN	וטו שו	AL (max 100 pts))			

Site: V	Vetlan	d LP-054	Rater(s): MJA		Date: 2021-10-18
0	0	Motric 1 Wotland A	roa (sizo)		
<u> </u>	_	Metric 1. Wetland A	•		
max 6 pts.	subtotal	Select one size class and assign sco) 0.2ha) (5 pts) ha) (4 pts)) (3 pts) 2ha) (2pts)		
11	11	Metric 2. Upland bu	ffers and surround	ing land use.	
max 14 pts.	subtotal	MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers 2b. Intensity of surrounding land use VERY LOW. 2nd growth o X LOW. Old field (>10 years X MODERATELY HIGH. Res	m (164ft) or more around wetland per 25m to <50m (82 to <164ft) around e 10m to <25m (32ft to <82ft) arour average <10m (<32ft) around wetlar	erimeter (7) wetland perimeter (4) nd wetland perimeter (1) nd perimeter (0) everage. dlife area, etc. (7) ervation tillage, new fallo	ow field. (3)
6	17	Metric 3. Hydrology	/.		
max 30 pts.	subtotal	3a. Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surfa Perennial surface water (la 3c. Maximum water depth. Select or >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrolog None or none apparent (12 Recovered (7) X Recovering (3)	apply. 3b. ce water (3) ke or stream) (5) 3d. nly one and assign score. (2) c regime. Score one or double checked.	Part of wetland/up Part of riparian or Duration inundation/sate Semi- to permane Regularly inundat Seasonally inundat X Seasonally satura ck and average. point source (non filling/grading	in (1) lake and other human use (1) pland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ted/saturated (3) ated (2) ated in upper 30cm (12in) (1)
5	22	Recent or no recovery (1) Metric 4. Habitat Al	dike weir stormwater input teration and Develo	road bed/RR trac dredging other	k
max 20 pts.	subtotal	4a. Substrate disturbance. Score on None or none apparent (4) Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select onl Excellent (7) Very good (6) Good (5)	e or double check and average.		
	22	Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one or one apparent (9) Recovered (6) Recovering (3) X Recent or no recovery (1)	double check and average. Check all disturbances observed mowing grazing clearcutting selective cutting woody debris removal	x shrub/sapling rem herbaceous/aqua sedimentation dredging farming	
S.	ubtotal this po		toxic pollutants	nutrient enrichme	nt

Site: V	Vetlan	d LP-054	Rater(s): MJA		Date: 2021-10-18
sı	22 ubtotal first pa	age			
0	22	Metric 5. Special	Wetlands.		
max 10 pts.	subtotal	Check all that apply and score as Bog (10) Fen (10) Old growth forest (10)	indicated.		
			ry wetland-unrestricted hyd ry wetland-restricted hydrol	•	
		Significant migratory sor	/federal threatened or enda ngbird/water fowl habitat or ee Question 1 Qualitative R	usage (10)	
-4	18		•	erspersion, microto	opography.
max 20 pts.	subtotal	6a. Wetland Vegetation CommunScore all present using 0 to 3 scal		Community Cover Scale Absent or comprises < 0.1ha (0.24)	171 acres) contiguous area
		Aquatic bed	1	Present and either comprises sm	
		1 Emergent		vegetation and is of moderate of	
		0 Shrub		significant part but is of low qua	•
		0 Forest	2	Present and either comprises sign	
		0 Mudflats0 Open water		vegetation and is of moderate of part and is of high quality	quality or comprises a small
		0 Other	3	Present and comprises significan	t part, or more, of wetland's
		6b. horizontal (plan view) Interspe	ersion.	vegetation and is of high quality	
		Select only one.	Norrativa D	accription of Vagatation Quality	
		High (5) Moderately high(4)	low	Low spp diversity and/or predomi	nance of nonnative or
		Moderate (3)		disturbance tolerant native spec	
		Moderately low (2)	mod	Native spp are dominant compon	ent of the vegetation,
		Low (1)		although nonnative and/or distu	• • • • • • • • • • • • • • • • • • • •
		X None (0) 6c. Coverage of invasive plants.	Pefer	can also be present, and species moderately high, but generally was	•
		to Table 1 ORAM long form for list		threatened or endangered spp	
		or deduct points for coverage	high	A predominance of native species	
		X Extensive >75% cover (and/or disturbance tolerant nation	
		Moderate 25-75% cover	, ,	absent, and high spp diversity a	
		Sparse 5-25% cover (-1) Nearly absent <5% cover		the presence of rare, threatened	u, or endangered spp
		Absent (1)	` '	Open Water Class Quality	
		6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
		Score all present using 0 to 3 scal		Low 0.1 to <1ha (0.247 to 2.47 ac	
		Vegetated hummucks/tuCoarse woody debris >1		Moderate 1 to <4ha (2.47 to 9.88 High 4ha (9.88 acres) or more	acres)
		0 Standing dead >25cm (` '	riigii 4na (5.55 aoi 63) oi moic	
		Amphibian breeding poor	•	raphy Cover Scale	
			0	Absent	
			1	Present very small amounts or if	more common
			2	of marginal quality Present in moderate amounts, but	ut not of highest
			4	quality or in small amounts of h	=
			3	Present in moderate or greater ar	
10				and of highest quality	
18	GRAN	ND TOTAL (max 100 pt	s)		

Site: Wetlan	d LP-055	Rater(s): MJA		Date: 2021-10-18
0 0	Metric 1. Wetland A	rea (size).		
max 6 pts. subtotal	Select one size class and assign sco >50 acres (>20.2ha) (6 pts 25 to <50 acres (10.1 to <2 10 to <25 acres (4 to <10.1 3 to <10 acres (1.2 to <4ha 0.3 to <3 acres (0.12 to <1 0.1 to <0.3 acres (0.04 to < × <0.1 acres (0.04ha) (0 pts)	re.) 20.2ha) (5 pts) ha) (4 pts) i) (3 pts) .2ha) (2pts) :0.12ha) (1 pt)		
111 111	Metric 2. Upland bเ	iffers and surroundi	ing land use.	
max 14 pts. subtotal	2a. Calculate average buffer width. X WIDE. Buffers average 50 MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers 2b. Intensity of surrounding land use VERY LOW. 2nd growth of X LOW. Old field (>10 years X MODERATELY HIGH. Re	Select only one and assign score. D m (164ft) or more around wetland pe 25m to <50m (82 to <164ft) around e 10m to <25m (32ft to <82ft) around average <10m (<32ft) around wetlan	o not double check. erimeter (7) wetland perimeter (4) d wetland perimeter (1) d perimeter (0) verage. life area, etc. (7) prest. (5) ervation tillage, new fallow	w field. (3)
6 17	Metric 3. Hydrology	<i>1</i> .		
max 30 pts. subtotal	3a. Sources of Water. Score all that High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surfa Perennial surface water (la 3c. Maximum water depth. Select o >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in) X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrolog	capply. 3b. since water (3) ke or stream) (5) 3d. nly one and assign score. (2) ic regime. Score one or double checked.	Part of wetland/upl Part of riparian or u Duration inundation/satur Semi- to permaner Regularly inundate Seasonally inundat X Seasonally saturat	n (1) ake and other human use (1) land (e.g. forest), complex (1) upland corridor (1) ration. Score one or dbl check ntly inundated/saturated (4) ed/saturated (3)
7 24	None or none apparent (12 Recovered (7) X Recovering (3) Recent or no recovery (1)	ditch tile dike weir stormwater input	point source (nons filling/grading x road bed/RR track dredging other	,
max 20 pts. subtotal	Metric 4. Habitat Al 4a. Substrate disturbance. Score or		pment.	
	None or none apparent (4) X Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select onless Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3)			
	Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one or	double check and average.		
24	None or none apparent (9) Recovered (6) Recovering (3) Recent or no recovery (1)	Check all disturbances observed mowing grazing clearcutting selective cutting woody debris removal toxic pollutants	x shrub/sapling remonstrates herbaceous/aquati sedimentation dredging farming nutrient enrichmen	ic bed removal

Site: Wetland LP-055 Rat	er(s): MJA		Date: 2021-10-18
24			
subtotal first page			
0 24 Metric 5. Special Wetl	ands.		
max 10 pts. subtotal Check all that apply and score as indicated			
Bog (10)			
Fen (10) Old growth forest (10)			
Mature forested wetland (5)			
Lake Erie coastal/tributary wetla	•	• , ,	
Lake Erie coastal/tributary wetla	-	ology (5)	
Lake Plain Sand Prairies (Oak C Relict Wet Prairies (10)	ppenings) (10)		
Known occurrence state/federal	threatened or enda	angered species (10)	
Significant migratory songbird/w			
Category 1 Wetland. See Ques	tion 1 Qualitative R	Rating (-10)	
-4 20 Metric 6. Plant commi	initiae int	archardian migrate	nogranhy
mound of Triant Commit	-	•	pograpny.
max 20 pts. subtotal 6a. Wetland Vegetation Communities. Score all present using 0 to 3 scale.	vegetation 0	Community Cover Scale Absent or comprises <0.1ha (0.24)	171 acres) contiguous area
Q Aquatic bed	1	Present and either comprises small	, ,
1 Emergent		vegetation and is of moderate of	
0 Shrub	2	significant part but is of low qua	
0 Forest 0 Mudflats	2	Present and either comprises sign vegetation and is of moderate of	
0 Open water		part and is of high quality	aanty or comprised a circum
0 Other	3	Present and comprises significan	
6b. horizontal (plan view) Interspersion.		vegetation and is of high quality	1
Select only one. High (5)	Narrative D	escription of Vegetation Quality	
Moderately high(4)	low	Low spp diversity and/or predomin	nance of nonnative or
Moderate (3)		disturbance tolerant native spec	
Moderately low (2) Low (1)	mod	Native spp are dominant compon- although nonnative and/or distu	_
X None (0)		can also be present, and specie	• • • • • • • • • • • • • • • • • • • •
6c. Coverage of invasive plants. Refer		moderately high, but generally v	w/o presence of rare
to Table 1 ORAM long form for list. Add	h: ala	threatened or endangered spp	
or deduct points for coverage X Extensive >75% cover (-5)	high	A predominance of native species and/or disturbance tolerant native	
Moderate 25-75% cover (-3)		absent, and high spp diversity a	
Sparse 5-25% cover (-1)		the presence of rare, threatened	d, or endangered spp
Nearly absent <5% cover (0) Absent (1)	Mudflat and	d Open Water Class Quality	
6d. Microtopography.	0	Absent <0.1ha (0.247 acres)	
Score all present using 0 to 3 scale.	1	Low 0.1 to <1ha (0.247 to 2.47 ac	cres)
0 Vegetated hummucks/tussucks	2	Moderate 1 to <4ha (2.47 to 9.88	acres)
0 Coarse woody debris >15cm (6i 0 Standing dead >25cm (10in) dbl		High 4ha (9.88 acres) or more	
0 Standing dead >25cm (10in) dbl		raphy Cover Scale	
<u> </u>	0	Absent	
	1	Present very small amounts or if	more common
	2	of marginal quality Present in moderate amounts, bu	t not of highest
	2	quality or in small amounts of h	_
	3	Present in moderate or greater ar	
20		and of highest quality	
20 GRAND TOTAL (max 100 pts)			

Site: V	Vetlan	d LP-056	Rater(s): MJA		Date: 2021-08-09
2	2	Metric 1. Wetland A	rea (size)		
max 6 pts.	subtotal	Select one size class and assign sco >50 acres (>20.2ha) (6 pts 25 to <50 acres (10.1 to <2 10 to <25 acres (4 to <10.1 3 to <10 acres (1.2 to <4ha × 0.3 to <3 acres (0.12 to <1 0.1 to <0.3 acres (0.04 to < <0.1 acres (0.04ha) (0 pts)	ore.) 20.2ha) (5 pts) (ha) (4 pts) a) (3 pts) (.2ha) (2pts) (-0.12ha) (1 pt)		
8	10	Metric 2. Upland bu	iffers and surround	ing land use.	
max 14 pts.	subtotal	2a. Calculate average buffer width. WIDE. Buffers average 50 X MEDIUM. Buffers average NARROW. Buffers average VERY NARROW. Buffers 2b. Intensity of surrounding land use VERY LOW. 2nd growth of X MODERATELY HIGH. Re	Select only one and assign score. E om (164ft) or more around wetland per 225m to <50m (82 to <164ft) around 19e 10m to <25m (32ft to <82ft) around average <10m (<32ft) around wetlar	Do not double check. Do not double check. Do not double check. Do not double check. Do wetland perimeter (4) Do d wetland perimeter (1) Do perimeter (0) Do verage. Unified area, etc. (7) Do rest. (5) Do revation tillage, new fallo	ow field. (3)
6	16	Metric 3. Hydrology	/.		
max 30 pts.	subtotal	3a. Sources of Water. Score all tha High pH groundwater (5) Other groundwater (3) X Precipitation (1) Seasonal/Intermittent surfa Perennial surface water (la 3c. Maximum water depth. Select o >0.7 (27.6in) (3) 0.4 to 0.7m (15.7 to 27.6in X <0.4m (<15.7in) (1) 3e. Modifications to natural hydrolog None or none apparent (12 Recovered (7) X Recovering (3) Recent or no recovery (1)	t apply. 3b. ace water (3) lke or stream) (5) 3d. nly one and assign score. (2) Check all disturbances observed ditch tile dike	Part of wetland/up Part of riparian or Duration inundation/satu Semi- to permane Regularly inundat Seasonally inundat X Seasonally saturack and average. point source (non filling/grading road bed/RR trace)	in (1) ake and other human use (1) bland (e.g. forest), complex (1) upland corridor (1) uration. Score one or dbl check. ently inundated/saturated (4) ed/saturated (3) ated (2) ated in upper 30cm (12in) (1) stormwater)
7	23	 Metric 4. Habitat Al	weir stormwater input	dredging other	
max 20 pts.	subtotal	4a. Substrate disturbance. Score or None or none apparent (4) X Recovered (3) Recovering (2) Recent or no recovery (1) 4b. Habitat development. Select on Excellent (7) Very good (6) Good (5) Moderately good (4) Fair (3) Poor to fair (2) X Poor (1) 4c. Habitat alteration. Score one or	ne or double check and average.		
	23	Recovered (6) X Recovering (3) Recent or no recovery (1)	x mowing grazing clearcutting selective cutting woody debris removal toxic pollutants	x shrub/sapling rem herbaceous/aqua sedimentation dredging farming nutrient enrichme	tic bed removal

Site: Wetland LP-0)56	Rater(s): MJA		Date: 2021-08-09
23 subtotal first page				
10 23 Metri	ic 5. Special W	etlands.		
	that apply and score as ind			
	Bog (10) Fen (10) Old growth forest (10) Mature forested wetland (5 Lake Erie coastal/tributary Lake Erie coastal/tributary Lake Plain Sand Prairies (0 Relict Wet Prairies (10) Known occurrence state/fe Significant migratory songt Category 1 Wetland. See) wetland-unrestricted hyd wetland-restricted hydrol Dak Openings) (10) deral threatened or enda bird/water fowl habitat or	logy (5) Ingered species (10) usage (10)	
0 23 Metri	is 6 Diant sam	munitiaa int	oroporojop miorote	anagraphy
		•	erspersion, microto	opograpny.
	and Vegetation Communitie		Community Cover Scale	474 cores) contiguous ores
Score all	present using 0 to 3 scale. Aquatic bed	0	Absent or comprises <0.1ha (0.24) Present and either comprises sm	
1	Emergent	'	vegetation and is of moderate of	
0	Shrub		significant part but is of low qua	
0	Forest	2	Present and either comprises sig	
0	Mudflats		vegetation and is of moderate of	quality or comprises a small
0	Open water	3	part and is of high quality	t nort or more of wetlendle
6b horiz	Other ontal (plan view) Interspersi	_	Present and comprises significan vegetation and is of high quality	
Select on			regetation and to entire quality	
	High (5)	Narrative De	escription of Vegetation Quality	
	Moderately high(4)	low	Low spp diversity and/or predomi	
	Moderate (3)	mod	disturbance tolerant native spec	
	Moderately low (2) Low (1)	mod	Native spp are dominant compon although nonnative and/or distu	
X	None (0)		can also be present, and specie	· · ·
6c. Cove	erage of invasive plants. Re	fer	moderately high, but generally	w/o presence of rare
	1 ORAM long form for list. A		threatened or endangered spp	
or deduct	t points for coverage	high	A predominance of native species	· · · · · · · · · · · · · · · · · · ·
	Extensive >75% cover (-5) Moderate 25-75% cover (-3	8)	and/or disturbance tolerant nati absent, and high spp diversity a	
X	Sparse 5-25% cover (-1)	•)	the presence of rare, threatene	
	Nearly absent <5% cover (0)		
	Absent (1)		Open Water Class Quality	
	otopography.	0	Absent <0.1ha (0.247 acres)	2700)
Score all	present using 0 to 3 scale. Vegetated hummucks/tuss	ucks <u>1</u>	Low 0.1 to <1ha (0.247 to 2.47 ac Moderate 1 to <4ha (2.47 to 9.88	
0	Coarse woody debris >15c		High 4ha (9.88 acres) or more	o dorco)
0	Standing dead >25cm (10i	` '	, , , , , , , , , , , , , , , , , , ,	
0	Amphibian breeding pools	Microtopog	raphy Cover Scale	
		0	Absent	
		1	Present very small amounts or if	more common
		2	of marginal quality Present in moderate amounts, but	ut not of highest
		4	quality or in small amounts of h	=
		3	Present in moderate or greater ar	
22			and of highest quality	
∠෮ GRAND TOT	AL (max 100 pts)			





Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

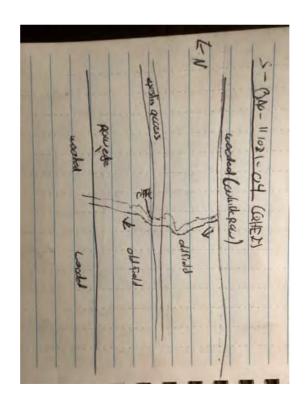


Stream & Location: Stream LP-01	Leroy Center-Mayfiel	ld 138 kV Transmissior	n Line Project /	<i>PM:</i> 3 <i>L</i>	<i>Date:</i> 11/10/21
S-BAO-111021-04	Scoi	rers Full Name &		.0	Jacobs
	STORET #:	Lat./Long.: — (NAD 83 - decimal °)	41.66905	/ -81.14287	Office verified location
1] SUBSTRATE Check ONLY Two subsestimate % or note ever	strate TYPE BOXES;		Check ONE	E (Or 2 & average)	
BEST TYPES □ □ BLDR /SLABS [10] □ □ BOULDER [9] □ □ COBBLE [8] □ □ GRAVEL [7] □ □ SAND [6] □ □ BEDROCK [5]	OTHER TYPES P HARDPAN [4] DETRITUS [3] MUCK [2] SILT [2] ARTIFICIAL [0] (Score natural sub	LIME LIME LIME LIME	TLANDS [0] DPAN [0] DSTONE [0]	SILT MO	ENSIVE [-2] DERATE [-1]
NUMBER OF BEST TYPES: ☐ 4 o Comments	r more [2] sludge from p r less [0]	SHA	USTURINE [0] L LE [-1] L FINES [-2]	NOI	RMAL [0] 20 NE [1]
2] ///STREAM COVER Indicate prese quality; 2-Mod quality; 3-Highest quality in moderate or gr diameter log that is stable, well developed 0 UNDERCUT BANKS [1] 2 OVERHANGING VEGETATION [1] 1 SHALLOWS (IN SLOW WATER) [1] 0 ROOTMATS [1]	lerate amounts, but not deater amounts (e.g., ver) rootwad in deep / fast wide of the proof of t	of highest quality or in some particular of deep states, or deep, well-defined [2] 0 OXBOWS OAQUATION AQUATION OXBOWS OAQUATION OXBOWS OAQUATI	small amounts of help or fast water. Iai	highest rge Check Ol ols. EXTEN	MOUNT NE (Or 2 & average) ISIVE >75% [11] RATE 25-75% [7] SE 5-<25% [3] LY ABSENT <5% [1] Cover Maximum 9
-					20
3] CHANNEL MORPHOLOGY Check SINUOSITY DEVELOPMENT	k ONE in each category CHANNELIZA		ABILITY		
Image: Sindostif of the properties	□ NONE [6] ☑ RECOVERED [4] □ RECOVERING [3] □ RECENT OR NO F	□ HI ☑ M: □ L0	ABILITY IGH [3] ODERATE [2] OW [1]		Channel Maximum 20
4] BANK EROSION AND RIPARIA	AN ZONE Check ONE	in each category for E	ACH BANK (Or 2	per bank & averag	e)
EROSION WIDE > NONE / LITTLE [3]	ATE 10-50m [3]	FLOOD PL. FOREST, SWAMP [: SHRUB OR OLD FIL RESIDENTIAL, PAR FENCED PASTURE OPEN PASTURE, R	ELD [2] K, NEW FIELD [1] : [1]	CONSER	
					10
Check ONE (ONLY!) Check ON □ > 1m [6] ☑ POOL WIDT □ 0.7-<1m [4]	NNEL WIDTH IE (Or 2 & average) H > RIFFLE WIDTH [2] H = RIFFLE WIDTH [1]		that apply SLOW [1] INTERSTITIAN INTERMITTEN	Print Secon (circle one	ation Potential mary Contact modary Contact and comment on back) Pool / Current Maximum 12
Indicate for functional riffles;			to support a p	opulation _	INO DIEELE Emparie 01
of riffle-obligate species: RIFFLE DEPTH RUN D		NE (<i>Or</i> 2 & average). . E / RUN SUBST R	ATE DIEELI	⊒ E / RUN EMBE	NO RIFFLE [metric=0]
☐ BEST AREAS > 10cm [2] ☐ MAXIMUM	l > 50cm [2] ⊠ STABL l < 50cm [1] ☐ MOD. S	E (e.g., Cobble, Bould	der) [2] Gravel) [1]	□ NONE [2] □ LOW [1] □ MODERAT	
, , –	RY LOW - LOW [2-4] DERATE [6-10]	%POC	DL: 40 %	GLIDE: 50	Gradient 4
	H - VFRY HIGH [10-6]	%RUN	N: (5)%F	RIFFLE: 5	Maximum

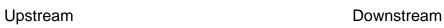
A] SAMPLI	ED REACH	Comment RE: Reach consistency/I	s reach typical of steam?, Recreation	on/Observed - Inferred, Other/	Sampling observations, Concerns, Acc	cess directions, etc.
Check A	LL that apply					
METHOD	STAGE					
□ BOAT □ WADE □ L. LINE □ OTHER DISTANCE	1st -sample pass- 2nd HIGH UP NORMAL LOW DRY					
☐ 0.5 Km ☐ 0.2 Km	CLARITY	B] AESTHETICS	D] MAINTENANCE	Circle some & COMMENT	E] ISSUES	F] MEASUREMENT.
0.15 Km	· σ	INVASIVE MACROPHYTES EXCESS TURBIDITY DISCOLORATION FOAM / SCUM OIL SHEEN TRASH / LITTER NUISANCE ODOR	PUBLIC / PRIVATE / BOTH / NA ACTIVE / HISTORIC / BOTH / NA YOUNG - SUCCESSION - OLD SPRAY / SNAG / REMOVED MODIFIED / DIPPED OUT / NA LEVEED / ONE SIDED RELOCATED / CUTOFFS MOVING - BEDLOAD - STABLE ARMOURED / SLUMPS ISLANDS / SCOURED IMPOUNDED / DESICCATED FLOOD CONTROL / DRAINAGE		WWTP / CSO / NPDES / INDUSTRY HARDENED / URBAN / DIRT&GRIME CONTAMINATED / LANDFILL BMPs - CONSTRUCTION - SEDIMENT LOGGING / IRRIGATION / COOLING BANK / EROSION / SURFACE FALSE BANK / MANURE / LAGOON WASH H20 / TILE / H20 TABLE ACID / MINE / QUARRY / FLOW NATURAL / WETLAND / STAGNANT PARK / GOLF / LAWN / HOME	x width 6 x depth 8 max. depth 20 x bankfull width 8 bankfull x depth W/D ratio bankfull max. depth floodprone x² width entrench. ratio
☐ 10%-<30% ☐ <10%- CLO	C] RECRESED	<i>EATION</i> AREA DEPTH <i>POOL:</i> □ >100ft² □ >3ft	LEGGS GOMMOE / BRAINAGE		ATMOSPHERE / DATA PAUCITY	Legacy Tree:

Comment RE: Reach consistency/ Is reach typical of steam?, Recreation/Observed - Inferred, Other/Sampling observations, Concerns, Access directions, etc.

Stream Drawing:









Substrate



Qualitative Habitat Evaluation Index and Use Assessment Field Sheet

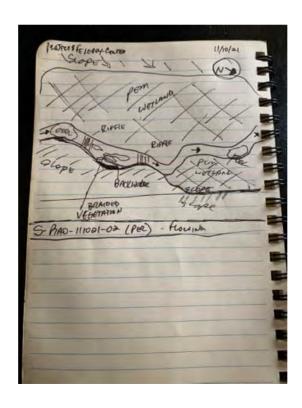


Stream & Location: Stream LP-04	Leroy Center-Mayfield 138 kV Transmission Line Project	Date: 11/10/21
S-BAO-111021-02	Scorers Full Name & Affiliation: BAO	Jacobs
	STORET #: Lat./Long.: 41.64306 /-81.15474	<i>Office verified</i> ✓ <i>location</i>
1] SUBSTRATE Check ONLY Two subsectimate % or note ever	strate <i>TYPE BOXES</i> ; ery type present	ge)
□ □ BOULDER [9] □ □ □ □ □ COBBLE [8] 35 50 [☐ DETRITUS [3] ☐ ☐ TILLS [1] SILT ☐ M ☐ MUCK [2] ☐ WETLANDS [0]	QUALITY JEAVY [-2] MODERATE [-1] Substrate JORMAL [0] JREE [1]
SAND [6] 20 10 [0] BEDROCK [5] NUMBER OF BEST TYPES: 4 or	ARTIFICIAL [0] SANDSTONE [0] SCORE natural substrates; ignore RIP/RAP [0] RIP/RAP [0] RIP/RAP [0]	MODERATE [-1] IORMAL [0] IONE [1]
quality; 3 -Highest quality in moderate or great	rootwad in deep / fast water, or deep, well-defined, functional pools. DOXBOWS, BACKWATERS [1] ROOTWADS [1] AQUATIC MACROPHYTES [1] PAGENTAL STATEMENT OF THE PROPERTY OF	AMOUNT ONE (Or 2 & average) ENSIVE >75% [11] DERATE 25-75% [7] RSE 5-<25% [3] ARLY ABSENT <5% [1]
Comments		Cover Maximum 20
3] CHANNEL MORPHOLOGY Chec	k ONE in each category (<i>Or 2 & average</i>)	20
SINUOSITY DEVELOPMENT	CHANNELIZATION STABILITY	
☐ HIGH [4] ☐ EXCELLENT [7] ☒ MODERATE [3] ☒ GOOD [5] ☐ LOW [2] ☐ FAIR [3] ☐ NONE [4] ☐ PROPER [4]	☑ NONE [6] ☑ HIGH [3] ☐ RECOVERED [4] ☐ MODERATE [2] ☐ RECOVERING [3] ☐ LOW [1]	Channel C
None [1] Poor [1] Comments	RECENT OR NO RECOVERY [1]	Maximum 17
RIPAR RIPAR RIPAR RIPAR RIPAR RIPAR RIPAR RIPAR NONE / LITTLE [3]	ATE 10-50m [3] SHRUB OR OLD FIELD [2] URBAN W 5-10m [2] RESIDENTIAL, PARK, NEW FIELD [1] MINING	
Comments	0] □ OPEN PASTURE, ROWCROP [0] past 100m rip.	Arian. Riparian 7.5 Maximum 10
5] POOL / GLIDE AND RIFFLE / R MAXIMUM DEPTH CHAN	RUN QUALITY NNEL WIDTH CURRENT VELOCITY Rec	reation Potential
 □ > 1m [6] ☑ 0.7-<1m [4] ☑ POOL WIDTH 	H > RIFFLE WIDTH [2] ☐ TORRENTIAL [-1] ☐ SLOW [1] Sec	rimary Contact Condary Contact one and comment on back)
☐ 0.2-<0.4m [1] ☐ < 0.2m [0]	☐ MODERATE [1] ☐ EDDIES [1] Indicate for reach - pools and riffles.	Pool / R
Comments		Maximum 12
Indicate for functional riffles; of riffle-obligate species: RIFFLE DEPTH RUN D	Best areas must be large enough to support a population Check ONE (Or 2 & average). PEPTH RIFFLE / RUN SUBSTRATE RIFFLE / RUN EM	□NO RIFFLE [metric=0] BEDDEDNESS
	I > 50cm [2] ☑ STABLE (e.g., Cobble, Boulder) [2] ☐ NONE [2] I < 50cm [1] ☐ MOD. STABLE (e.g., Large Gravel) [1] ☑ LOW [1] ☐ UNSTABLE (e.g., Fine Gravel, Sand) [0] ☐ MODER.	ATF IO1 Riffle
[metric=0] Comments	□ EXTENS	SIVE [-1] RUN Maximum
6] GRADIENT (50 ft/mi) □ VEF	RY LOW - LOW [2-4]	Gradient
	DERATE [6-10] %RUN: 20 %RIFFLE: 30	Maximum 4

A] SAMPLE	ED REACH	Comment RE: Reach consistency/	s reach typical of steam?, Recreation	on/Observed - Inferred, Other/	Sampling observations, Concerns, Acc	cess directions, etc.
Check A	LL that apply					
METHOD	STAGE					
☐ BOAT ☐ WADE ☐ L. LINE ☐ OTHER DISTANCE	1st -sample pass- 2nd HIGH UP NORMAL LOW DRY					
☐ 0.5 Km ☐ 0.2 Km	CLARITY	B] AESTHETICS	D] MAINTENANCE	Circle some & COMMENT	E] ISSUES	F] MEASUREMENT.
☐ 0.15 Km ☐ 0.12 Km ☐ OTHER	· ·	INVASIVE MACROPHYTES EXCESS TURBIDITY DISCOLORATION FOAM / SCUM OIL SHEEN TRASH / LITTER NUISANCE ODOR	PUBLIC / PRIVATE / BOTH / NA ACTIVE / HISTORIC / BOTH / NA YOUNG - SUCCESSION - OLD SPRAY / SNAG / REMOVED MODIFIED / DIPPED OUT / NA LEVEED / ONE SIDED RELOCATED / CUTOFFS MOVING - BEDLOAD - STABLE ARMOURED / SLUMPS ISLANDS / SCOURED IMPOUNDED / DESICCATED FLOOD CONTROL / DRAINAGE		WWTP / CSO / NPDES / INDUSTRY HARDENED / URBAN / DIRT&GRIME CONTAMINATED / LANDFILL BMPS - CONSTRUCTION - SEDIMENT LOGGING / IRRIGATION / COOLING BANK / EROSION / SURFACE FALSE BANK / MANURE / LAGOON WASH H20 / TILE / H20 TABLE ACID / MINE / QUARRY / FLOW NATURAL / WETLAND / STAGNANT PARK / GOLF / LAWN / HOME	x width 12 x depth 4 max. depth 30 x bankfull width 12 bankfull x depth W/D ratio bankfull max. depth floodprone x² width entrench. ratio
☐ 10%-<30% ☐ <10%- CLOS	CJ RECRA	<i>EATION</i> AREA DEPTH <i>POOL:</i> □ >100ft² □ >3ft	. 2002 CO. M. SE / BIANNAGE		ATMOSPHERE / DATA PAUCITY	Legacy Tree:

Comment RE: Reach consistency/ Is reach typical of steam?, Recreation/Observed - Inferred, Other/Sampling observations, Concerns, Access directions, etc.

Stream Drawing:









Downstream



Substrate



Qualitative Habitat Evaluation Index and Use Assessment Field Sheet



Stream & Location: Stream LP-09	Leroy Center-Mayfield 138 kV Trans	smission Line Project RM:	1.2 <i>Date:</i> 9/29/21
S-BCR-092921-03		ame & Affiliation: BCR	Jacobs
		(-Ong.: 41.62179 / -8	1.18744 Office verified location ✓
1] SUBSTRATE Check ONLY Two substantial estimate % or note ever	rate TYPE BOXES;	Check ONE (Or 2	2 & average)
BEST TYPES □ BLDR /SLABS [10] □ BOULDER [9] □ COBBLE [8] □ GRAVEL [7] □ SAND [6] □ BEDROCK [5] NUMBER OF BEST TYPES: □ 4 or	OTHER TYPES HARDPAN [4]	ORIGIN LIMESTONE [1] TILLS [1] WETLANDS [0] HAPPPAN [0]	QUALITY HEAVY [-2] MODERATE [-1] Substrato
2] ///STREAM COVER Indicate preser quality; 3-Highest quality in moderate or gre diameter log that is stable, well developed in UNDERCUT BANKS [1] 1 OVERHANGING VEGETATION [1] 1 SHALLOWS (IN SLOW WATER) [1] 0 ROOTMATS [1] Comments	erate amounts, but not of highest qualicater amounts (e.g., very large boulder boutwad in deep / fast water, or deep, vorget process of the p	ty or in small amounts of highes is in deep or fast water, large	AMOUNT Check ONE (Or 2 & average) EXTENSIVE >75% [11] MODERATE 25-75% [7] SPARSE 5-<25% [3] NEARLY ABSENT <5% [1] Cover Maximum 20 6
3] CHANNEL MORPHOLOGY Check SINUOSITY DEVELOPMENT	ONE in each category (<i>Or</i> 2 & <i>average</i>	ge) STABILITY	
☐ HIGH [4] ☐ EXCELLENT [7] ☐ MODERATE [3] ☐ GOOD [5] ☐ LOW [2] ☐ FAIR [3] ☐ NONE [1] ☐ POOR [1] Comments	NONE [6] □ RECOVERED [4] □ RECOVERING [3] □ RECENT OR NO RECOVERY [1]	☐ HIGH [3] ☑ MODERATE [2] ☑ LOW [1]	Channel 9.5
4] BANK EROSION AND RIPARIA			nk & average)
EROSION	50m [4]	OLD FIELD [2] AL, PARK, NEW FIELD [1] STURE [1] Indic	CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] MINING / CONSTRUCTION [0] ate predominant land use(s) 100m riparian. Riparian
Comments			Maximum 10
Check ONE (ONLY!) Check ONI ☒ > 1m [6] ☒ POOL WIDTH ☐ 0.7-<1m [4]	NEL WIDTH E (Or 2 & average) > RIFFLE WIDTH [2] = RIFFLE WIDTH [1] RIFFLE WIDTH [0] RIFFLE WIDTH [0] AMDORNATION	RENT VELOCITY eck ALL that apply IAL [-1] SLOW [1] T [1] INTERSTITIAL [-1] INTERMITTENT [-2 TE [1] EDDIES [1] for reach - pools and riffles.	Recreation Potential Primary Contact Secondary Contact (circle one and comment on back) Pool/ Current Maximum 12
Indicate for functional riffles; of riffle-obligate species: RIFFLE DEPTH RUN DI BEST AREAS > 10cm [2] MAXIMUM BEST AREAS 5-10cm [1] MAXIMUM BEST AREAS < 5cm [metric=0] Comments	Check ONE (Or 2 & ave	rage). JBSTRATE RIFFLE / R e, Boulder) [2] Large Gravel) [1]	lation ☐NO RIFFLE [metric=0]
DRAINAGE AREA	DERATE [6-10]	%POOL: 40 %GLII %RUN: 10 %RIFFI	<u> </u>

ARMOURED / SLUMPS

ISLANDS / SCOURED

IMPOUNDED / DESICCATED

FLOOD CONTROL / DRAINAGE

bankfull max. depth

floodprone x² width

entrench. ratio

Legacy Tree:

ACID / MINE / QUARRY / FLOW

NATURAL / WETLAND / STAGNANT

PARK / GOLF / LAWN / HOME

ATMOSPHERE / DATA PAUCITY

Stream Drawing:

× > 85%- OPEN

☐ 55%-<85%

□ 30%-<55%

10%-<30%

<10%- CLOSED

pass

2nd_

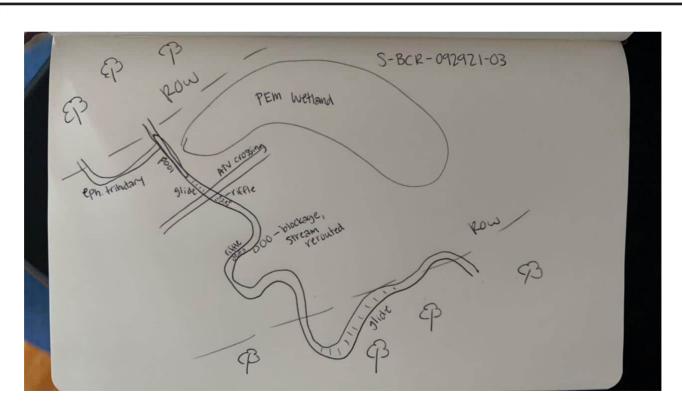
■ NUISANCE ODOR

CIRECREATION AREA DEPTH

☐ SLUDGE DEPOSITS

POOL: № >100ft2 № >3ft

☐ CSOs/SSOs/OUTFALLS





Upstream



Downstream



Substrate



Qualitative Habitat Evaluation Index and Use Assessment Field Sheet



Scorers Full Name & Affiliation: MJA Jacobs
1] SUBSTRATE Check ONLY Two substrate TYPE BOXES; estimate % or note every type present BEST TYPES POOL RIFFLE HARDPAN [4] BOULDER [9] COBBLE [8] GRAVEL [7] DETRITUS [3] MUCK [2] BUBSTRATE Check ONL (Or 2 & average) Check ONE (Or 2 & average) ORIGIN QUALITY LIMESTONE [1] MODERATE [-1] Substrate TYPE BOXES; Check ONE (Or 2 & average) ORIGIN ULIMESTONE [1] MODERATE [-1] Substrate TYPE BOXES; Check ONE (Or 2 & average) ORIGIN ULIMESTONE [1] MODERATE [-1] NORMAL [0] FREE [1] 11
Substitute Sestimate Ses
BEST TYPES □ BLDR /SLABS [10]
□ □ BLDR /SLABS [10] □ □ HARDPAN [4] □ □ LIMESTONE [1] □ HEAVY [-2] □ □ BOULDER [9] 5 10 □ □ DETRITUS [3] □ TILLS [1] SILT □ MODERATE [-1] SUbstance □ □ GRAVEL [7] 15 25 □ SILT [2] 15 5 □ HARDPAN [0] □ FREE [1] 11
□ ☑ COBBLE [8]
NUMBER OF BEST TYPES: 4 or more [2] sludge from point-sources) LACUSTURINE [0] NORMAL [0] NONE [1]
Comments
2] ///STREAM COVER Indicate presence 0 to 3: 0-Absent; 1-Very small amounts or if more common of marginal AMOUNT
quality; 2-Moderate amounts, but not of highest quality or in small amounts of highest 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. EXTENSIVE >75% [11]
0 UNDERCUT BANKS [1] 1 POOLS > 70cm [2] 0 OXBOWS, BACKWATERS [1]
1 SHALLOWS (IN SLOW WATER) [1] 1 BOULDERS [1] 1 LOGS OR WOODY DEBRIS [1] NEARLY ABSENT <5% [1] ROOTMATS [1]
Cover Comments Maximum 10
20
3] CHANNEL MORPHOLOGY Check ONE in each category (Or 2 & average)
SINUOSITY DEVELOPMENT CHANNELIZATION STABILITY HIGH [4] EXCELLENT [7] NONE [6] HIGH [3]
☐ MODERATE [3] ☐ GOOD [5] ☐ RECOVERED [4] ☐ MODERATE [2]
☑ LOW [2] ☑ FAIR [3] ☐ RECOVERING [3] ☑ LOW [1] ☐ NONE [1] ☐ RECENT OR NO RECOVERY [1] Channel
Comments Maximum 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
River right looking downstream RIPARIAN WIDTH FLOOD PLAIN QUALITY River right looking downstream RIPARIAN WIDTH FLOOD PLAIN QUALITY CONSERVATION TILLAGE [1]
RIPARIAN WIDTH RROSION RIPARIAN WIDTH FLOOD PLAIN QUALITY RIPARIAN WIDTH FROOD PLAIN QUALITY RIPARIAN WIDTH FROOD PLAIN QUALITY RIPARIAN WIDTH RIPARI
RIPARIAN WIDTH EROSION NONE / LITTLE [3]
RIPARIAN WIDTH EROSION NONE / LITTLE [3] MODERATE [2] HEAVY / SEVERE [1] NONE [0] RIPARIAN WIDTH FLOOD PLAIN QUALITY RIPARIAN WIDTH FLOOD PLAIN QUALITY RIPARIAN WIDTH FLOOD PLAIN QUALITY RIPARIAN WIDTH RIPARIA
RIPARIAN WIDTH EROSION NONE / LITTLE [3]
River right looking downstream RIPARIAN WIDTH EROSION NONE / LITTLE [3] MODERATE 10-50m [3] MODERATE [2] HEAVY / SEVERE [1] NONE [0] RIPARIAN WIDTH FLOOD PLAIN QUALITY FOREST, SWAMP [3] RESIDENTIAL, PARK, NEW FIELD [1] RESIDENTIAL, PARK, NEW FIELD [1] RESIDENTIAL, PARK, NEW FIELD [1] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10 FOREST, SWAMP [3] CONSERVATION TILLAGE [1] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10
RIPARIAN WIDTH EROSION NONE / LITTLE [3] MODERATE 10-50m [3] HEAVY / SEVERE [1] NONE [0] RIPARIAN WIDTH FLOOD PLAIN QUALITY FROST, SWAMP [3] SHRUB OR OLD FIELD [2] RESIDENTIAL, PARK, NEW FIELD [1] RESIDENTIAL, PARK, NEW FIELD [1] RESIDENTIAL, PARK, NEW FIELD [1] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10 FROST, SWAMP [3] CONSERVATION TILLAGE [1] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10 FROST, SWAMP [3] CONSERVATION TILLAGE [1] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10 FROST, SWAMP [3] CONSERVATION TILLAGE [1] RESIDENTIAL, PARK, NEW FIELD [1] OPEN PASTURE, ROWCROP [0] RESIDENTIAL, PARK, NEW FIELD [1] RESIDENTIAL, PARK, PAR
River right looking downstream RIPARIAN WIDTH EROSION Wide Som [4] Forest, swamp [3] Conservation tillage [1] Wide Som [4] Wide Som [4] Wide Som [4] Governments RIPARIAN WIDTH FLOOD PLAIN QUALITY Check ONE (ONLY!) Conservation tillage [1] Conservation tillage [1]
River right looking downstream RIPARIAN WIDTH EROSION WIDE > 50m [4] Signature of the construction of the
River right looking downstream RIPARIAN WIDTH EROSION WIDE > 50m [4] SHRUB OR OLD FIELD [2] MODERATE [3] NARROW 5-10m [2] RESIDENTIAL, PARK, NEW FIELD [1] NONE [0] MINING / CONSTRUCTION [0] RESIDENTIAL, PARK, NEW FIELD [1] NONE [0] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. RIPARIAN WIDTH REOSION RIPARIAN WIDTH REOSION RESIDENTIAL, PARK, NEW FIELD [1] NONE [0] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum Naximum Check ONE (ONLY!) Check ONE (ONLY!) Check ONE (Or 2 & average) Solow [1] O.7
River right looking downstream RIPARIAN WIDTH REROSION Wide Stom [4] Forest, swamp [3] Conservation tillage [1] Wide Stom [4] Forest, swamp [3] URBAN OR INDUSTRIAL [0] Indicate predominant land use(s) past 100m riparian. Comments Stom [4] Forest, swamp [3] URBAN OR INDUSTRIAL [0] URBAN OR INDUSTRIAL [0] URBAN OR INDUSTRIAL [0] Indicate predominant land use(s) past 100m riparian. Indicate predominant land use(s) past 100m riparian. Indicate predominant land use(s) past 100m r
RIVER right looking downstream REPARIAN WIDTH FROSION WIDE > 50m [4] FOREST, SWAMP [3] SIMPODERATE [2] SIMPODERATE [1] SIMPODE
RIPARIAN WIDTH EROSION Wide > 50m [4] Forest, swamp [3] Urban or industrial [0] Urban
River right looking downstream RIPARIAN WIDTH EROSION RIPARIAN WIDTH FLOOD PLAIN QUALITY NONE (1TITLE [3] MODERATE 10-50m [3] SHRUB OR OLD FIELD [2] URBAN OR INDUSTRIAL [0] MODERATE [2] NARROW 5-10m [2] RESIDENTIAL, PARK, NEW FIELD [1] MINING / CONSTRUCTION [0] HEAVY / SEVERE [1] OPEN PASTURE, ROWCROP [0] RESIDENTIAL, PARK, NEW FIELD [1] RESIDENTIAL FIELD [1] RECEIVED FOOL WIDTH PASTURE, ROWCROP [0] RESIDENTIAL FIELD FIELD [1] RECEIVED FIELD FI
RIPARIAN WIDTH EROSION WiDE > 50m [4] FOREST, SWAMP [3] URBAN OR INDUSTRIAL [0] URBAN OR INDUSTRIAL [0] WINING / CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] WINING / CONSERVATION TILLAGE [1] URBAN OR INDUSTRIAL [0] WIRBAN OR INDUSTRIAL [0] WIRBAN OR INDUSTRIAL [0] RESIDENTIAL, PARK, NEW FIELD [1] MINING / CONSTRUCTION [0] FENCED PASTURE [1] MINING / CONSTRUCTION [0] FENCED PASTURE [1] MINING / CONSTRUCTION [0] Indicate predominant land use(s) past 100m riparian. Riparian Maximum 10 Maximum 12 Moderate [1] Eddles [1] Eddles [1] Moderate [1] Eddles [1] Maximum 12 Moderate [1] Moderate [1] Moderate [1] Moderate [1] Moderate [1] Moderate [1] Maximum 12 Moderate [1] Maximum 12 Maximum 12 Maximum 12 Moderate [1]
RIPARIAN WIDTH REOSION Wide Som [4] Flood Plain Quality
RIPARIAN WIDTH EROSION
RIPARIAN WIDTH REOSION Wide Som [4] Flood Plain Quality

entrench. ratio

Legacy Tree:

PARK / GOLF / LAWN / HOME

ATMOSPHERE / DATA PAUCITY

IMPOUNDED / DESICCATED

FLOOD CONTROL / DRAINAGE

☐ CSOs/SSOs/OUTFALLS

47/O// AREA DEPTH POOL: □>100ft²□>3ft

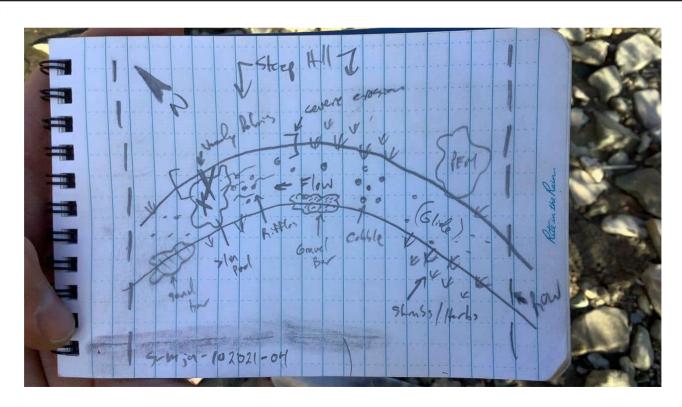
CI RECREATION

Stream Drawing:

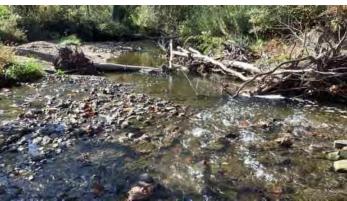
□ 30%-<55%

10%-<30%

<10%- CLOSED







Upstream Downstream



Substrate





64
\cup

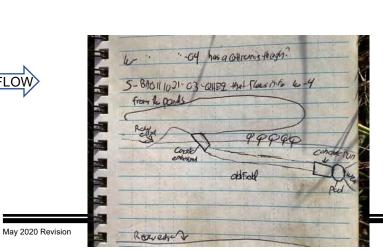
SITE NAME/LOCATION Stream LP-02 Leroy Center-Mayfield 138 kV Transmission Line Project	
SITE NUMBER S-BAO-111021-03 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²) 0.	43
LENGTH OF STREAM REACH (ft) 287 LAT 41.65255 LONG -81.14312 RIVER MILE	
DATE 11/10/2021 SCORER BAO COMMENTS Concrete conveyance	
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Ins	tructions
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR I	NO RECOVERY
1. SUBSTRATE (Estimate percent of every type 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 TYPE PERCENT TYPE PERCENT 15 BLDR SLABS [16 pts] SILT [3 pt] 15 BOULDER (>256 mm)[16 pts] FINE DETRITUS [3 pts] SILT	HHEI Metric Points Substrate Max = 40 14 A + B
2. Maximum Pool Depth (Measure the <u>maximum</u> pool depth within the 61 meter (200 feet) evaluation reach at the time of 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] > 22.5 - 30 cm [30 pts] < 5 cm [5pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0pts] COMMENTS MAXIMUM POOL DEPTH (inches):	Pool Depth Max = 30
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] x > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (feet):	
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 (Most Predominant per Bank) L R (Per Bank) L R	
☐ Wide >10m ☐ Mature Forest, Wetland ☐ Conservation Tillage ☐ Moderate 5-10m ☐ Immature Forest, Shrub or Old Field ☐ Urban or Industrial ☐ Narrow <5m	
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing	ent)
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): □ None □ 1.0 □ 2.0 □ 3.0 ▼ 0.5 □ 1.5 □ 2.5 □ >3	
STREAM GRADIENT ESTIMATE	
Flat (0.5 ft/100 ft) Flat to Moderate	100 ft)

QHEI PERFORMED? ☐ Yes ☑ No QHEI Score	e (If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S)	
	Distance from Evaluated Stream
	Distance from Evaluated Stream 0
EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING	THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: Painesville	NRCS Soil Map Page: NRCS Soil Map Stream Order:
	Township/City: Leroy Township
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Yes Date of last precipit	ation: 10/31/21 Quantity: 0.14
Photo-documentation Notes:	
Elevated Turbidity? (Y/N): NO Canopy (% open): _	85
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):
Field Measures: Temp (°C) Dissolved Oxygen (mg	g/l) pH (S.U.) Conductivity (umhos/cm)
Is the sampling reach representative of the stream (Y/N) \underline{Y}	es If not, explain:
Additional comments/description of pollution impacts:	
BIOLOGICA	AL OBSERVATIONS
(Record al	l observations below)
Fish Observed? (Y/N) Species observed (if known	n):
Frogs or Tadpoles Observed? (Y/N) Species obser	ved (if known):
Salamanders Observed? (Y/N) Species observed (i	f known):
Aquatic Macroinvertebrates Observed? (Y/N) Speci	es observed (if known):
Comments Regarding Biology:	
ū ū <u>ū</u>	

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location







Upstream



Substrate



Downstream



38

SITE NAME/LOCATION Stream LP-03 Leroy Center-Mayfield 138 kV Transmission Line Project	
SITE NUMBER S-BAO-110921-01 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²) 0.3	370
LENGTH OF STREAM REACH (ft) 315 LAT 41.64371 LONG -81.15405 RIVER MILE	
DATE 11/09/2021 SCORER BAO COMMENTS Concrete conveyance	
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Inst	ructions
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR N	O RECOVERY
1. SUBSTRATE (Estimate percent of every type 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 TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pts] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock Bdr Slabs, Boulder, Cobble, Bedrock (Max of 32). Check ONLY two predominant substrate TYPE boxes. SILT [3 pt] LEAF PACK/WOODY DEBRIS [3 pts] FINE DETRITUS [3 pts] CLAY or HARDPAN [0 pt] MUCK [0 pts] ARTIFICIAL [3 pts]	HHEI Metric Points Substrate Max = 40 8
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 TOTAL NUMBER OF SUBSTRATE TYPES: 5	
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of 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] > 22.5 - 30 cm [30 pts] < 5 cm [5pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0pts]	Pool Depth Max = 30
COMMENTS MAXIMUM POOL DEPTH (inches):	
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (feet):	
This information <u>must</u> also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ★ NOTE: River Left (L) and Right (R) as looking downstream ★	
RIPARIAN WIDTH (Per Bank) L R Wide >10m Moderate 5-10m Narrow <5m None COMMENTS 1 RESIDENT A STATE OF THE ARCH TO THE BANK (Most Predominant per Bank) L R L R L R L R Conservation Tillage Urban or Industrial Residential, Park, New Field Open Pasture, Row Cre Fenced Pasture COMMENTS 1	ор
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing	nt)
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): □ None □ 1.0 ☒ 2.0 □ 3.0 □ 0.5 □ 1.5 □ 2.5 □ >3	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate X Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/1	00 ft)

© CWH Name: Aylworth Creek	QHEI PERFORMED? ☐ Yes ☒ No QHEI Score	(If Yes, Attach Completed QHEI form)
□ WWH Name: Distance from Evaluated Stream □ CWH Name: Aylworth Creek Distance from Evaluated Stream 0.03 mile □ EWH Name: Distance from Evaluated Stream Distance from Evaluated Stream WAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION. USGS Quadrangle Name: Painesville NRCS Soil Map Page: NRCS Soil Map Stream Order: County: Leroy Township/City: Leroy Township MISCELLANEOUS Base Flow Conditions? (Y/N): Painesville Name: 10/31/21 Quantity: 0.14 Photo-documentation Notes: Elevated Turbidity? (Y/N): No Lab Sample # or ID (attach results):	DOWNSTREAM DESIGNATED USE(S)	
□ CWH Name: Aylworth Creek □ Distance from Evaluated Stream □ 0.03 mile □ EWH Name: □ Distance from Evaluated Stream □ 0.03 mile □ EWH Name: □ Distance from Evaluated Stream □ 0.03 mile □ Distance from Evaluated Stream □ 0.04 mile □ Distance from Evaluated Stream □ 0.04 mile □ Distance from Evaluated Stream □ 0.04 mile □ Distance from Evaluated Stream □ 0.05 mile □ 0.05 mile □	` ,	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION. USGS Quadrangle Name: Painesville NRCS Soil Map Page:NRCS Soil Map Stream Order: County: Lake		Distance from Evaluated Stream 0.03 mile
USGS Quadrangle Name: Painesville NRCS Soil Map Page:NRCS Soil Map Stream Order: County: Leroy Township MISCELLANEOUS Base Flow Conditions? (Y/N): Yes Date of last precipitation: 10/31/21 Quantity: 0.14 Photo-documentation Notes: Elevated Turbidity? (Y/N): No Canopy (% open): 100 Were samples collected for water chemistry? (Y/N): No Lab Sample # or ID (attach results): Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (umhos/cm) Is the sampling reach representative of the stream (Y/N) Yes If not, explain: Additional comments/description of pollution impacts: BIOLOGICAL OBSERVATIONS (Record all observations below) Fish Observed? (Y/N) Species observed (if known): Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	☐ EWH Name:	Distance from Evaluated Stream
MISCELLANEOUS Base Flow Conditions? (Y/N): Yes Date of last precipitation: 10/31/21 Quantity: 0.14 Photo-documentation Notes: Elevated Turbidity? (Y/N): No Canopy (% open): 100 Were samples collected for water chemistry? (Y/N): No Lab Sample # or ID (attach results):	· · · · · · · · · · · · · · · · · · ·	TIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
MISCELLANEOUS Base Flow Conditions? (Y/N): Yes Date of last precipitation: 10/31/21 Quantity: 0.14 Photo-documentation Notes: Elevated Turbidity? (Y/N): No Canopy (% open): 100 Were samples collected for water chemistry? (Y/N): No Lab Sample # or ID (attach results):	USGS Quadrangle Name: Painesville NRC	S Soil Map Page: NRCS Soil Map Stream Order:
Base Flow Conditions? (Y/N): Yes Date of last precipitation: 10/31/21 Quantity: 0.14 Photo-documentation Notes:		ship/City: Leroy Township
Photo-documentation Notes: Elevated Turbidity? (Y/N): No Canopy (% open): 100 Were samples collected for water chemistry? (Y/N): No Lab Sample # or ID (attach results): Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (umhos/cm) ls the sampling reach representative of the stream (Y/N) Yes If not, explain: Additional comments/description of pollution impacts: BIOLOGICAL OBSERVATIONS (Record all observations below) Fish Observed? (Y/N) Species observed (if known): Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	MISCELLANEOUS	
Elevated Turbidity? (Y/N): No Canopy (% open): 100 Were samples collected for water chemistry? (Y/N): No Lab Sample # or ID (attach results):	Base Flow Conditions? (Y/N): Yes Date of last precipitation: _1	0/31/21 Quantity: 0.14
Were samples collected for water chemistry? (Y/N): No Lab Sample # or ID (attach results): Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (umhos/cm) Is the sampling reach representative of the stream (Y/N) Yes If not, explain: Additional comments/description of pollution impacts: BIOLOGICAL OBSERVATIONS (Record all observations below) Fish Observed? (Y/N) Species observed (if known): Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	Photo-documentation Notes:	
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (umhos/cm) Is the sampling reach representative of the stream (Y/N) Yes If not, explain: Additional comments/description of pollution impacts: BIOLOGICAL OBSERVATIONS (Record all observations below) Fish Observed? (Y/N) Species observed (if known): Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	Elevated Turbidity? (Y/N): No Canopy (% open): 100	
Is the sampling reach representative of the stream (Y/N) Yes If not, explain: Additional comments/description of pollution impacts: BIOLOGICAL OBSERVATIONS (Record all observations below) Fish Observed? (Y/N) Species observed (if known): Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	Were samples collected for water chemistry? (Y/N): No	.ab Sample # or ID (attach results):
Additional comments/description of pollution impacts: BIOLOGICAL OBSERVATIONS (Record all observations below) Fish Observed? (Y/N) Species observed (if known): Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	Field Measures: Temp (°C) Dissolved Oxygen (mg/l)	pH (S.U.) Conductivity (umhos/cm)
Additional comments/description of pollution impacts: BIOLOGICAL OBSERVATIONS (Record all observations below) Fish Observed? (Y/N) Species observed (if known): Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	Is the sampling reach representative of the stream (Y/N) Yes	ot explain:
BIOLOGICAL OBSERVATIONS (Record all observations below) Fish Observed? (Y/N) Species observed (if known): Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	To allo camping road rispressinante or allo cascam (1717)	
(Record all observations below) Fish Observed? (Y/N) Species observed (if known): Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	Additional comments/description of pollution impacts:	
(Record all observations below) Fish Observed? (Y/N) Species observed (if known): Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):		
Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):		
Frogs or Tadpoles Observed? (Y/N) Species observed (if known): Salamanders Observed? (Y/N) Species observed (if known): Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	Fish Observed? (Y/N) Species observed (if known):	
Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):		
	Salamanders Observed? (Y/N) Species observed (if known)):
Comments Regarding Biology:	Aquatic Macroinvertebrates Observed? (Y/N) Species observed	rved (if known):
	Comments Regarding Biology:	

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location







Upstream



Substrate



Downstream



47

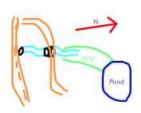
SITE NAME/LOCATION Stream LP-05 Leroy Center-Mayfield 138 kV Transmission Line Project	
SITE NUMBER S-BAO-111021-01 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²) 0.0	
LENGTH OF STREAM REACH (ft) 270 LAT 41.64204 LONG -81.15683 RIVER MILE	
DATE 11/10/2021 SCORER BAO COMMENTS Manmade concrete conveyance, intermittent. Concrete channelized the	nroughout
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Inst	ructions
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR N	O RECOVERY
1. SUBSTRATE (Estimate percent of every type 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 TYPE PERCENT SILT [3 pt] BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pts] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock Bedrock 10 max of 8). Final metric score is sum of boxes A & B PERCENT SILT [3 pt] LEAF PACK/WOODY DEBRIS [3 pts] LEAF PACK/WOODY DEBRIS [3 pts] CLAY or HARDPAN [0 pt] MUCK [0 pts] ARTIFICIAL [3 pts]	HHEI Metric Points Substrate Max = 40 17
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 12 TOTAL NUMBER OF SUBSTRATE TYPES: 5	,,,,,
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of 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] 5 cm - 10 cm [5 pts] 5 cm - 10 cm [5 pts] NO WATER OR MOIST CHANNEL [0pts]	Pool Depth Max = 30
COMMENTS MAXIMUM POOL DEPTH (inches): 4	
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check <i>ONLY</i> one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] × ≤ 1.0 m (≤ 3' 3") [5 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (feet):	\blacksquare
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ★ NOTE: River Left (L) and Right (R) as looking downstream ★	
RIPARIAN WIDTH (Per Bank) L R Wide >10m Moderate 5-10m Narrow <5m None COMMENTS RESIDENTS FLOODPLAIN QUALITY (Most Predominant per Bank) L R L R L R Conservation Tillage Urban or Industrial Open Pasture, Row Cro Mining or Construction	op
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing Subsurface flow with isolated pools (interstitial) COMMENTS The control of Evaluation (Check ONLY one box): Moist Channel, isolated pools, no flow (intermitter or control of the contr	nt)
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): □ None ▼ 1.0 2.0 □ 3.0 □ 0.5 □ 1.5 □ 2.5 □ >3	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/10 ft)	00 ft)

QHEI PERFORMED? ☐ Yes ☑ No QHEI Score	e (If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S)	
	Distance from Evaluated Stream
	Distance from Evaluated Stream 0.14 mile
☐ EWH Name:	
MAPPING: ATTACH COPIES OF MAPS, INCLUDING	THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: Painesville	NRCS Soil Map Page:NRCS Soil Map Stream Order:
	Township/City: Leroy Township
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Yes Date of last precipit	ation: 10/31/21 Quantity: 0.14
Photo-documentation Notes:	
Elevated Turbidity? (Y/N): No Canopy (% open): _	100
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):
Field Measures: Temp (°C) Dissolved Oxygen (mg	g/l) pH (S.U.) Conductivity (umhos/cm)
Is the sampling reach representative of the stream (Y/N) $\underline{\underline{Y}}$	es If not, explain:
Additional comments/description of pollution impacts:	
	AL OBSERVATIONS I observations below)
,	n):
	ved (if known):
· · · · · · · · · · · · · · · · · · ·	f known):
	es observed (if known):
Comments Regarding Biology:	
3 3 37	

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location







Upstream



Substrate



Downstream



40	
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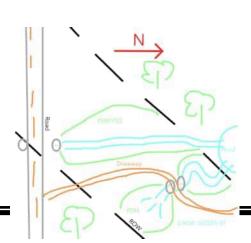
SITE NAME/LOCATION Stream LP-06 Leroy Center-Mayfield 138 kV Transmission Line Project			
SITE NUMBER S-MJA-102221-01 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²)).170		
LENGTH OF STREAM REACH (ft) 263 LAT 41.63068 LONG -81.17436 RIVER MILE _			
DATE 10/22/2021 SCORER MJA COMMENTS Ephemeral. Culverted			
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for In	structions		
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OF	NO RECOVERY		
1. SUBSTRATE (Estimate percent of every type 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 TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pts]	HHEI Metric Points Substrate Max = 40 15		
2. Maximum Pool Depth (<i>Measure the <u>maximum</u> pool depth within the 61 meter (200 feet</i>) evaluation reach at the	Pool Depth		
time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):	Max = 30		
X > 30 centimeters [20 pts] 5 cm - 10 cm [15 pts] → > 22.5 - 30 cm [30 pts] < 5 cm [5pts]	20		
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0pts]			
COMMENTS MAXIMUM POOL DEPTH (inches): 18			
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check <i>ONLY</i> one box): > 4.0 meters (> 13') [30 pts]	Bankfull Width Max=30		
COMMENTS AVERAGE BANKFULL WIDTH (feet): 1.5			
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ★ NOTE: River Left (L) and Right (R) as looking downstream ★ RIPARIAN WIDTH			
COMMENTS			
None 1.0 x 2.0 3.0 0.5 1.5 2.5 >3			
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) X Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10	ft/100 ft)		

QHEI PERFORMED? ☐ Yes ☑ No QHEI Score	(If Yes, Attach Completed QHEI form)	
☐ CWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream	
MAPPING: ATTACH COPIES OF MAPS, INCLUDING T	HE <u>entire</u> watershed area. Clearly mark the site location.	
USGS Quadrangle Name: Painesville	NRCS Soil Map Page: NRCS Soil Map Stream Order:	
	Township/City: Hambden Township	
MISCELLANEOUS		
Base Flow Conditions? (Y/N): NO Date of last precipitation	ion: 10/22/21 Quantity: 0.29	
Photo-documentation Notes:		
Elevated Turbidity? (Y/N): No Canopy (% open): Q	5	
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):	
) pH (S.U.) Conductivity (umhos/cm)	
Is the sampling reach representative of the stream (Y/N)	S If not, explain:	
Additional comments/description of pollution impacts:		
	_ OBSERVATIONS observations below)	
Fish Observed? (Y/N) Species observed (if known)		
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):		
Salamanders Observed? (Y/N) Species observed (if	known):	
Aquatic Macroinvertebrates Observed? (Y/N) Species	s observed (if known):	
Comments Regarding Biology:		

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location







Upstream



Downstream



Substrate



45

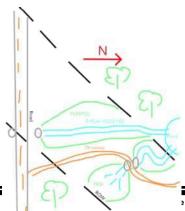
SITE NAME/LOCATION Stream LP-07 Leroy Center-Mayfield 138 kV Transmission Line Project			
SITE NUMBER S-MJA-102221-02 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²) 0.100			
LENGTH OF STREAM REACH (ft) 321.015981813013 LAT 41.63013766700004 LONG -81.17489489999997 RIVER MILE			
DATE 10/22/2021 SCORER MJA COMMENTS Intermittent. Culverted			
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Inst	ructions		
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR NO	O RECOVERY		
1. SUBSTRATE (Estimate percent of every type 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 TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pts]	HHEI Metric Points Substrate Max = 40 20 A + B		
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 15 TOTAL NUMBER OF SUBSTRATE TYPES: 5			
2. Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): Som - 10 cm [15 pts] 5 cm - 10 cm [15 pts] 5 cm - 10 cm [5 pts] 7 cm - 10 cm [Pool Depth Max = 30		
COMMENTS MAXIMUM POOL DEPTH (inches): 18			
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] × 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] × 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	Bankfull Width Max=30		
COMMENTS AVERAGE BANKFULL WIDTH (feet): 3			
This information <u>must</u> also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ★ NOTE: River Left (L) and Right (R) as looking downstream ★			
RIPARIAN WIDTH L R (Per Bank) L R Wide >10m Moderate 5-10m None None RIPARIAN WIDTH L R FLOODPLAIN QUALITY (Most Predominant per Bank) L R L R Mature Forest, Wetland D Conservation Tillage Urban or Industrial D Residential, Park, New Field D Open Pasture, Row Cro Mining or Construction COMMENTS	pp		
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing	nt)		
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): X None □ 1.0 □ 2.0 □ 3.0 □ 0.5 □ 1.5 □ 2.5 □ >3			
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/1)	00.4)		

QHEI PERFORMED? ☐ Yes ☑ No QHEI Score	(If Yes, Attach Completed QHEI form)	
☐ CWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream	
MAPPING: ATTACH COPIES OF MAPS, INCLUDING T	HE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.	
USGS Quadrangle Name: Painesville	NRCS Soil Map Page: NRCS Soil Map Stream Order:	
	Township/City: Hambden Township	
MISCELLANEOUS		
Base Flow Conditions? (Y/N): NO Date of last precipitat	ion: 10/22/2021 Quantity: 0.29	
Photo-documentation Notes:		
Elevated Turbidity?(Y/N): No Canopy (% open): 9	0	
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):	
) pH (S.U.) Conductivity (umhos/cm)	
Is the sampling reach representative of the stream (Y/N)	S If not, explain:	
Additional comments/description of pollution impacts:		
	_ OBSERVATIONS observations below)	
Fish Observed? (Y/N) Species observed (if known)		
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):		
Salamanders Observed? (Y/N) Species observed (if	known):	
Aquatic Macroinvertebrates Observed? (Y/N) Species	s observed (if known):	
Comments Regarding Biology:		

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location





May 2020 Revision



Upstream



Downstream



Substrate



|--|

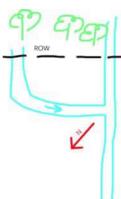
SITE NAME/LOCATION Stream LP-08 Leroy C	enter-iviayrieid 138 k	V Transmission Line Project		
SITE NUMBER S-BCR-092921-04 RIVER BASIN	4110004	_ RIVER CODE	DRAINAGE AREA (mi²) 0.	001
LENGTH OF STREAM REACH (ft) 118	LAT 41.62177	LONG <u>-81.18709</u>	RIVER MILE	
DATE 09/29/2021 SCORER BCR	COMMENTS	Intermittent channelized stream along road. Channelized	zed stream along road. Flows under multiple culverts t	hroughout reach.
NOTE: Complete All Items On This Form	- Refer to "Headw	vater Habitat Evaluation In	dex Field Manual" for Ins	tructions
STREAM CHANNEL MODIFICATIONS:	NONE / NATURAL CH	HANNEL RECOVERED R	RECOVERING X RECENT OR N	NO RECOVERY
1. SUBSTRATE (Estimate percent of ever (Max of 32). Add total number of significations of the control of the co	cant substrate types RCENT TYPE X X X X X X X X X	found (Max of 8). Final metric s SILT [3 pt] LEAF PACK/WOODY DEE FINE DETRITUS [3 pts] CLAY or HARDPAN [0 pt] MUCK [0 pts] ARTIFICIAL [3 pts]	PERCENT 20 BRIS [3 pts] 60 (B)	HHEI Metric Points Substrate Max = 40 7
Maximum Pool Depth (<i>Measure the I</i> time of evaluation. Avoid plunge pools	<u>naximum</u> pool dept	h within the 61 meter (200 fee	et) evaluation reach at the ONLY 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]	<u> </u>	<pre>< 5 cm [5pts] X NO WATER OR MOIST OF THE CONTROL OF THE CONT</pre>	CHANNEL [Onts]	0
COMMENTS	L			
COMMENTS			OI DEDTH (inches): \ \	
			01 D2: 111 (c.ico):	- · · · · ·
3. BANK FULL WIDTH (Measured as the > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7"- 13') [25 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	e average of 3 - 4 m [Y one box):	Bankfull Width Max=30
3. BANK FULL WIDTH (Measured as th > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts]	e average of 3 - 4 m [easurements) (Check <i>ONL</i> > 1.0 m - 1.5 m (> 3' 3" - 4 × ≤ 1.0 m (≤ 3' 3") [5 pts]	Y one box):	Width Max=30
3. BANK FULL WIDTH (Measured as the > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7"- 13') [25 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	This information	easurements) (Check <i>ONL</i> > 1.0 m - 1.5 m (> 3' 3" - 4 × ≤ 1.0 m (≤ 3' 3") [5 pts] AVERAGE BANK on must also be completed	Yone box): 4' 8")[15 pts] FULL WIDTH (feet):	Width Max=30
3. BANK FULL WIDTH (Measured as the > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] COMMENTS RIPARIAN ZONE AND FLOOD	This information	easurements) (Check <i>ONL</i> > 1.0 m - 1.5 m (> 3' 3" - 4 × ≤ 1.0 m (≤ 3' 3") [5 pts] AVERAGE BANK on must also be completed	Y one box): 4' 8")[15 pts] FULL WIDTH (feet): at (R) as looking downstream	Width Max=30
3. BANK FULL WIDTH (Measured as the > 4.0 meters (> 13') [30 pts]	This information PLAIN QUALITY FLOODP L R	easurements) (Check ONL > 1.0 m - 1.5 m (> 3' 3" - 4 × ≤ 1.0 m (≤ 3' 3") [5 pts] AVERAGE BANK On must also be completed NOTE: River Left (L) and Right AIN QUALITY (Most Predomin Lorest, Wetland e Forest, Shrub or Old Field	Y one box): 4' 8")[15 pts] SFULL WIDTH (feet): ant (R) as looking downstream to the per Bank) R Conservation Tillage Urban or Industrial Open Pasture, Row Ci	Width Max=30 5
3. BANK FULL WIDTH (Measured as the second s	This information PLAIN QUALITY FLOODP L R Mature F	easurements) (Check ONL > 1.0 m - 1.5 m (> 3' 3" - 4 × ≤ 1.0 m (≤ 3' 3") [5 pts] AVERAGE BANK On must also be completed NOTE: River Left (L) and Right AIN QUALITY (Most Predomin Lorest, Wetland e Forest, Shrub or Old Field	Y one box): 4' 8")[15 pts] SFULL WIDTH (feet): at (R) as looking downstream to the per Bank) R Conservation Tillage Urban or Industrial	Width Max=30 5
3. BANK FULL WIDTH (Measured as the > 4.0 meters (> 13') [30 pts]	This information PLAIN QUALITY FLOODP L R Mature F Immature Resident Fenced F	easurements) (Check ONL > 1.0 m - 1.5 m (> 3' 3" - 4 ≤ 1.0 m (≤ 3' 3") [5 pts] AVERAGE BANK On must also be completed NOTE: River Left (L) and Right AIN QUALITY (Most Predomin Lorest, Wetland e Forest, Shrub or Old Field in Lorest, New Field Pasture	Y one box): 4' 8")[15 pts] SFULL WIDTH (feet): ant (R) as looking downstream to the per Bank) R Conservation Tillage Urban or Industrial Open Pasture, Row Ci	Width Max=30 5
3. BANK FULL WIDTH (Measured as the second s	This information PLAIN QUALITY FLOODP L R Immature Resident Fenced B aluation) (Check Of	easurements) (Check ONL > 1.0 m - 1.5 m (> 3' 3" - 4 ≤ 1.0 m (≤ 3' 3") [5 pts] AVERAGE BANK On must also be completed NOTE: River Left (L) and Right AIN QUALITY (Most Predomin Lorest, Wetland e Forest, Shrub or Old Field ial, Park, New Field Pasture VLY one box):	Y one box): 4' 8")[15 pts] SFULL WIDTH (feet): ant (R) as looking downstream to the mant per Bank) R Conservation Tillage Urban or Industrial Open Pasture, Row Company of the mant per Bank of t	Width Max=30
3. BANK FULL WIDTH (Measured as the	This information PLAIN QUALITY FLOODP L R Mature F Immature Resident Fenced F Fenced F Aduation) (Check Official Control of Check Official Control of Check Official	easurements) (Check ONL > 1.0 m - 1.5 m (> 3' 3" - 4 ≤ 1.0 m (≤ 3' 3") [5 pts] AVERAGE BANK On must also be completed NOTE: River Left (L) and Right AIN QUALITY (Most Predomin Leforest, Wetland en Forest, Shrub or Old Field en Forest, Shrub or Old Field en Pasture Completed en Port Comp	Y one box): 4' 8")[15 pts] IFULL WIDTH (feet): In (R) as looking downstream * In ant per Bank) R Conservation Tillage Urban or Industrial Open Pasture, Row Company of Mining or Construction Diated pools, no flow (intermitted ater (ephemeral)	Width Max=30
3. BANK FULL WIDTH (Measured as the second s	This information PLAIN QUALITY FLOODP L R Immature Resident Fenced R aluation) (Check Office) ols (interstitial) per 61 m (200 ft) of cents.	easurements) (Check ONL > 1.0 m - 1.5 m (> 3' 3" - 4 ≤ 1.0 m (≤ 3' 3") [5 pts] AVERAGE BANK On must also be completed NOTE: River Left (L) and Right AIN QUALITY (Most Predomin Leforest, Wetland Perorest, Shrub or Old Field ial, Park, New Field Pasture WLY one box): Moist Channel, isc Dry channel, no wether the complete Local	Y one box): 4' 8")[15 pts] at (R) as looking downstream * that (R) as looking downstream * that per Bank) R Conservation Tillage Urban or Industrial Open Pasture, Row Cr Mining or Construction Colated pools, no flow (intermitter ater (ephemeral) 3.0	Width Max=30 5

QHEI PERFORMED? ☐ Yes ☒ No QHEI Score	(If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S)	
☐ WWH Name:	Distance from Evaluated Stream
CMULNI-man Jonks Crook	Distance from Evaluated Stream 0 mile (direct tributary)
☐ EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING	THE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: Chardon	NRCS Soil Map Page: NRCS Soil Map Stream Order:
_{County:} Geauga	Township/City: Hambden Township
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Yes Date of last precipitation	9/23/21 Quantity: 1.72
Photo-documentation Notes:	
Elevated Turbidity? (Y/N): No Canopy (% open):	100
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):
Field Measures:Temp (°C) Dissolved Oxygen (mg	/l) pH (S.U.) Conductivity (umhos/cm)
Is the sampling reach representative of the stream (Y/N) \underline{Ye}	If not, explain:
Additional comments/description of pollution impacts:	
BIOLOGICA	L OBSERVATIONS
	observations below)
Fish Observed? (Y/N) Species observed (if known):
	red (if known):
Salamanders Observed? (Y/N) Species observed (if	known):
Aquatic Macroinvertebrates Observed? (Y/N) Specie	es observed (if known):
Comments Regarding Biology:	
5 5 5/	

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location







Upstream



Substrate



Downstream



SITE NAME/LOCATION Stream LP-10 Leroy Center-Mayfield 138 kV Transmission Line Project	
SITE NUMBER S-BCR-092921-02 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²)	
LENGTH OF STREAM REACH (ft) 77 LAT 41.62112 LONG -81.18947 RIVER MILE .	
DATE 09/29/2021 SCORER BCR COMMENTS Culverted	
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for I	nstructions
STREAM CHANNEL MODIFICATIONS: None / Natural Channel Recovered Recovering Recent C	R NO RECOVERY
1. SUBSTRATE (Estimate percent of every type 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 TYPE BLDR SLABS [16 pts] BOULDER (>256 mm)[16 pts] BEDROCK [16 pts] COBBLE (65-256 mm)[12 pts] GRAVEL (2-64 mm)[9 pts] SILT [3 pt] LEAF PACK/WOODY DEBRIS [3 pts] FINE DETRITUS [3 pts] CLAY or HARDPAN [0 pt] MUCK [0 pts] ARTIFICIAL [3 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock MB (B) (B)	HHEI Metric Points Substrate Max = 40 25
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 21 TOTAL NUMBER OF SUBSTRATE TYPES: 4	
Maximum Pool Depth (Measure the maximum pool depth within the 61 meter (200 feet) evaluation reach at the time of 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] 5 cm - 10 cm [5pts] 5 cm - 10 cm [5pts] 7 cm	Pool Depth Max = 30
COMMENTS MAXIMUM POOL DEPTH (inches): 5	
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box):	
5. DAINT I OLE WID ITI (Measured as the average of 5 - 4 measurements) (Check ONL) one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	Width Max=30
 > 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7"- 13') [25 pts] × 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] × 1.0 m (≤ 3' 3") [5 pts] 	Width Max=30
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] X > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] X COMMENTS AVERAGE BANKFULL WIDTH (feet): 2.5 This information must also be completed	Width Max=30
> 4.0 meters (> 13') [30 pts]	Width Max=30
	Width Max=30 5
> 4.0 meters (> 13') [30 pts]	Width Max=30 5 Crop cion
> 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] ≥ 1.0 m (≤ 3' 3") [5 pts] ≥ 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] ≥ 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] ≥ 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] ≥ 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] ≥ 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] ≥ 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] ≥ 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] ≥ 1.0 m (≤ 3' 3") [5 pts]	Width Max=30 5 Crop cion
> 4.0 meters (> 13') [30 pts]	Width Max=30 5 The work of the control of the cont

QHEI PERFORMED? ☐ Yes ☒ No QHEI Score	(If Yes, Attach Completed QHEI form)
DOWNSTREAM DESIGNATED USE(S)	
☐ WWH Name:	Distance from Evaluated Stream
	Distance from Evaluated Stream 0.05 mile
☐ EWH Name:	Distance from Evaluated Stream
MAPPING: ATTACH COPIES OF MAPS, INCLUDING	THE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: Chardon	NRCS Soil Map Page:NRCS Soil Map Stream Order:
	Township/City: Hambden Township
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Yes Date of last precipita	ation: 9/23/21 Quantity: 1.72
Photo-documentation Notes:	
Elevated Turbidity? (Y/N): No Canopy (% open): 4	<u>30 </u>
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):
Field Measures:Temp (°C) Dissolved Oxygen (mg	/l) pH (S.U.) Conductivity (umhos/cm)
Is the sampling reach representative of the stream (Y/N)	If not, explain:
Additional comments/description of pollution impacts:	
Additional comments/description of poliution impacts.	
	L OBSERVATIONS observations below)
Fish Observed? (Y/N) Species observed (if known):
	red (if known):
Salamanders Observed? (Y/N) Species observed (if	known):
Aquatic Macroinvertebrates Observed? (Y/N) Species	es observed (if known):
Comments Regarding Biology:	

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location







Upstream





Downstream



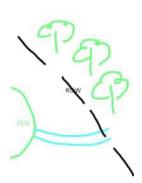
SITE NAME/LOCATION_Stream LP-11 Leroy Center-Mayfield 138 kV Transmission Line Project		
SITE NUMBER S-BCR-092921-01 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²) 0.	042	
LENGTH OF STREAM REACH (ft) 24 LAT 41.62097 LONG -81.18981 RIVER MILE		
DATE 09/29/2021 SCORER BCR COMMENTS Channelization, riparian clearing		
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Ins	ructions	
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR N	IO RECOVERY	
1. SUBSTRATE (Estimate percent of every type 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 TYPE BLDR SLABS [16 pts] SILT [3 pt] 10 BOULDER (>256 mm)[16 pts] FINE DETRITUS [3 pts] SILT [3	HHEI Metric Points Substrate Max = 40 25	
2. Maximum Pool Depth (<i>Measure the maximum pool depth within the 61 meter (200 feet)</i> evaluation reach at the	Pool Depth	
time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):	Max = 30	
☐ > 30 centimeters [20 pts]	15	
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0pts]		
COMMENTS MAXIMUM POOL DEPTH (inches): 3		
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] ≤ 1.0 m (≤ 3' 3") [5 pts]	Bankfull Width Max=30	
COMMENTS AVERAGE BANKFULL WIDTH (feet):		
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 (Most Predominant per Bank) L R (Per Bank) L R X Wide >10m X Mature Forest, Wetland Conservation Tillage Moderate 5-10m X Immature Forest, Shrub or Old Field Urban or Industrial Narrow <5m Residential, Park, New Field Open Pasture, Row Crop None Fenced Pasture Mining or Construction COMMENTS 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) COMMENTS COMM	_	
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): □ None □ 1.0 □ 2.0 □ 3.0 ☒ 0.5 □ 1.5 □ 2.5 □ >3		
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/	00 ft)	

QHEI PERFORMED? ☐ Yes ☒ No QHEI Score	(If Yes, Attach Completed QHEI form)		
DOWNSTREAM DESIGNATED USE(S)			
☐ WWH Name:	Distance from Evaluated Stream		
	Distance from Evaluated Stream 0.05 mile		
☐ EWH Name:	Distance from Evaluated Stream		
MAPPING: ATTACH COPIES OF MAPS, INCLUDING T	HE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.		
USGS Quadrangle Name: Chardon	NRCS Soil Map Page:NRCS Soil Map Stream Order:		
	Township/City: Hambden Township		
MISCELLANEOUS			
Base Flow Conditions? (Y/N): Yes Date of last precipital	on: 9/23/21 Quantity: 1.72		
Photo-documentation Notes:			
Elevated Turbidity? (Y/N): No Canopy (% open):	00		
Were samples collected for water chemistry? (Y/N): No Lab Sample # or ID (attach results):			
Field Measures:Temp (°C) Dissolved Oxygen (mg/	l) pH (S.U.) Conductivity (umhos/cm)		
Is the sampling reach representative of the stream (Y/N) Yes If not, explain:			
Additional comments/description of pollution impacts:			
BIOLOGICAL OBSERVATIONS (Record all observations below)			
Fish Observed? (Y/N) Species observed (if known)	:		
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):			
Salamanders Observed? (Y/N) Species observed (if	known):		
Aquatic Macroinvertebrates Observed? (Y/N) Specie	s observed (if known):		
Comments Regarding Biology:			

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location







Upstream



Substrate



Downstream



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SITE NAME/LOCATION Stream LP-12 Leroy Center-Mayfield 138 kV Transmission Line Project	
SITE NUMBER S-MJA-102021-01 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²) 0.0)73
LENGTH OF STREAM REACH (ft) 283 LAT 41.61357 LONG -81.20179 RIVER MILE	
DATE 10/20/2021 SCORER MJA COMMENTS Stream 8 along road 2. Channelized, culvert	
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Inst	ructions
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR N	O RECOVERY
1. SUBSTRATE (Estimate percent of every type 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 TYPE BLDR SLABS [16 pts] BOULDER (>256 mm)[16 pts] BEDROCK [16 pts] COBBLE (65-256 mm)[12 pts] GRAVEL (2-64 mm)[9 pts] SAND (<2 mm) [6 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 1. Check ONLY two predominant substrate TYPE boxes. (Max of 32). 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 PERCENT TYPE PERCENT TOTAL NUMBER OF SUBSTRATE TYPES: (B) 3	HHEI Metric Points Substrate Max = 40 15
TOTAL NUMBER OF SUBSTRATE TIPES.	
2. Maximum Pool Depth (Measure the <u>maximum</u> pool depth within the 61 meter (200 feet) evaluation reach at the time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): X > 30 centimeters [20 pts]	Pool Depth Max = 30
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box):	Bankfull
> 4.0 meters (> 13') [30 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (feet): 1.5	
This information <u>must</u> also be completed	
RIPARIAN ZONE AND FLOODPLAIN QUALITY ★ NOTE: River Left (L) and Right (R) as looking downstream ★ RIPARIAN WIDTH L R (Per Bank) L R Wide >10m X X Wide >10m X X Mature Forest, Wetland X Conservation Tillage	
Moderate 5-10m Immature Forest, Shrub or Old Field Urban or Industrial Narrow < 5m Residential, Park, New Field Open Pasture, Row Cro None Fenced Pasture Mining or Construction COMMENTS	op
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing	nt)
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): □ None □ 1.0 □ 2.0 □ 3.0 □ 0.5 □ 1.5 ☒ 2.5 □ >3	
STREAM GRADIENT ESTIMATE	

QHEI PERFORMED? ☐ Yes ☑ No QHEI Score	e (If Yes, Attach Completed QHEI form)	
LI CWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream	
,	THE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.	
USGS Quadrangle Name: Chardon	NRCS Soil Map Page: NRCS Soil Map Stream Order:	
County: Geauga	Township/City: Chardon Township	
MISCELLANEOUS		
Base Flow Conditions? (Y/N): Yes Date of last precipit	ation: 10/17/21 Quantity: 0.15	
Photo-documentation Notes:		
Elevated Turbidity? (Y/N): NO Canopy (% open):	70	
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):	
Field Measures: Temp (°C) Dissolved Oxygen (mg	g/l) pH (S.U.) Conductivity (umhos/cm)	
	es If not, explain:	
is the sampling reach representative of the stream (T/N)	— п пот, ехріані.	
Additional comments/decomption of mellution insurants.		
Additional comments/description of pollution impacts:		
BIOLOGICA	AL OBSERVATIONS	
	l observations below)	
Fish Observed? (Y/N) Species observed (if known):		
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):		
Salamanders Observed? (Y/N) Species observed (i	f known):	
	es observed (if known):	
Comments Regarding Biology:		

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location





Surveyed up to where it loses definition for ~10 ft in wetland, but channel does continue further upstream, entering the ROW via culvert







Upstream



Downstream



Substrate



|--|

SITE NAME/LOCATION Stream LP-13 Leroy Center-Mayfield 138 kV Transmission Line Project	
SITE NUMBER S-MJA-102021-02 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²) 0	.077
LENGTH OF STREAM REACH (ft) 29 LAT 41.61273 LONG -81.20235 RIVER MILE	
DATE 10/20/2021 SCORER MJA COMMENTS Intermittent. Channelized, culvert	
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Ins	structions
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR	NO RECOVERY
1. SUBSTRATE (Estimate percent of every type 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 TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pts]	HHEI Metric Points Substrate Max = 40 7
SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: 3 TOTAL NUMBER OF SUBSTRATE TYPES: 4	
2. Maximum Pool Depth (Measure the <u>maximum pool depth within the 61 meter (200 feet)</u> evaluation reach at the time of 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] > 22.5 - 30 cm [30 pts] × < 5 cm [5pts] > 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0pts] COMMENTS MAXIMUM POOL DEPTH (inches):	Pool Depth Max = 30
	Daniel de II
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check <i>ONLY</i> one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7"- 13') [25 pts] × 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] × 1.0 m (≤ 3' 3") [5 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (feet): 2	
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 (Most Predominant per Bank) L R (Per Bank) L R X X Wide >10m Mature Forest, Wetland Chapter (Conservation Tillage)	*
☐ Moderate 5-10m X X Immature Forest, Shrub or Old Field ☐ Urban or Industrial ☐ Narrow <5m	•
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing	ent)
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): □ None □ 1.0 □ 2.0 □ 3.0 □ 0.5 □ 1.5 □ 2.5 □ >3	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft) Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft)	t/100 ft)

QHEI PERFORMED? ☐ Yes ☑ No QHEI Score	(If Yes, Attach Completed QHEI form)	
DOWNSTREAM DESIGNATED USE(S) WWH Name: Big Creek CWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream	
☐ EWH Name:	Distance from Evaluated Stream	
MAPPING: ATTACH COPIES OF MAPS, INCLUDING T	HE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.	
USGS Quadrangle Name: Chardon	NRCS Soil Map Page:NRCS Soil Map Stream Order:	
	Township/City: Chardon Township	
MISCELLANEOUS	, ,	
Base Flow Conditions? (Y/N): Yes Date of last precipitation	tion: 10/17/21 Quantity: 0.15	
Photo-documentation Notes:		
Elevated Turbidity? (Y/N): No Canopy (% open): Q	<u>95 </u>	
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):	
Field Measures: Temp (°C) Dissolved Oxygen (mg/) pH (S.U.) Conductivity (umhos/cm)	
Is the sampling reach representative of the stream (Y/N)	S If not, explain:	
Additional comments/description of pollution impacts:		
	_ OBSERVATIONS observations below)	
Fish Observed? (Y/N) Species observed (if known):		
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):		
Salamanders Observed? (Y/N) Species observed (if known):		
Aquatic Macroinvertebrates Observed? (Y/N) Species	s observed (if known):	
Comments Regarding Biology:		

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location





May 2020 Revision





Upstream Downstream



Substrate



34

SITE NAME/LOCATION Stream LP-14 Leroy Center-Mayfield 138 kV Transmission Line Project	
SITE NUMBER S-MJA-102021-03 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²) 0.0	035
LENGTH OF STREAM REACH (ft) 76 LAT 41.61075 LONG -81.20538 RIVER MILE	
DATE 10/20/2021 SCORER MJA COMMENTS Intermittent stream 09. Channelized, culvert	
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Inst	ructions
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR N	IO RECOVERY
1. SUBSTRATE (Estimate percent of every type 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 TYPE PERCENT SILT [3 pt] BLDR SLABS [16 pts] BEDROCK [16 pts] BEDROCK [16 pts] COBBLE (65-256 mm)[12 pts] GRAVEL (2-64 mm)[9 pts] GRAVEL (2-64 mm)[9 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock BEDROCK [16 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock SCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES:	HHEI Metric Points Substrate Max = 40 4 A + B
time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box): > 30 centimeters [20 pts]	Pool Depth Max = 30
COMMENTS MAXIMUM POOL DEPTH (inches): 5	
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONL Y one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] × 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] × 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (feet):	
This information <u>must</u> also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ★ NOTE: River Left (L) and Right (R) as looking downstream ★	
RIPARIAN WIDTH L R (Per Bank) L R Wide >10m Moderate 5-10m Narrow <5m None COMMENTS RESIDENTS FLOODPLAIN QUALITY (Most Predominant per Bank) L R L R Mature Forest, Wetland L R Wetland U Conservation Tillage Urban or Industrial Open Pasture, Row Cr Fenced Pasture COMMENTS	•
FLOW REGIME (At Time of Evaluation) (Check ONLY one box): Stream Flowing	nt)
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): □ None □ 1.0 □ 2.0 □ 3.0 □ 0.5 □ 1.5 □ 2.5 □ >3	
STREAM GRADIENT ESTIMATE X Flat (0.5 ft/100 ft)	00 ft)

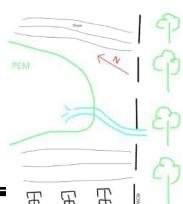
QHEI PERFORMED? ☐ Yes ☑ No QHEI Score	(If Yes, Attach Completed QHEI form)	
DOWNSTREAM DESIGNATED USE(S) WWH Name: Big Creek CWH Name: EWH Name:	Distance from Evaluated Stream	
MAPPING: ATTACH COPIES OF MAPS, INCLUDING	THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.	
USGS Quadrangle Name: Chardon	NRCS Soil Map Page: NRCS Soil Map Stream Order:	
	Township/City: Chardon Township	
MISCELLANEOUS	- Simonip, Sidy.	
Base Flow Conditions? (Y/N): Yes Date of last precipite	ation: 10/17/21 Quantity: 0.15	
Photo-documentation Notes:		
Elevated Turbidity? (Y/N): No Canopy (% open): _	75	
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):	
Field Measures: Temp (°C) Dissolved Oxygen (mg	p/l) pH (S.U.) Conductivity (umhos/cm)	
Is the sampling reach representative of the stream (Y/N) \underline{Y}	es If not, explain:	
Additional comments/description of pollution impacts:		
	AL OBSERVATIONS observations below)	
Fish Observed? (Y/N) Species observed (if known):	
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):		
Salamanders Observed? (Y/N) Species observed (if	f known):	
	es observed (if known):	
Comments Regarding Biology: Frog observed, orange	cloudiness observed	

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

Flows from wetland, through mowed pipeline ROW, and into woods outside of ROW







Upstream



Downstream



Substrate



60

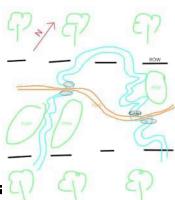
SITE NAME/LOCATION Stream LP-16 Leroy Center-Mayfield 138 kV Transmission Line Project	
SITE NUMBER S-MJA-102021-05 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²)).150
LENGTH OF STREAM REACH (ft) 539 LAT 41.60689 LONG -81.21183 RIVER MILE _	
DATE 10/20/2021 SCORER MJA COMMENTS Ephemeral. Concrete channeled; culvert	
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for In	structions
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OF	NO RECOVERY
1. SUBSTRATE (Estimate percent of every type 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 TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pts] COBBLE (65-256 mm) [12 pts] GRAVEL (2-64 mm) [9 pts] GRAVEL (2-64 mm) [9 pts] Total of Percentages of Bldr Slabs, Boulder, Cobble, Bedrock BCORE OF TWO MOST PREDOMINATE SUBSTRATE TYPES: TOTAL NUMBER OF SUBSTRATE TYPES: Check ONLY two predominant substrate TYPE boxes. (Max of 32). Check ONLY two predominant substrate TYPE boxes. PERCENT SILT [3 pt] LEAF PACK/WOODY DEBRIS [3 pts] CLAY or HARDPAN [0 pt] MUCK [0 pts] ARTIFICIAL [3 pts] TOTAL NUMBER OF SUBSTRATE TYPES: 4	HHEI Metric Points Substrate Max = 40 25
2. Maximum Pool Depth (<i>Measure the <u>maximum</u> pool depth within the 61 meter (200 feet)</i> evaluation reach at the	Pool Depth
time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check <i>ONLY</i> one box): > 30 centimeters [20 pts] 5 cm - 10 cm [15 pts]	Max = 30
 □ > 30 centimeters [20 pts] □ 5 cm - 10 cm [15 pts] □ < 5 cm [5pts] □ < 5 cm [5	30
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0pts]	
COMMENTS MAXIMUM POOL DEPTH (inches):	
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check <i>ONLY</i> one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] × 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts] × 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (feet):	
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY ★ NOTE: River Left (L) and Right (R) as looking downstream RIPARIAN WIDTH (Per Bank) L R Wide >10m Mature Forest, Wetland Conservation Tillage Moderate 5-10m Mature Forest, Shrub or Old Field Urban or Industrial Narrow <5m Residential, Park, New Field Open Pasture, Row on None Fenced Pasture Mining or Construction COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	Crop
✓ Stream Flowing ☐ Moist Channel, isolated pools, no flow (intermit Dry channel, no water (ephemeral) COMMENTS ☐ Dry channel, no water (ephemeral)	tent)
SINUOSITY (Number of bends per 61 m (200 ft) of channel) (Check ONLY one box): □ None □ 1.0 □ 2.0 × 3.0 □ 0.5 □ 1.5 □ 2.5 □ >3	
STREAM GRADIENT ESTIMATE Flat (0.5 ft/100 ft)	t/100 ft)

QHEI PERFORMED? ☐ Yes ☒ No QHEI Score	(If Yes, Attach Completed QHEI form)	
☐ CWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream	
	HE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.	
Chardon	NRCS Soil Map Page:NRCS Soil Map Stream Order:	
County: Geauga	Township/City: Chardon Township	
MISCELLANEOUS Base Flow Conditions? (Y/N): Yes Date of last precipita		
Photo-documentation Notes:		
Elevated Turbidity? (Y/N): No Canopy (% open):	90	
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):	
	I) pH (S.U.) Conductivity (umhos/cm)	
Is the sampling reach representative of the stream (Y/N)	S If not, explain:	
Additional comments/description of pollution impacts:		
	L OBSERVATIONS observations below)	
Fish Observed? (Y/N) Species observed (if known):		
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):		
Salamanders Observed? (Y/N) Species observed (if	known):	
Aquatic Macroinvertebrates Observed? (Y/N) Specie	s observed (if known):	
Comments Regarding Biology:		

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This <u>must</u> be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location





May 2020 Revision



Upstream



Substrate



Downstream



56

SITE NAME/LOCATION_Stream LP-17 Leroy Center-Mayfield 138 kV Transmission Line Project	
SITE NUMBER S-MJA-101921-01 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²) 0.4	470
LENGTH OF STREAM REACH (ft) 441 LAT 41.59917 LONG -81.22231 RIVER MILE	
DATE 10/19/2021 SCORER MJA COMMENTS Intermittent. Channelized, culvert	
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Inst	ructions
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR N	IO RECOVERY
1. SUBSTRATE (Estimate percent of every type 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 TYPE DERCENT TYPE PERCENT SILT [3 pt] SILT [3 pt] DEACH DETRITUS [3 pts] SEDROCK [16 pts] SILT [13 pt] DEACH DETRITUS [13 pts] SEDROCK [16	HHEI Metric Points Substrate Max = 40 16
2. Maximum Pool Depth (<i>Measure the <u>maximum</u> pool depth within the 61 meter (200 feet)</i> evaluation reach at the	Pool Depth
time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):	Max = 30
X > 30 centimeters [20 pts] 5 cm - 10 cm [15 pts] → > 22.5 - 30 cm [30 pts] < 5 cm [5pts]	20
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0pts]	
COMMENTS MAXIMUM POOL DEPTH (inches): 24	
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check ONLY one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8") [15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] ≤ 1.0 m (≤ 3' 3") [5 pts] x > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (feet): 5	
This information must also be completed RIPARIAN ZONE AND FLOODPLAIN QUALITY * NOTE: River Left (L) and Right (R) as looking downstream * RIPARIAN WIDTH (Per Bank) L R Wide >10m Wix Mature Forest, Wetland Conservation Tillage Moderate 5-10m Immature Forest, Shrub or Old Field Urban or Industrial Narrow <5m Residential, Park, New Field Open Pasture, Row Cr None Residential, Park, New Field Mining or Construction COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	ор
Stream Flowing Subsurface flow with isolated pools (interstitial) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) Moist Channel, isolated pools, no flow (intermitte Dry channel, no water (ephemeral) COMMENTS (Check ONLY one box):	nt)
□ None □ 1.0 □ 2.0 □ 3.0 □ 0.5 □ 1.5 □ 2.5 □ >3	
STREAM GRADIENT ESTIMATE X Flat (0.5 ft/100 ft)	00 ft)

QHEI PERFORMED? ☐ Yes ☑ No QHEI Score	e (If Yes, Attach Completed QHEI form)
LI CWH Name:	Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream Distance from Evaluated Stream
	THE ENTIRE WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.
USGS Quadrangle Name: Chardon	NRCS Soil Map Page: NRCS Soil Map Stream Order:
County: Geauga	Township/City: Chardon Township
MISCELLANEOUS Base Flow Conditions? (Y/N): Yes Date of last precipit	ation: 10/17/21 Quantity: 0.15
Photo-documentation Notes:	
Elevated Turbidity? (Y/N): No Canopy (% open):	<u>95 </u>
Were samples collected for water chemistry? (Y/N): No	Lab Sample # or ID (attach results):
Field Measures: Temp (°C) Dissolved Oxygen (mg	g/l) pH (S.U.) Conductivity (umhos/cm)
	'es If not, explain:
Additional comments/description of pollution impacts:	
<u></u>	AL OBSERVATIONS Il observations below)
Fish Observed? (Y/N) Species observed (if known	n):
	ved (if known):
Salamanders Observed? (Y/N) Species observed (i	f known):
	es observed (if known):
Comments Regarding Biology: Fish observed	· · · · ·

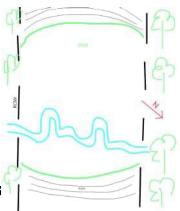
DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location

Deeply incised channel in places



May 2020 Revision





Upstream



Substrate



Downstream



58

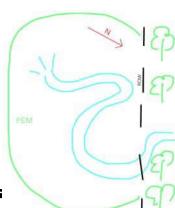
SITE NAME/LOCATION_Stream LP-18 Leroy Center-Mayfield 138 kV Transmission Line Project	
SITE NUMBER S-MJA-101821-01 RIVER BASIN 04110004 RIVER CODE DRAINAGE AREA (mi²) 0.	110
LENGTH OF STREAM REACH (ft) 103 LAT 41.59820 LONG -81.22490 RIVER MILE	
DATE 10/18/2021 SCORER MJA COMMENTS Intermittent. Channelized, culvert	
NOTE: Complete All Items On This Form - Refer to "Headwater Habitat Evaluation Index Field Manual" for Ins	tructions
STREAM CHANNEL MODIFICATIONS: NONE / NATURAL CHANNEL RECOVERED RECOVERING RECENT OR N	IO RECOVERY
1. SUBSTRATE (Estimate percent of every type 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 TYPE BLDR SLABS [16 pts] BOULDER (>256 mm) [16 pts] BEDROCK [16 pts]	HHEI Metric Points Substrate Max = 40 23
2. Maximum Pool Depth (<i>Measure the maximum pool depth within the 61 meter (200 feet)</i> evaluation reach at the	Pool Depth
time of evaluation. Avoid plunge pools from road culverts or storm water pipes) (Check ONLY one box):	Max = 30
 □ > 30 centimeters [20 pts] □ 5 cm - 10 cm [15 pts] □ < 5 cm [5pts] 	30
> 10 - 22.5 cm [25 pts] NO WATER OR MOIST CHANNEL [0pts]	
COMMENTS MAXIMUM POOL DEPTH (inches):	
3. BANK FULL WIDTH (Measured as the average of 3 - 4 measurements) (Check <i>ONLY</i> one box): > 4.0 meters (> 13') [30 pts] > 1.0 m - 1.5 m (> 3' 3" - 4' 8")[15 pts] > 3.0 m - 4.0 m (> 9' 7" - 13') [25 pts] ≤ 1.0 m (≤ 3' 3") [5 pts] > 1.5 m - 3.0 m (> 4' 8" - 9' 7") [20 pts]	Bankfull Width Max=30
COMMENTS AVERAGE BANKFULL WIDTH (feet): 2	
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 (Most Predominant per Bank) L R L R X Wide >10m X Mature Forest, Wetland Conservation Tillage Moderate 5-10m Immature Forest, Shrub or Old Field Urban or Industrial Narrow <5m Residential, Park, New Field Open Pasture, Row Colombian None Fenced Pasture Mining or Construction COMMENTS FLOW REGIME (At Time of Evaluation) (Check ONLY one box):	op _
Stream Flowing Subsurface flow with isolated pools (interstitial) COMMENTS SINUOSITY (Number of bends per 61 m (200 ft) of channel) Moist Channel, isolated pools, no flow (intermitted Dry channel, no water (ephemeral) COMMENTS (Check ONLY one box):	
□ None □ 1.0 □ 2.0 □ 3.0 □ 0.5 □ 1.5 □ 2.5 □ >3	
STREAM GRADIENT ESTIMATE	
Flat (0.5 ft/100 ft) X Flat to Moderate Moderate (2 ft/100 ft) Moderate to Severe Severe (10 ft/	100 ft)

DOWNSTREAM DESIGNATED USE(S)	
■ WWH Name: Big Creek ■ Distance from Evaluated Stream ■ 1.35 mile	s
☐ CWH Name: Distance from Evaluated Stream	
☐ EWH Name: Distance from Evaluated Stream	
MAPPING: ATTACH COPIES OF MAPS, INCLUDING THE <u>ENTIRE</u> WATERSHED AREA. CLEARLY MARK THE SITE LOCATION.	
USGS Quadrangle Name: Chardon NRCS Soil Map Page:NRCS Soil Map Stream Order:	_
County: Geauga Township/City: Chardon Township	
MISCELLANEOUS	
Base Flow Conditions? (Y/N): Yes Date of last precipitation: 10/17/21 Quantity: 0.15	
Photo-documentation Notes:	
Elevated Turbidity? (Y/N): No Canopy (% open): 90	
Were samples collected for water chemistry? (Y/N): No Lab Sample # or ID (attach results):	
Field Measures: Temp (°C) Dissolved Oxygen (mg/l) pH (S.U.) Conductivity (umhos/cm)	
Is the sampling reach representative of the stream (Y/N) Yes If not, explain:	
Additional comments/description of pollution impacts:	
BIOLOGICAL OBSERVATIONS (Record all observations below)	
Fish Observed? (Y/N) Species observed (if known):	
Frogs or Tadpoles Observed? (Y/N) Species observed (if known):	
Salamanders Observed? (Y/N) Species observed (if known):	
Aquatic Macroinvertebrates Observed? (Y/N) Species observed (if known):	
Comments Regarding Biology:	

DRAWING AND NARRATIVE DESCRIPTION OF STREAM REACH (This must be completed)

Include important landmarks and other features of interest for site evaluation and a narrative description of the stream's location





May 2020 Revision



Upstream



Substrate



Downstream





POND DATA SHEET FEATURE ID Pond LP-01 **ASSOCIATED FEATURES:** Survey Type: Wetland and waterbodies delineation **CLIENT/PROJECT NAME:** FirstEnergy DATE: 11/11/2021 Leroy Center-Mayfield 138 kV Transmission Line Project **ROUTE: INVESTIGATORS:** BAO STATE/COUNTY: OH IS THIS A MAPPED NWI FEATURE?: no Lake **WATERBODY CHARACTERISTICS** WATERBODY TYPE: Constructed pond Estimated 4 ft AVG. DEPTH: AVG. WIDTH (WATER SURFACE): 400 ft 4 acres **APPROXIMATE SIZE: QUALITATIVE ATTRIBUTES AVERAGE WATER APPEARANCE:** Clear PRIMARY SUBSTRATE (IF Silt OBSERVED): **POTENTIAL HABITAT FOR: SURROUNDING LAND USE:** ROW, wetlands N/A WETLAND FRINGE (IF PRESENT): **COMMENTS**







POND DATA SHEET FEATURE ID Pond LP-02 **ASSOCIATED FEATURES:** Survey Type: Wetland and waterbodies delineation **CLIENT/PROJECT NAME:** FirstEnergy DATE: 11/10/2021 Leroy Center-Mayfield 138 kV Transmission Line Project **INVESTIGATORS: ROUTE:** BAO Is this a Mapped NWI Feature?: yes STATE/COUNTY: OH Lake **PUBGX WATERBODY CHARACTERISTICS POND** WATERBODY TYPE: Estimated 4 ft AVG. DEPTH: AVG. WIDTH (WATER SURFACE): 300 ft 10.5 acres **APPROXIMATE SIZE: QUALITATIVE ATTRIBUTES AVERAGE WATER APPEARANCE:** Good PRIMARY SUBSTRATE (IF OBSERVED): **POTENTIAL HABITAT FOR: SURROUNDING LAND USE:** Residential None WETLAND FRINGE (IF PRESENT): **COMMENTS**



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POND DATA SHEET FEATURE ID Pond LP-03 **ASSOCIATED FEATURES:** Survey Type: Wetland and waterbodies delineation **CLIENT/PROJECT NAME:** FirstEnergy DATE: 11/10/2021 Leroy Center-Mayfield 138 kV Transmission Line Project **ROUTE: INVESTIGATORS:** BAO Is this a Mapped NWI Feature?: yes STATE/COUNTY: OH **PUBG** Lake **WATERBODY CHARACTERISTICS POND** WATERBODY TYPE: Estimated 2 ft AVG. DEPTH: AVG. WIDTH (WATER SURFACE): 100 ft 1 acre **APPROXIMATE SIZE: QUALITATIVE ATTRIBUTES AVERAGE WATER APPEARANCE:** Clear PRIMARY SUBSTRATE (IF Silt OBSERVED): **POTENTIAL HABITAT FOR: SURROUNDING LAND USE:** Residential, wooded PEM WETLAND FRINGE (IF PRESENT): **COMMENTS**



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POND DATA SHEET FEATURE ID Pond LP-04 **ASSOCIATED FEATURES:** Survey Type: Wetland and waterbodies delineation CLIENT/PROJECT NAME: FirstEnergy DATE: 09/10/2021 Leroy Center-Mayfield 138 kV Transmission Line Project **ROUTE: INVESTIGATORS: BCR** Is this a Mapped NWI Feature?: yes STATE/COUNTY: OH Geauga **PUBGx WATERBODY CHARACTERISTICS** Pond WATERBODY TYPE: Estimated 4 ft AVG. DEPTH: AVG. WIDTH (WATER SURFACE): 90 0.5 acre **APPROXIMATE SIZE: QUALITATIVE ATTRIBUTES AVERAGE WATER APPEARANCE:** Clear brown PRIMARY SUBSTRATE (IF Silt OBSERVED): **POTENTIAL HABITAT FOR:** Frogs **SURROUNDING LAND USE:** Mowed N/A WETLAND FRINGE (IF PRESENT): **COMMENTS**





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POND DATA SHEET FEATURE ID Pond LP-05 **ASSOCIATED FEATURES:** Survey Type: Wetland and waterbodies delineation CLIENT/PROJECT NAME: FirstEnergy DATE: 09/10/2021 Leroy Center-Mayfield 138 kV Transmission Line Project **INVESTIGATORS: ROUTE: BCR** Is this a Mapped NWI Feature?: yes STATE/COUNTY: OH Geauga **PUBGx WATERBODY CHARACTERISTICS** Pond WATERBODY TYPE: Estimated 3 ft AVG. DEPTH: AVG. WIDTH (WATER SURFACE): 100 0.5 acre **APPROXIMATE SIZE: QUALITATIVE ATTRIBUTES AVERAGE WATER APPEARANCE:** Slightly cloudy brown PRIMARY SUBSTRATE (IF Silt OBSERVED): **POTENTIAL HABITAT FOR:** None observed **SURROUNDING LAND USE:** Mowed lawn N/A WETLAND FRINGE (IF PRESENT): **COMMENTS**





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POND DATA SHEET

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FEATURE ID Pond LP-06		ASSOCIATED	FEATURES:				
Survey Type: Wetland and waterbodies delineation							
DATE: 09/10/2021	CLIENT/PROJECT NAME:	FirstEnergy Leroy Center-Mayfield 138 kV Transmission Line Project					
INVESTIGATORS: BCR		ROUTE:					
STATE/COUNTY: OH	Geauga		IS THIS A MAPE	PED NWI FEATURE?: yes	PUBGx		
WATERBODY CHARACTERISTICS							
WATERBODY TYPE:	Pond						
AVG. DEPTH:	Estimated 3 ft						
AVG. WIDTH (WATER SURFACE):	60 ft						
APPROXIMATE SIZE:	0.25 acre						
		QUALITATIVE	ATTRIBUTE	S			
AVERAGE WATER APPEARANCE: Slightly cloudy brown/gray							
PRIMARY SUBSTRATE (IF OBSERVED):	Silt						
POTENTIAL HABITAT FOR:	Fish, turtles, damselflies						
SURROUNDING LAND USE:	Mowed lawn, old fie	eld ROW					
WETLAND FRINGE (IF PRESENT):	PEM outside of RO	W					
COMMENTS							





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This foregoing document was electronically filed with the Public Utilities Commission of Ohio Docketing Information System on

8/23/2022 2:06:30 PM

in

Case No(s). 22-0747-EL-BLN

Summary: Application Letter of Notification (Part 5 of 5) electronically filed by Ms. Devan K. Flahive on behalf of American Transmission Systems Incorporated