

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
	River Pointe Logistics Center	10/02/22	0.070	WE-2	1.31	
Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:		
Stephen Dadio		40.906947	-75.097363			
General Comments:						

1. Wetland Zone of Influence Condition Index

Wetland Zone of Influence (300 foot area around AA perimeter)	Condition Category														CI = Total Score/20					
	Optimal				Suboptimal				Marginal				Poor							
ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	High Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.				High Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.				Low Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.		High Poor: ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.		Low Poor: ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above. 2. Estimate the % area within each condition category. Calculators are provided for you below. 3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.															Total Score = SUM(%Areas*Scores)					
Condition Category:															Total Score:					
Scoring:	% ZOI Area:		0%	0%	0%	0%	100%	0%												
	Score:		0	0	0	0	8	0												
	Total Sub-score:		0.00	0.00	0.00	0.00	8.00	0.00	8.00											
Comments:																				

2. Roadbed Presence Index

a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20											
	Optimal				Suboptimal				Marginal				Poor													
Roadbeds present within 100 feet of the AA boundary	High Optimal: No roadbeds present within 100 feet of the AA boundary				Low Optimal: Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.				High Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but less than or equal to 4.				Low Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1						
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Condition Category:															Total Score:											
Scoring:	% ZOI Area:		0%	0%	0%	0%	100%	0%																		
	Score:		0	0	0	0	8	0																		
	Total Sub-score:		0.00	0.00	0.00	0.00	8.00	0.00	8.00																	
Comments:																										

b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20											
	Optimal				Suboptimal				Marginal				Poor													
Roadbeds present within 100 - 300 feet of the AA boundary	High Optimal: No roadbeds present within 100 - 300 feet of the AA boundary				Low Optimal: Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.				High Suboptimal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 100 - 300 feet AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1						
															Condition Score	Weighting	Sub-Scores									
															a. Roadbed 0-100:	20	* (0.67)	13								
															b. Roadbed 100-300:	20	* (0.33)	7								
															Total Score:		20		1.00							
Comments:																										

Wetland Condition Assessment Form

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Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

3. Vegetation Condition Index

	Condition Category																														
	Optimal					Suboptimal					Marginal					Poor															
a. Invasive Species Presence	High Optimal: No invasives present.					Low Optimal: <5% of the total AA contains invasive species.					High Suboptimal: >5% but less than 10% of the total AA contains invasive species.					Low Suboptimal: >10% but less than 20% of the total AA contains invasive species.				High Marginal: >20% but less than 30% of the total AA contains invasive species.				Low Marginal: >30% but less than 50% of the total AA contains invasive species.				Poor: > 50% of the total AA contains invasive species.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1											

Comments:

	Condition Category														CI = Total Score/40																
	Optimal					Suboptimal					Marginal					Poor															
b. Vegetation Stressor Presence	High Optimal: No vegetation stressors present within the AA boundary.					Low Optimal: One vegetation stressor present within the AA boundary.					High Suboptimal: Two vegetation stressors present within the AA boundary.					Low Suboptimal: Three vegetation stressors present within the AA boundary.				High Marginal: Four vegetation stressors present within the AA boundary.				Low Marginal: Five vegetation stressors present within the AA boundary.				Poor: Greater than five vegetation stressors present within the AA boundary.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1											

Comments:

a. Invasive Sub-Score:	20	Total Score	1.00
b. Vegetation Sub-Score:	20	Total Score	40

4. Hydrologic Modification Index

	Condition Category														CI = Total Score/20																
	Optimal					Suboptimal					Marginal					Poor															
Hydrologic Modification Stressor Presence	High Optimal: No hydrologic stressors present within the AA boundary.					Low Optimal: One hydrologic stressor present within the AA boundary.					High Suboptimal: Two hydrologic stressors present within the AA boundary.					Low Suboptimal: Three hydrologic stressors present within the AA boundary.				High Marginal: Four hydrologic stressors present within the AA boundary.				Low Marginal: Five hydrologic stressors present within the AA boundary.				Poor: Greater than five hydrologic stressors present within the AA boundary.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1											

Comments:

Score:	20		1.00
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5. Sediment Stressor Index

	Condition Category														CI = Total Score/20																
	Optimal					Suboptimal					Marginal					Poor															
Sediment Stressor Presence	High Optimal: No sediment stressors present within the AA boundary.					Low Optimal: One sediment stressor present within the AA boundary.					High Suboptimal: Two sediment stressors present within the AA boundary.					Low Suboptimal: Three sediment stressors present within the AA boundary.				High Marginal: Four sediment stressors present within the AA boundary.				Low Marginal: Five sediment stressors present within the AA boundary.				Poor: Greater than five sediment stressors present within the AA boundary.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1											

Comments:

Score:	20		1.00
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	Condition Category																					
	Optimal					Suboptimal					Marginal					Poor						
a. Eutrophication Stressor Presence	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.				Three eutrophication stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		

Comments:

	Condition Category														CI = Total Score/40							
	Optimal					Suboptimal					Marginal					Poor						
b. Contaminant / Toxicity Stressor Presence	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicity stressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.				Three contaminant / toxicity stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		

Comments:

a. Eutrophication Score	20	Total Score:	1.00
b. Contaminant Score	20	Total Score:	40

Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.

Overall Condition Index: **0.90**

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier		Date	Name(s) of Evaluator(s)	
Resource Identifier	AA #	Lat (dd)	Long (dd)	Notes:

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.		2	0
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	0			100-300 ft.	0		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002) Pennsylvania Department of Environmental Protection STRESSOR WORKSHEET		2/4/2017		
		Occurrence in AA		
		Y	#s	N
Vegetation Alteration				
Mowing				
Moderate livestock grazing (within one year)				
Crops (annual row crops, within one year)				
Selective tree harvesting/cutting (>50% removal, within 5 years)				
Right-of-way clearing (mechanical or chemical)				
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)				
Removal of woody debris				
Aquatic weed control (mechanical or herbicide)				
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)				
Plantation (conversion from typical natural tree species, including orchards)				
Other:				
Total Number:				
Hydrologic Modification				
Ditching, tile draining, or other dewatering methods				
Dike/weir/dam				
Filling/grading				
Dredging/excavation				
Stormwater inputs (culvert or similar concentrated urban runoff)				
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)				
Dead or dying trees (trunks still standing) *				
Stream alteration (channelization or incision)				
Other:				
Total Number:				
Sedimentation				
Sediment deposits/plumes				
Eroding banks/slopes				
Active construction (earth disturbance for development)				
Active plowing (plowing for crop planting in past year)				
Intensive livestock grazing (in one year, ground is >50% bare)				
Active selective forestry harvesting (within one year)				
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)				
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)				
Other:				
Total Number:				
Eutrophication				
Direct discharges from agricultural feedlots, manure pits, etc.				
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.				
Heavy or moderately heavy formation of algal mats				
Other:				
Total Number:				
Contaminant/Toxicity				
Severe vegetation stress (source unknown or suspected)				
Obvious spills, discharges, plumes, odors, etc.				
Acidic drainages (mined sites, quarries, road cuts)				
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites				
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)				
Fish or wildlife kills or obvious disease or abnormalities observed				
Excessive garbage/dumping				
Other:				
Total Number:				

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

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Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? **YES NO**

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%

Total % relative cover of all invasives, collectively on site: _____ %

Comments:

Common Invasives/Aggressives List

Code	Common Name	Scientific	Status	Code	Common Name	Scientific	Status
aggi2	Redtop	<i>Agrostis gigantea</i>	FACW	luhe	Water primrose	<i>Ludwigia hexapetala</i>	OBLW
algl2	European Alder	<i>Alnus glutinosa</i>	FACW	lyvu	Garden loosestrife	<i>Lysimachia vulgaris</i>	OBLW
arhi3	Carpetgrass	<i>Arthraxon hispidus</i>	FAC-	lysa2	Purple loosestrife	<i>Lythrum salicaria</i>	FACW
beth	Japanese barberry	<i>Berberis thunbergii</i>	FACW	maqu	European waterclover	<i>Marsilea quadrifolia</i>	OBLW
bevu	European barberry	<i>Berberis vulgaris</i>	FACW	mivi	Japanese stiltgrass	<i>Microstegium vimineum</i>	FAC
butom	Flowering Rush	<i>Butomus umbellatus</i>	OBLW	nami2	Water cress	<i>Nasturtium officinale</i>	OBLW
calli6	Pond water-starwort	<i>Callitriche stagnalis</i>	OBLW	pelo	Low smartweed	<i>Persicaria longiseta</i>	FACW
egde	Brazilian waterweed	<i>Egeria densa</i>	OBLW	phar	Reed canary grass	<i>Phalaris arundinacea</i>	FACW
elan	Russian olive	<i>Elaeagnus angustifolia</i>	FACU	phau7	Common Reed	<i>Phragmites australis</i>	OBLW
elum	Autumn olive	<i>Elaeagnus umbellata</i>	FACU	potr	Rough bluegrass	<i>Poa trivialis</i>	FACW
ephi	Hairy willow-herb	<i>Epilobium hirsutum</i>	FACW	pocu6	Japanese knotweed	<i>Polygonum (Faloia) cuspidatum</i>	FAC-
eppa5	Willow-herb	<i>Epilobium parviflorum</i>	FACW	pgpf	Mile-a-minute	<i>Polygonum perfoliatum</i>	FAC-
fasa	Giant knotweed	<i>Fallopia sachalinensis</i>	OBLW	puera	Kudzu-vine	<i>Pueraria lobata</i>	FAC-
gldi	Mudmats	<i>Glossostigma diandrum</i>	OBLW	pysp1	Apple/crabapple/pear	<i>Pyrus sp.</i>	FAC?
hola	Velvetgrass	<i>Holcus lanatus</i>	FAC	rhfr	Glossy Buckthorn	<i>Rhamnus frangula</i>	FAC-
huja	Japanese Hops	<i>Humulus japonicus</i>	FACU	romu	Multiflora rose	<i>Rosa multiflora</i>	FACU
loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
lomo	Morrow's honeysuckle	<i>Lonicera morrowii</i>	NI	tygl	Hybrid cattail	<i>Typha x glauca</i>	OBLW
lota	Tartarian honeysuckle	<i>Lonicera tatarica</i>					

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Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:		
Stephen Dadio		40.904726	-75.099295			
General Comments:						

1. Wetland Zone of Influence Condition Index

Wetland Zone of Influence (300 foot area around AA perimeter)	Condition Category														CI = Total Score/20						
	Optimal				Suboptimal				Marginal				Poor								
ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	High Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.				High Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.				Low Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.		High Poor: ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.		Low Poor: ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.				
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3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.																					
Condition Category:																					
Scoring:	% ZOI Area:	0%				0%				0%				0%		80%		20%		Total Score:	
	Score:	0				0				0				0		8		12			
	Total Sub-score:	0.00				0.00				0.00				0.00		6.40		2.40		8.80	
Comments:																					

2. Roadbed Presence Index

a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20											
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Roadbeds present within 100 feet of the AA boundary	High Optimal: No roadbeds present within 100 feet of the AA boundary				Low Optimal: Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.				High Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but less than or equal to 4.				Low Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
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														Condition Score		Weighting		Sub-Scores								
														a. Roadbed 0-100:		20		* (0.67)		13						
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	Condition Category																																		
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SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1															

Comments:

	Condition Category															CI = Total Score/40																			
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SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1															

Comments:

a. Invasive Sub-Score:	20	Total Score	1.00
b. Vegetation Sub-Score:	20	Total Score	40

4. Hydrologic Modification Index

	Condition Category															CI = Total Score/20																			
	Optimal					Suboptimal					Marginal						Poor																		
Hydrologic Modification Stressor Presence	High Optimal: No hydrologic stressors present within the AA boundary.					Low Optimal: One hydrologic stressor present within the AA boundary.					High Suboptimal: Two hydrologic stressors present within the AA boundary.					Low Suboptimal: Three hydrologic stressors present within the AA boundary.					High Marginal: Four hydrologic stressors present within the AA boundary.					Low Marginal: Five hydrologic stressors present within the AA boundary.					Greater than five hydrologic stressors present within the AA boundary.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1															

Comments:

Score:	20	1.00
--------	----	------

5. Sediment Stressor Index

	Condition Category															CI = Total Score/20																			
	Optimal					Suboptimal					Marginal						Poor																		
Sediment Stressor Presence	High Optimal: No sediment stressors present within the AA boundary.					Low Optimal: One sediment stressor present within the AA boundary.					High Suboptimal: Two sediment stressors present within the AA boundary.					Low Suboptimal: Three sediment stressors present within the AA boundary.					High Marginal: Four sediment stressors present within the AA boundary.					Low Marginal: Five sediment stressors present within the AA boundary.					Greater than five sediment stressors present within the AA boundary.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1															

Comments:

Score:	20	1.00
--------	----	------

	Condition Category																			
	Optimal					Suboptimal					Marginal						Poor			
a. Eutrophication Stressor Presence	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.					Three eutrophication stressors present within the AA boundary.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

Comments:

	Condition Category															CI = Total Score/40				
	Optimal					Suboptimal					Marginal						Poor			
b. Contaminant / Toxicity Stressor Presence	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicity stressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.					Three contaminant / toxicity stressors present within the AA boundary.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

Comments:

a. Eutrophication Score	20	Total Score:	1.00
b. Contaminant Score	20	Total Score:	40

Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.

Overall Condition Index: **0.91**

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)	
Resource Identifier	AA #	Lat (dd)	Long (dd)	Notes:	

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.		2	0
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	0			100-300 ft.	0		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002) Pennsylvania Department of Environmental Protection STRESSOR WORKSHEET		2/4/2017		
		Occurrence in AA		
		Y	#s	N
Vegetation Alteration				
Mowing				
Moderate livestock grazing (within one year)				
Crops (annual row crops, within one year)				
Selective tree harvesting/cutting (>50% removal, within 5 years)				
Right-of-way clearing (mechanical or chemical)				
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)				
Removal of woody debris				
Aquatic weed control (mechanical or herbicide)				
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)				
Plantation (conversion from typical natural tree species, including orchards)				
Other:				
Total Number:				
Hydrologic Modification				
Ditching, tile draining, or other dewatering methods				
Dike/weir/dam				
Filling/grading				
Dredging/excavation				
Stormwater inputs (culvert or similar concentrated urban runoff)				
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)				
Dead or dying trees (trunks still standing) *				
Stream alteration (channelization or incision)				
Other:				
Total Number:				
Sedimentation				
Sediment deposits/plumes				
Eroding banks/slopes				
Active construction (earth disturbance for development)				
Active plowing (plowing for crop planting in past year)				
Intensive livestock grazing (in one year, ground is >50% bare)				
Active selective forestry harvesting (within one year)				
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)				
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)				
Other:				
Total Number:				
Eutrophication				
Direct discharges from agricultural feedlots, manure pits, etc.				
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.				
Heavy or moderately heavy formation of algal mats				
Other:				
Total Number:				
Contaminant/Toxicity				
Severe vegetation stress (source unknown or suspected)				
Obvious spills, discharges, plumes, odors, etc.				
Acidic drainages (mined sites, quarries, road cuts)				
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites				
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)				
Fish or wildlife kills or obvious disease or abnormalities observed				
Excessive garbage/dumping				
Other:				
Total Number:				

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? YES NO

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%

Total % relative cover of all invasives, collectively on site: _____%

Comments:

Common Invasives/Aggressives List

Code	Common Name	Scientific	Status	Code	Common Name	Scientific	Status
aggi2	Redtop	<i>Agrostis gigantea</i>	FACW	luhe	Water primrose	<i>Ludwigia hexapetala</i>	OBLW
algl2	European Alder	<i>Alnus glutinosa</i>	FACW	lyvu	Garden loosestrife	<i>Lysimachia vulgaris</i>	OBLW
arhi3	Carpetgrass	<i>Arthraxon hispidus</i>	FAC-	lysa2	Purple loosestrife	<i>Lythrum salicaria</i>	FACW
beth	Japanese barberry	<i>Berberis thunbergii</i>	FACW	maqu	European waterclover	<i>Marsilea quadrifolia</i>	OBLW
bevu	European barberry	<i>Berberis vulgaris</i>	FACW	mivi	Japanese stiltgrass	<i>Microstegium vimineum</i>	FAC
butom	Flowering Rush	<i>Butomus umbellatus</i>	OBLW	nami2	Water cress	<i>Nasturtium officinale</i>	OBLW
calli6	Pond water-starwort	<i>Callitriche stagnalis</i>	OBLW	pelo	Low smartweed	<i>Persicaria longiseta</i>	FACW
egde	Brazilian waterweed	<i>Egeria densa</i>	OBLW	phar	Reed canary grass	<i>Phalaris arundinacea</i>	FACW
elan	Russian olive	<i>Elaeagnus angustifolia</i>	FACU	phau7	Common Reed	<i>Phragmites australis</i>	OBLW
elum	Autumn olive	<i>Elaeagnus umbellata</i>	FACU	potr	Rough bluegrass	<i>Poa trivialis</i>	FACW
ephi	Hairy willow-herb	<i>Epilobium hirsutum</i>	FACW	pocu6	Japanese knotweed	<i>Polygonum (Faloia) cuspidatum</i>	FAC-
eppa5	Willow-herb	<i>Epilobium parviflorum</i>	FACW	pgpf	Mile-a-minute	<i>Polygonum perfoliatum</i>	FAC-
fasa	Giant knotweed	<i>Fallopia sachalinensis</i>	OBLW	puera	Kudzu-vine	<i>Pueraria lobata</i>	FAC-
gldi	Mudmats	<i>Glossostigma diandrum</i>	OBLW	pysp1	Apple/crabapple/pear	<i>Pyrus sp.</i>	FAC?
hola	Velvetgrass	<i>Holcus lanatus</i>	FAC	rhfr	Glossy Buckthorn	<i>Rhamnus frangula</i>	FAC-
huja	Japanese Hops	<i>Humulus japonicus</i>	FACU	romu	Multiflora rose	<i>Rosa multiflora</i>	FACU
loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
lomo	Morrow's honeysuckle	<i>Lonicera morrowii</i>	NI	tygl	Hybrid cattail	<i>Typha x glauca</i>	OBLW
lota	Tartarian honeysuckle	<i>Lonicera tatarica</i>					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
	River Pointe	10/02/22	0.024	WE-5	1.98	
Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:		
Stephen Dadio		40.904726	-75.099295			
General Comments:						

1. Wetland Zone of Influence Condition Index

Wetland Zone of Influence (300 foot area around AA perimeter)	Condition Category														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.				High Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.				High Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.				Low Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.		High Poor: ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.		Low Poor: ZOI area vegetation consists of impervious surfaces; mine spoil surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above. 2. Estimate the % area within each condition category. Calculators are provided for you below. 3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.															Total Score = SUM(%Areas*Scores)							
Condition Category:																Total Score:						
Scoring:		% ZOI Area: 0%				0%				0%				60%				40%				
		Score: 0				0				0				12				10				
		Total Sub-score: 0.00				0.00				0.00				7.20		4.00		11.20		0.56		
Comments:																						

2. Roadbed Presence Index

a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20									
	Optimal				Suboptimal				Marginal				Poor											
	High Optimal: No roadbeds present within 100 feet of the AA boundary		Low Optimal: Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
%																								
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20									
	Optimal				Suboptimal				Marginal				Poor											
	High Optimal: No roadbeds present within 100 - 300 feet of the AA boundary		Low Optimal: Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 100 - 300 feet AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
															Condition Score		Weighting		Sub-Scores		Total Score:			
															a. Roadbed 0-100:		20		* (0.67)				13	
															b. Roadbed 100-300:		20		* (0.33)				7	
1.00																								
Comments:																								

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

3. Vegetation Condition Index																											
a. Invasive Species Presence	Condition Category																										
	Optimal					Suboptimal					Marginal						Poor										
	High Optimal: No invasives present.		Low Optimal: <5% of the total AA contains invasive species.			High Suboptimal: >5% but less than 10% of the total AA contains invasive species.		Low Suboptimal: >10% but less than 20% of the total AA contains invasive species.			High Marginal: >20% but less than 30% of the total AA contains invasive species.		Low Marginal: >30% but less than 50% of the total AA contains invasive species.				> 50% of the total AA contains invasive species.										
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Comments:																											
4. Hydrologic Modification Index																											
b. Vegetation Stressor Presence	Condition Category																										
	Optimal					Suboptimal					Marginal						Poor										
	High Optimal: No vegetation stressors present within the AA boundary.		Low Optimal: One vegetation stressor present within the AA boundary.			High Suboptimal: Two vegetation stressors present within the AA boundary.		Low Suboptimal: Three vegetation stressors present within the AA boundary.			High Marginal: Four vegetation stressors present within the AA boundary.		Low Marginal: Five vegetation stressors present within the AA boundary.				Greater than five vegetation stressors present within the AA boundary.										
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Comments:																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">a. Invasive Sub-Score:</td> <td style="width: 15%; text-align: center;">6</td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">Total Score</td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> <tr> <td>b. Vegetation Sub-Score:</td> <td style="text-align: center;">20</td> <td></td> <td style="text-align: center;">26</td> <td></td> <td style="text-align: center;">0.65</td> </tr> </table>																a. Invasive Sub-Score:	6		Total Score			b. Vegetation Sub-Score:	20		26		0.65
a. Invasive Sub-Score:	6		Total Score																								
b. Vegetation Sub-Score:	20		26		0.65																						
5. Sediment Stressor Index																											
Hydrologic Modification Stressor Presence	Condition Category																										
	Optimal					Suboptimal					Marginal						Poor										
	High Optimal: No hydrologic stressors present within the AA boundary.		Low Optimal: One hydrologic stressor present within the AA boundary.			High Suboptimal: Two hydrologic stressors present within the AA boundary.		Low Suboptimal: Three hydrologic stressors present within the AA boundary.			High Marginal: Four hydrologic stressors present within the AA boundary.		Low Marginal: Five hydrologic stressors present within the AA boundary.				Greater than five hydrologic stressors present within the AA boundary.										
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Comments:																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">Score:</td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">20</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: center;">1.00</td> </tr> </table>																			Score:		20						1.00
			Score:		20																						
					1.00																						
6. Sediment Stressor Index																											
Sediment Stressor Presence	Condition Category																										
	Optimal					Suboptimal					Marginal						Poor										
	High Optimal: No sediment stressors present within the AA boundary.		Low Optimal: One sediment stressor present within the AA boundary.			High Suboptimal: Two sediment stressors present within the AA boundary.		Low Suboptimal: Three sediment stressors present within the AA boundary.			High Marginal: Four sediment stressors present within the AA boundary.		Low Marginal: Five sediment stressors present within the AA boundary.				Greater than five sediment stressors present within the AA boundary.										
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Comments:																											
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			Score:		20																						
					1.00																						
7. Eutrophication Stressor Index																											
a. Eutrophication Stressor Presence	Condition Category																										
	Optimal					Suboptimal					Marginal						Poor										
	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.						Three eutrophication stressors present within the AA boundary.										
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Comments:																											
8. Contaminant / Toxicity Stressor Index																											
b. Contaminant / Toxicity Stressor Presence	Condition Category																										
	Optimal					Suboptimal					Marginal						Poor										
	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicity stressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.						Three contaminant / toxicity stressors present within the AA boundary.										
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1							
Comments:																											
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">a. Eutrophication Score</td> <td style="width: 15%; text-align: center;">20</td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">Total Score:</td> <td style="width: 15%;"></td> <td style="width: 15%;"></td> </tr> <tr> <td>b. Contaminant Score</td> <td style="text-align: center;">20</td> <td></td> <td style="text-align: center;">40</td> <td></td> <td style="text-align: center;">1.00</td> </tr> </table>																a. Eutrophication Score	20		Total Score:			b. Contaminant Score	20		40		1.00
a. Eutrophication Score	20		Total Score:																								
b. Contaminant Score	20		40		1.00																						
Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.																											
														Overall Condition Index:	0.87												

2/4/2017

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)	
Resource Identifier	AA #	Lat (dd)	Long (dd)	Notes:	

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.		2	0
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	0			100-300 ft.	0		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002) Pennsylvania Department of Environmental Protection STRESSOR WORKSHEET		2/4/2017		
		Occurrence in AA		
		Y	#s	N
Vegetation Alteration				
Mowing				
Moderate livestock grazing (within one year)				
Crops (annual row crops, within one year)				
Selective tree harvesting/cutting (>50% removal, within 5 years)				
Right-of-way clearing (mechanical or chemical)				
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)				
Removal of woody debris				
Aquatic weed control (mechanical or herbicide)				
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)				
Plantation (conversion from typical natural tree species, including orchards)				
Other:				
Total Number:				
Hydrologic Modification				
Ditching, tile draining, or other dewatering methods				
Dike/weir/dam				
Filling/grading				
Dredging/excavation				
Stormwater inputs (culvert or similar concentrated urban runoff)				
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)				
Dead or dying trees (trunks still standing) *				
Stream alteration (channelization or incision)				
Other:				
Total Number:				
Sedimentation				
Sediment deposits/plumes				
Eroding banks/slopes				
Active construction (earth disturbance for development)				
Active plowing (plowing for crop planting in past year)				
Intensive livestock grazing (in one year, ground is >50% bare)				
Active selective forestry harvesting (within one year)				
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)				
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)				
Other:				
Total Number:				
Eutrophication				
Direct discharges from agricultural feedlots, manure pits, etc.				
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.				
Heavy or moderately heavy formation of algal mats				
Other:				
Total Number:				
Contaminant/Toxicity				
Severe vegetation stress (source unknown or suspected)				
Obvious spills, discharges, plumes, odors, etc.				
Acidic drainages (mined sites, quarries, road cuts)				
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites				
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)				
Fish or wildlife kills or obvious disease or abnormalities observed				
Excessive garbage/dumping				
Other:				
Total Number:				

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? **YES**

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
Rosa multiflora			50						

Total % relative cover of all invasives, collectively on site: 50 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	Scientific	Status	Code	Common Name	Scientific	Status
aggi2	Redtop	<i>Agrostis gigantea</i>	FACW	luhe	Water primrose	<i>Ludwigia hexapetala</i>	OBLW
alg12	European Alder	<i>Alnus glutinosa</i>	FACW	lyvu	Garden loosestrife	<i>Lysimachia vulgaris</i>	OBLW
arhi3	Carpetgrass	<i>Arthraxon hispidus</i>	FAC-	lysa2	Purple loosestrife	<i>Lythrum salicaria</i>	FACW
beth	Japanese barberry	<i>Berberis thunbergii</i>	FACW	maqu	European waterclover	<i>Marsilea quadrifolia</i>	OBLW
bevu	European barberry	<i>Berberis vulgaris</i>	FACW	mivi	Japanese stiltgrass	<i>Microstegium vimineum</i>	FAC
butom	Flowering Rush	<i>Butomus umbellatus</i>	OBLW	nami2	Water cress	<i>Nasturtium officinale</i>	OBLW
calli6	Pond water-starwort	<i>Callitriche stagnalis</i>	OBLW	pelo	Low smartweed	<i>Persicaria longiseta</i>	FACW
egde	Brazilian waterweed	<i>Egeria densa</i>	OBLW	phar	Reed canary grass	<i>Phalaris arundinacea</i>	FACW
elan	Russian olive	<i>Elaeagnus angustifolia</i>	FACU	phau7	Common Reed	<i>Phragmites australis</i>	OBLW
elum	Autumn olive	<i>Elaeagnus umbellata</i>	FACU	potr	Rough bluegrass	<i>Poa trivialis</i>	FACW
ephi	Hairy willow-herb	<i>Epilobium hirsutum</i>	FACW	pocu6	Japanese knotweed	<i>Polygonum (Faloia) cuspidatum</i>	FAC-
eppa5	Willow-herb	<i>Epilobium parviflorum</i>	FACW	pgpf	Mile-a-minute	<i>Polygonum perfoliatum</i>	FAC-
fasa	Giant knotweed	<i>Fallopia sachalinensis</i>	OBLW	puera	Kudzu-vine	<i>Pueraria lobata</i>	FAC-
gldi	Mudmats	<i>Glossostigma diandrum</i>	OBLW	pysp1	Apple/crabapple/pear	<i>Pyrus sp.</i>	FAC?
hola	Velvetgrass	<i>Holcus lanatus</i>	FAC	rhfr	Glossy Buckthorn	<i>Rhamnus frangula</i>	FAC-
huja	Japanese Hops	<i>Humulus japonicus</i>	FACU	romu	Multiflora rose	<i>Rosa multiflora</i>	FACU
loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
lomo	Morrow's honeysuckle	<i>Lonicera morrowii</i>	NI	tygl	Hybrid cattail	<i>Typha x glauca</i>	OBLW
lota	Tartarian honeysuckle	<i>Lonicera tatarica</i>					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
	River Pointe	10/02/22	0.024	WE-8	1.98	
Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:		
Stephen Dadio		40.907564	-75.089360			
General Comments:						

1. Wetland Zone of Influence Condition Index

Wetland Zone of Influence (300 foot area around AA perimeter)	Condition Category														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.				High Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.				High Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.				Low Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.		High Poor: ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.		Low Poor: ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above. 2. Estimate the % area within each condition category. Calculators are provided for you below. 3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.															Total Score = SUM(%Areas*Scores)							
Condition Category:																Total Score:						
% ZOI Area:		0%				0%				0%				60%		40%						
Score:		0				0				0				10		8						
Total Sub-score:		0.00				0.00				0.00				6.00		3.20		9.20		0.46		
Comments:																						

2. Roadbed Presence Index

a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20								
	Optimal				Suboptimal				Marginal				Poor										
	High Optimal: No roadbeds present within 100 feet of the AA boundary		Low Optimal: Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
%																							
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20								
	Optimal				Suboptimal				Marginal				Poor										
	High Optimal: No roadbeds present within 100 - 300 feet of the AA boundary		Low Optimal: Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 100 - 300 feet AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
															Condition Score		Weighting		Sub-Scores				
															a. Roadbed 0-100:		16		* (0.67)		11		
															b. Roadbed 100-300:		20		* (0.33)		7		
															Total Score:		17		0.87				
Comments:																							

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

3. Vegetation Condition Index																							
a. Invasive Species Presence	Condition Category																						
	Optimal					Suboptimal					Marginal					Poor							
	High Optimal: No invasives present.		Low Optimal: <5% of the total AA contains invasive species.			High Suboptimal: >5% but less than 10% of the total AA contains invasive species.		Low Suboptimal: >10% but less than 20% of the total AA contains invasive species.			High Marginal: >20% but less than 30% of the total AA contains invasive species.		Low Marginal: >30% but less than 50% of the total AA contains invasive species.			> 50% of the total AA contains invasive species.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
Comments:																							
b. Vegetation Stressor Presence	Condition Category																						
	Optimal					Suboptimal					Marginal					Poor							
	High Optimal: No vegetation stressors present within the AA boundary.		Low Optimal: One vegetation stressor present within the AA boundary.			High Suboptimal: Two vegetation stressors present within the AA boundary.		Low Suboptimal: Three vegetation stressors present within the AA boundary.			High Marginal: Four vegetation stressors present within the AA boundary.		Low Marginal: Five vegetation stressors present within the AA boundary.			Greater than five vegetation stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
Comments:																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">a. Invasive Sub-Score:</td> <td style="width: 15%; text-align: center;">6</td> <td style="width: 15%;">Total Score</td> <td style="width: 15%; text-align: center;">0.65</td> </tr> <tr> <td>b. Vegetation Sub-Score:</td> <td style="text-align: center;">20</td> <td style="text-align: center;">26</td> <td></td> </tr> </table>																a. Invasive Sub-Score:	6	Total Score	0.65	b. Vegetation Sub-Score:	20	26	
a. Invasive Sub-Score:	6	Total Score	0.65																				
b. Vegetation Sub-Score:	20	26																					
4. Hydrologic Modification Index																							
Hydrologic Modification Stressor Presence	Condition Category																						
	Optimal					Suboptimal					Marginal					Poor							
	High Optimal: No hydrologic stressors present within the AA boundary.		Low Optimal: One hydrologic stressor present within the AA boundary.			High Suboptimal: Two hydrologic stressors present within the AA boundary.		Low Suboptimal: Three hydrologic stressors present within the AA boundary.			High Marginal: Four hydrologic stressors present within the AA boundary.		Low Marginal: Five hydrologic stressors present within the AA boundary.			Greater than five hydrologic stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
Comments:																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Score:</td> <td style="width: 15%; text-align: center;">20</td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">1.00</td> </tr> </table>																Score:	20		1.00				
Score:	20		1.00																				
5. Sediment Stressor Index																							
Sediment Stressor Presence	Condition Category																						
	Optimal					Suboptimal					Marginal					Poor							
	High Optimal: No sediment stressors present within the AA boundary.		Low Optimal: One sediment stressor present within the AA boundary.			High Suboptimal: Two sediment stressors present within the AA boundary.		Low Suboptimal: Three sediment stressors present within the AA boundary.			High Marginal: Four sediment stressors present within the AA boundary.		Low Marginal: Five sediment stressors present within the AA boundary.			Greater than five sediment stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
Comments:																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Score:</td> <td style="width: 15%; text-align: center;">20</td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">1.00</td> </tr> </table>																Score:	20		1.00				
Score:	20		1.00																				
a. Eutrophication Stressor Presence	Condition Category																						
	Optimal					Suboptimal					Marginal					Poor							
	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.					Three eutrophication stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
Comments:																							
b. Contaminant / Toxicity Stressor Presence	Condition Category																						
	Optimal					Suboptimal					Marginal					Poor							
	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicity stressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.					Three contaminant / toxicity stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
Comments:																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">a. Eutrophication Score</td> <td style="width: 15%; text-align: center;">20</td> <td style="width: 15%;">Total Score:</td> <td style="width: 15%; text-align: center;">1.00</td> </tr> <tr> <td>b. Contaminant Score</td> <td style="text-align: center;">20</td> <td style="text-align: center;">40</td> <td></td> </tr> </table>																a. Eutrophication Score	20	Total Score:	1.00	b. Contaminant Score	20	40	
a. Eutrophication Score	20	Total Score:	1.00																				
b. Contaminant Score	20	40																					
Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.																							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Overall Condition Index:</td> <td style="width: 15%; text-align: center;">0.83</td> </tr> </table>																Overall Condition Index:	0.83						
Overall Condition Index:	0.83																						

2/4/2017

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)	
Resource Identifier	AA #	Lat (dd)	Long (dd)	Notes:	
	WE-8				

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.	1	2	2	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.		2	0
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	2			100-300 ft.	0		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002) Pennsylvania Department of Environmental Protection STRESSOR WORKSHEET		2/4/2017		
		Occurrence in AA		
		Y	#s	N
Vegetation Alteration				
Mowing				
Moderate livestock grazing (within one year)				
Crops (annual row crops, within one year)				
Selective tree harvesting/cutting (>50% removal, within 5 years)				
Right-of-way clearing (mechanical or chemical)				
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)				
Removal of woody debris				
Aquatic weed control (mechanical or herbicide)				
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)				
Plantation (conversion from typical natural tree species, including orchards)				
Other:				
Total Number:				
Hydrologic Modification				
Ditching, tile draining, or other dewatering methods				
Dike/weir/dam				
Filling/grading				
Dredging/excavation				
Stormwater inputs (culvert or similar concentrated urban runoff)				
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)				
Dead or dying trees (trunks still standing) *				
Stream alteration (channelization or incision)				
Other:				
Total Number:				
Sedimentation				
Sediment deposits/plumes				
Eroding banks/slopes				
Active construction (earth disturbance for development)				
Active plowing (plowing for crop planting in past year)				
Intensive livestock grazing (in one year, ground is >50% bare)				
Active selective forestry harvesting (within one year)				
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)				
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)				
Other:				
Total Number:				
Eutrophication				
Direct discharges from agricultural feedlots, manure pits, etc.				
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.				
Heavy or moderately heavy formation of algal mats				
Other:				
Total Number:				
Contaminant/Toxicity				
Severe vegetation stress (source unknown or suspected)				
Obvious spills, discharges, plumes, odors, etc.				
Acidic drainages (mined sites, quarries, road cuts)				
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites				
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)				
Fish or wildlife kills or obvious disease or abnormalities observed				
Excessive garbage/dumping				
Other:				
Total Number:				

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

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Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? YES

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
Phalaris arundinacea			40						

Total % relative cover of all invasives, collectively on site: 40 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	Scientific	Status	Code	Common Name	Scientific	Status
aggi2	Redtop	<i>Agrostis gigantea</i>	FACW	luhe	Water primrose	<i>Ludwigia hexapetala</i>	OBLW
algl2	European Alder	<i>Alnus glutinosa</i>	FACW	lyvu	Garden loosestrife	<i>Lysimachia vulgaris</i>	OBLW
arhi3	Carpetgrass	<i>Arthraxon hispidus</i>	FAC-	lysa2	Purple loosestrife	<i>Lythrum salicaria</i>	FACW
beth	Japanese barberry	<i>Berberis thunbergii</i>	FACW	maqu	European waterclover	<i>Marsilea quadrifolia</i>	OBLW
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butom	Flowering Rush	<i>Butomus umbellatus</i>	OBLW	nami2	Water cress	<i>Nasturtium officinale</i>	OBLW
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elan	Russian olive	<i>Elaeagnus angustifolia</i>	FACU	phau7	Common Reed	<i>Phragmites australis</i>	OBLW
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ephi	Hairy willow-herb	<i>Epilobium hirsutum</i>	FACW	pocu6	Japanese knotweed	<i>Polygonum (Faloia) cuspidatum</i>	FAC-
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loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
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Pennsylvania Wetland Condition Level 2 Rapid Assessment

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loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
lomo	Morrow's honeysuckle	<i>Lonicera morrowii</i>	NI	tygl	Hybrid cattail	<i>Typha x glauca</i>	OBLW
lota	Tartarian honeysuckle	<i>Lonicera tatarica</i>					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
	River Pointe	10/02/22	0.104	WE-14	1.27	
Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:		
Stephen Dadio		40.904180	-75.093343			
General Comments:						

1. Wetland Zone of Influence Condition Index

Wetland Zone of Influence (300 foot area around AA perimeter)	Condition Category														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.				High Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.				High Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.				Low Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.		High Poor: ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.		Low Poor: ZOI area vegetation consists of impervious surfaces; mine spoil surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above. 2. Estimate the % area within each condition category. Calculators are provided for you below. 3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.															Total Score = SUM(%Areas*Scores)							
Condition Category:																Total Score:						
Scoring:		% ZOI Area: 0%				0%				0%				80%				20%				
		Score: 0				0				0				4				2				
		Total Sub-score: 0.00				0.00				0.00				0.00		3.20		0.40		3.60		0.18
Comments:																						

2. Roadbed Presence Index

a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20									
	Optimal				Suboptimal				Marginal				Poor											
	High Optimal: No roadbeds present within 100 feet of the AA boundary		Low Optimal: Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
%																								
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20									
	Optimal				Suboptimal				Marginal				Poor											
	High Optimal: No roadbeds present within 100 - 300 feet of the AA boundary		Low Optimal: Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 100 - 300 feet AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
															Condition Score		Weighting		Sub-Scores		Total Score:			
															a. Roadbed 0-100:		20		* (0.67)				13	
															b. Roadbed 100-300:		16		* (0.33)				5	
																					19		0.93	
Comments:																								

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

3. Vegetation Condition Index																								
a. Invasive Species Presence	Condition Category																							
	Optimal					Suboptimal					Marginal						Poor							
	High Optimal: No invasives present.		Low Optimal: <5% of the total AA contains invasive species.			High Suboptimal: >5% but less than 10% of the total AA contains invasive species.		Low Suboptimal: >10% but less than 20% of the total AA contains invasive species.			High Marginal: >20% but less than 30% of the total AA contains invasive species.		Low Marginal: >30% but less than 50% of the total AA contains invasive species.				> 50% of the total AA contains invasive species.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
Comments:																								
4. Hydrologic Modification Index																								
b. Vegetation Stressor Presence	Condition Category															CI = Total Score/40								
	Optimal					Suboptimal					Marginal						Poor							
	High Optimal: No vegetation stressors present within the AA boundary.		Low Optimal: One vegetation stressor present within the AA boundary.			High Suboptimal: Two vegetation stressors present within the AA boundary.		Low Suboptimal: Three vegetation stressors present within the AA boundary.			High Marginal: Four vegetation stressors present within the AA boundary.		Low Marginal: Five vegetation stressors present within the AA boundary.				Greater than five vegetation stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0.60			
Comments:																								
<table border="1" style="margin-left: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">a. Invasive Sub-Score:</td> <td style="text-align: center; padding: 2px;">4</td> <td style="text-align: center; padding: 2px;">Total Score</td> <td style="text-align: center; padding: 2px;">0.60</td> </tr> <tr> <td style="padding: 2px;">b. Vegetation Sub-Score:</td> <td style="text-align: center; padding: 2px;">20</td> <td style="text-align: center; padding: 2px;">24</td> <td></td> </tr> </table>																	a. Invasive Sub-Score:	4	Total Score	0.60		b. Vegetation Sub-Score:	20	24
a. Invasive Sub-Score:	4	Total Score	0.60																					
b. Vegetation Sub-Score:	20	24																						
5. Sediment Stressor Index																								
Hydrologic Modification Stressor Presence	Condition Category															CI = Total Score/20								
	Optimal					Suboptimal					Marginal						Poor							
	High Optimal: No hydrologic stressors present within the AA boundary.		Low Optimal: One hydrologic stressor present within the AA boundary.			High Suboptimal: Two hydrologic stressors present within the AA boundary.		Low Suboptimal: Three hydrologic stressors present within the AA boundary.			High Marginal: Four hydrologic stressors present within the AA boundary.		Low Marginal: Five hydrologic stressors present within the AA boundary.				Greater than five hydrologic stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	1.00			
Comments:																								
<table border="1" style="margin-left: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Score:</td> <td style="text-align: center; padding: 2px;">20</td> </tr> </table>																	Score:	20						
Score:	20																							
6. Sediment Stressor Index																								
Sediment Stressor Presence	Condition Category															CI = Total Score/20								
	Optimal					Suboptimal					Marginal						Poor							
	High Optimal: No sediment stressors present within the AA boundary.		Low Optimal: One sediment stressor present within the AA boundary.			High Suboptimal: Two sediment stressors present within the AA boundary.		Low Suboptimal: Three sediment stressors present within the AA boundary.			High Marginal: Four sediment stressors present within the AA boundary.		Low Marginal: Five sediment stressors present within the AA boundary.				Greater than five sediment stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	1.00			
Comments:																								
<table border="1" style="margin-left: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Score:</td> <td style="text-align: center; padding: 2px;">20</td> </tr> </table>																	Score:	20						
Score:	20																							
7. Eutrophication Stressor Index																								
a. Eutrophication Stressor Presence	Condition Category																							
	Optimal					Suboptimal					Marginal						Poor							
	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.						Three eutrophication stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
Comments:																								
8. Contaminant / Toxicity Stressor Index																								
b. Contaminant / Toxicity Stressor Presence	Condition Category															CI = Total Score/40								
	Optimal					Suboptimal					Marginal						Poor							
	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicity stressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.						Three contaminant / toxicity stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	1.00			
Comments:																								
<table border="1" style="margin-left: auto; border-collapse: collapse;"> <tr> <td style="padding: 2px;">a. Eutrophication Score</td> <td style="text-align: center; padding: 2px;">20</td> <td style="text-align: center; padding: 2px;">Total Score:</td> <td style="text-align: center; padding: 2px;">1.00</td> </tr> <tr> <td style="padding: 2px;">b. Contaminant Score</td> <td style="text-align: center; padding: 2px;">20</td> <td style="text-align: center; padding: 2px;">40</td> <td></td> </tr> </table>																	a. Eutrophication Score	20	Total Score:	1.00		b. Contaminant Score	20	40
a. Eutrophication Score	20	Total Score:	1.00																					
b. Contaminant Score	20	40																						
Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.																								
															Overall Condition Index:	0.79								

2/4/2017

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	AA #	Lat (dd)	Long (dd)	Notes:
	WE-14			

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.	1	2	2
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.		2	0
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	0			100-300 ft.	2		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002) Pennsylvania Department of Environmental Protection STRESSOR WORKSHEET		2/4/2017		
		Occurrence in AA		
		Y	#s	N
Vegetation Alteration				
Mowing				
Moderate livestock grazing (within one year)				
Crops (annual row crops, within one year)				
Selective tree harvesting/cutting (>50% removal, within 5 years)				
Right-of-way clearing (mechanical or chemical)				
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)				
Removal of woody debris				
Aquatic weed control (mechanical or herbicide)				
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)				
Plantation (conversion from typical natural tree species, including orchards)				
Other:				
Total Number:				
Hydrologic Modification				
Ditching, tile draining, or other dewatering methods				
Dike/weir/dam				
Filling/grading				
Dredging/excavation				
Stormwater inputs (culvert or similar concentrated urban runoff)				
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)				
Dead or dying trees (trunks still standing) *				
Stream alteration (channelization or incision)				
Other:				
Total Number:				
Sedimentation				
Sediment deposits/plumes				
Eroding banks/slopes				
Active construction (earth disturbance for development)				
Active plowing (plowing for crop planting in past year)				
Intensive livestock grazing (in one year, ground is >50% bare)				
Active selective forestry harvesting (within one year)				
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)				
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)				
Other:				
Total Number:				
Eutrophication				
Direct discharges from agricultural feedlots, manure pits, etc.				
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.				
Heavy or moderately heavy formation of algal mats				
Other:				
Total Number:				
Contaminant/Toxicity				
Severe vegetation stress (source unknown or suspected)				
Obvious spills, discharges, plumes, odors, etc.				
Acidic drainages (mined sites, quarries, road cuts)				
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites				
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)				
Fish or wildlife kills or obvious disease or abnormalities observed				
Excessive garbage/dumping				
Other:				
Total Number:				

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? **YES**

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
Phalaris arundinacea			50						
Rosa multiflora		10							

Total % relative cover of all invasives, collectively on site: 60 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	Scientific	Status	Code	Common Name	Scientific	Status
aggi2	Redtop	<i>Agrostis gigantea</i>	FACW	luhe	Water primrose	<i>Ludwigia hexapetala</i>	OBLW
algl2	European Alder	<i>Alnus glutinosa</i>	FACW	lyvu	Garden loosestrife	<i>Lysimachia vulgaris</i>	OBLW
arhi3	Carpetgrass	<i>Arthraxon hispidus</i>	FAC-	lysa2	Purple loosestrife	<i>Lythrum salicaria</i>	FACW
beth	Japanese barberry	<i>Berberis thunbergii</i>	FACW	maqu	European waterclover	<i>Marsilea quadrifolia</i>	OBLW
bevu	European barberry	<i>Berberis vulgaris</i>	FACW	mivi	Japanese stiltgrass	<i>Microstegium vimineum</i>	FAC
butom	Flowering Rush	<i>Butomus umbellatus</i>	OBLW	nami2	Water cress	<i>Nasturtium officinale</i>	OBLW
calli6	Pond water-starwort	<i>Callitriche stagnalis</i>	OBLW	pelo	Low smartweed	<i>Persicaria longiseta</i>	FACW
egde	Brazilian waterweed	<i>Egeria densa</i>	OBLW	phar	Reed canary grass	<i>Phalaris arundinacea</i>	FACW
elan	Russian olive	<i>Elaeagnus angustifolia</i>	FACU	phau7	Common Reed	<i>Phragmites australis</i>	OBLW
elum	Autumn olive	<i>Elaeagnus umbellata</i>	FACU	potr	Rough bluegrass	<i>Poa trivialis</i>	FACW
ephi	Hairy willow-herb	<i>Epilobium hirsutum</i>	FACW	pocu6	Japanese knotweed	<i>Polygonum (Faloia) cuspidatum</i>	FAC-
eppa5	Willow-herb	<i>Epilobium parviflorum</i>	FACW	pgpf	Mile-a-minute	<i>Polygonum perfoliatum</i>	FAC-
fasa	Giant knotweed	<i>Fallopia sachalinensis</i>	OBLW	puera	Kudzu-vine	<i>Pueraria lobata</i>	FAC-
gldi	Mudmats	<i>Glossostigma diandrum</i>	OBLW	pysp1	Apple/crabapple/pear	<i>Pyrus sp.</i>	FAC?
hola	Velvetgrass	<i>Holcus lanatus</i>	FAC	rhfr	Glossy Buckthorn	<i>Rhamnus frangula</i>	FAC-
huja	Japanese Hops	<i>Humulus japonicus</i>	FACU	romu	Multiflora rose	<i>Rosa multiflora</i>	FACU
loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
lomo	Morrow's honeysuckle	<i>Lonicera morrowii</i>	NI	tygl	Hybrid cattail	<i>Typha x glauca</i>	OBLW
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Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
	River Pointe	10/02/22	0.120	WE-24	0.17	
Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:		
Stephen Dadio		40.902510	-75.090065			
General Comments:						

1. Wetland Zone of Influence Condition Index

Wetland Zone of Influence (300 foot area around AA perimeter)	Condition Category														CI = Total Score/20								
	Optimal				Suboptimal				Marginal				Poor										
	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.				High Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.				High Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.				Low Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.		High Poor: ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.		Low Poor: ZOI area vegetation consists of impervious surfaces; mine spoil surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above.															Total Score = SUM(%Areas*Scores)								
2. Estimate the % area within each condition category. Calculators are provided for you below.															Total Score = 5.20								
3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.																							
Condition Category:																							
% ZOI Area:		0%				0%				0%				0%				80%		20%		Total Score:	
Score:		0				0				0				0				4		10		5.20	
Total Sub-score:		0.00				0.00				0.00				0.00				3.20		2.00		5.20	
Comments:																							

2. Roadbed Presence Index

a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
	High Optimal: No roadbeds present within 100 feet of the AA boundary		Low Optimal: Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
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%																						
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SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
Condition Score															Weighting		Sub-Scores					
a. Roadbed 0-100:															20	* (0.67)		13				
b. Roadbed 100-300:															20	* (0.33)		7				
															Total Score:		20					
Comments:																						

40

Wetland Condition Assessment Form

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3. Vegetation Condition Index																																		
a. Invasive Species Presence	Condition Category																																	
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	High Optimal: No invasives present.					Low Optimal: <5% of the total AA contains invasive species.					High Suboptimal: >5% but less than 10% of the total AA contains invasive species.						Low Suboptimal: >10% but less than 20% of the total AA contains invasive species.					High Marginal: >20% but less than 30% of the total AA contains invasive species.					Low Marginal: >30% but less than 50% of the total AA contains invasive species.					Poor: > 50% of the total AA contains invasive species.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1														
Comments:																																		
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b. Vegetation Stressor Presence	Condition Category															CI = Total Score/40																		
	Optimal					Suboptimal					Marginal						Poor																	
	High Optimal: No vegetation stressors present within the AA boundary.					Low Optimal: One vegetation stressor present within the AA boundary.					High Suboptimal: Two vegetation stressors present within the AA boundary.						Low Suboptimal: Three vegetation stressors present within the AA boundary.					High Marginal: Four vegetation stressors present within the AA boundary.					Low Marginal: Five vegetation stressors present within the AA boundary.					Poor: Greater than five vegetation stressors present within the AA boundary.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	a. Invasive Sub-Score: 2	Total Score: 22	0.55											
Comments:																																		
Hydrologic Modification Stressor Presence	Condition Category															CI = Total Score/20																		
	Optimal					Suboptimal					Marginal						Poor																	
	High Optimal: No hydrologic stressors present within the AA boundary.					Low Optimal: One hydrologic stressor present within the AA boundary.					High Suboptimal: Two hydrologic stressors present within the AA boundary.						Low Suboptimal: Three hydrologic stressors present within the AA boundary.					High Marginal: Four hydrologic stressors present within the AA boundary.					Low Marginal: Five hydrologic stressors present within the AA boundary.					Poor: Greater than five hydrologic stressors present within the AA boundary.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Score: 20	1.00												
Comments:																																		
5. Sediment Stressor Index																																		
Sediment Stressor Presence	Condition Category															CI = Total Score/20																		
	Optimal					Suboptimal					Marginal						Poor																	
	High Optimal: No sediment stressors present within the AA boundary.					Low Optimal: One sediment stressor present within the AA boundary.					High Suboptimal: Two sediment stressors present within the AA boundary.						Low Suboptimal: Three sediment stressors present within the AA boundary.					High Marginal: Four sediment stressors present within the AA boundary.					Low Marginal: Five sediment stressors present within the AA boundary.					Poor: Greater than five sediment stressors present within the AA boundary.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Score: 20	1.00												
Comments:																																		
a. Eutrophication Stressor Presence	Condition Category																																	
	Optimal					Suboptimal					Marginal						Poor																	
	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.						Three eutrophication stressors present within the AA boundary.																	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1														
Comments:																																		
b. Contaminant / Toxicity Stressor Presence	Condition Category															CI = Total Score/40																		
	Optimal					Suboptimal					Marginal						Poor																	
	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicity stressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.						Three contaminant / toxicity stressors present within the AA boundary.																	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	a. Eutrophication Score: 20	Total Score: 40	1.00											
Comments:																																		
Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.																																		
															Overall Condition Index:	0.80																		

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)
Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)	
Resource Identifier	AA #	Lat (dd)	Long (dd)	Notes:	

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.		2	0
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.		0		100-300 ft.		0	

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002) Pennsylvania Department of Environmental Protection STRESSOR WORKSHEET		2/4/2017		
		Occurrence in AA		
		Y	#s	N
Vegetation Alteration				
Mowing				
Moderate livestock grazing (within one year)				
Crops (annual row crops, within one year)				
Selective tree harvesting/cutting (>50% removal, within 5 years)				
Right-of-way clearing (mechanical or chemical)				
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)				
Removal of woody debris				
Aquatic weed control (mechanical or herbicide)				
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)				
Plantation (conversion from typical natural tree species, including orchards)				
Other:				
Total Number:				
Hydrologic Modification				
Ditching, tile draining, or other dewatering methods				
Dike/weir/dam				
Filling/grading				
Dredging/excavation				
Stormwater inputs (culvert or similar concentrated urban runoff)				
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)				
Dead or dying trees (trunks still standing) *				
Stream alteration (channelization or incision)				
Other:				
Total Number:				
Sedimentation				
Sediment deposits/plumes				
Eroding banks/slopes				
Active construction (earth disturbance for development)				
Active plowing (plowing for crop planting in past year)				
Intensive livestock grazing (in one year, ground is >50% bare)				
Active selective forestry harvesting (within one year)				
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)				
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)				
Other:				
Total Number:				
Eutrophication				
Direct discharges from agricultural feedlots, manure pits, etc.				
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.				
Heavy or moderately heavy formation of algal mats				
Other:				
Total Number:				
Contaminant/Toxicity				
Severe vegetation stress (source unknown or suspected)				
Obvious spills, discharges, plumes, odors, etc.				
Acidic drainages (mined sites, quarries, road cuts)				
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites				
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)				
Fish or wildlife kills or obvious disease or abnormalities observed				
Excessive garbage/dumping				
Other:				
Total Number:				

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? **YES**

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
Microstegium vimineum				65					
Rosa multiflora		15							

Total % relative cover of all invasives, collectively on site: 80 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	Scientific	Status	Code	Common Name	Scientific	Status
aggi2	Redtop	<i>Agrostis gigantea</i>	FACW	luhe	Water primrose	<i>Ludwigia hexapetala</i>	OBLW
algi2	European Alder	<i>Alnus glutinosa</i>	FACW	lyvu	Garden loosestrife	<i>Lysimachia vulgaris</i>	OBLW
arhi3	Carpetgrass	<i>Arthraxon hispidus</i>	FAC-	lysa2	Purple loosestrife	<i>Lythrum salicaria</i>	FACW
beth	Japanese barberry	<i>Berberis thunbergii</i>	FACW	maqu	European waterclover	<i>Marsilea quadrifolia</i>	OBLW
bevu	European barberry	<i>Berberis vulgaris</i>	FACW	mivi	Japanese stiltgrass	<i>Microstegium vimineum</i>	FAC
butom	Flowering Rush	<i>Butomus umbellatus</i>	OBLW	nami2	Water cress	<i>Nasturtium officinale</i>	OBLW
calli6	Pond water-starwort	<i>Callitriche stagnalis</i>	OBLW	pelo	Low smartweed	<i>Persicaria longiseta</i>	FACW
egde	Brazilian waterweed	<i>Egeria densa</i>	OBLW	phar	Reed canary grass	<i>Phalaris arundinacea</i>	FACW
elan	Russian olive	<i>Elaeagnus angustifolia</i>	FACU	phau7	Common Reed	<i>Phragmites australis</i>	OBLW
elum	Autumn olive	<i>Elaeagnus umbellata</i>	FACU	potr	Rough bluegrass	<i>Poa trivialis</i>	FACW
ephi	Hairy willow-herb	<i>Epilobium hirsutum</i>	FACW	pocu6	Japanese knotweed	<i>Polygonum (Faloia) cuspidatum</i>	FAC-
eppa5	Willow-herb	<i>Epilobium parviflorum</i>	FACW	pgpf	Mile-a-minute	<i>Polygonum perfoliatum</i>	FAC-
fasa	Giant knotweed	<i>Fallopia sachalinensis</i>	OBLW	puera	Kudzu-vine	<i>Pueraria lobata</i>	FAC-
glidi	Mudmats	<i>Glossostigma diandrum</i>	OBLW	pysp1	Apple/crabapple/pear	<i>Pyrus sp.</i>	FAC?
hola	Velvetgrass	<i>Holcus lanatus</i>	FAC	rhfr	Glossy Buckthorn	<i>Rhamnus frangula</i>	FAC-
huja	Japanese Hops	<i>Humulus japonicus</i>	FACU	romu	Multiflora rose	<i>Rosa multiflora</i>	FACU
loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
lomo	Morrow's honeysuckle	<i>Lonicera morrowii</i>	NI	tygl	Hybrid cattail	<i>Typha x glauca</i>	OBLW
lota	Tartarian honeysuckle	<i>Lonicera tatarica</i>					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)
	River Pointe	10/02/22	0.010	WE-38	.010
Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:	
Stephen Dadio		40.906202	-75.089757		
General Comments:					

1. Wetland Zone of Influence Condition Index

Wetland Zone of Influence (300 foot area around AA perimeter)	Condition Category														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.				High Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.				High Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.				Low Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.		High Poor: ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.		Low Poor: ZOI area vegetation consists of impervious surfaces; mine spoil surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above.															Total Score = SUM(%Areas*Scores)							
2. Estimate the % area within each condition category. Calculators are provided for you below.																						
3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.																						
Condition Category:																Total Score:						
% ZOI Area:		100%				0%				0%				0%								
Score:		4				0				0				0								
Total Sub-score:		4.00				0.00				0.00				0.00		4.00		0.20				
Comments:																						

2. Roadbed Presence Index

a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20									
	Optimal				Suboptimal				Marginal				Poor											
	High Optimal: No roadbeds present within 100 feet of the AA boundary		Low Optimal: Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
%																								
Condition Categories																								
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	Optimal				Suboptimal				Marginal				Poor		CI = Total Score/20									
	High Optimal: No roadbeds present within 100 - 300 feet of the AA boundary		Low Optimal: Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 100 - 300 feet AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
															Condition Score		Weighting		Sub-Scores		Total Score:			
															a. Roadbed 0-100:		17		* (0.67)				11	
															b. Roadbed 100-300:		20		* (0.33)				7	
															Total Score:		18		18		0.90			
Comments:																								

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

3. Vegetation Condition Index																																		
a. Invasive Species Presence	Condition Category																																	
	Optimal					Suboptimal					Marginal						Poor																	
	High Optimal: No invasives present.					Low Optimal: <5% of the total AA contains invasive species.					High Suboptimal: >5% but less than 10% of the total AA contains invasive species.						Low Suboptimal: >10% but less than 20% of the total AA contains invasive species.					High Marginal: >20% but less than 30% of the total AA contains invasive species.					Low Marginal: >30% but less than 50% of the total AA contains invasive species.					Poor: > 50% of the total AA contains invasive species.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1														
Comments:																																		
4. Hydrologic Modification Index																																		
b. Vegetation Stressor Presence	Condition Category															CI = Total Score/40																		
	Optimal					Suboptimal					Marginal						Poor																	
	High Optimal: No vegetation stressors present within the AA boundary.					Low Optimal: One vegetation stressor present within the AA boundary.					High Suboptimal: Two vegetation stressors present within the AA boundary.						Low Suboptimal: Three vegetation stressors present within the AA boundary.					High Marginal: Four vegetation stressors present within the AA boundary.					Low Marginal: Five vegetation stressors present within the AA boundary.					Poor: Greater than five vegetation stressors present within the AA boundary.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	a. Invasive Sub-Score: 20	Total Score: 40	1.00											
Comments:																																		
Hydrologic Modification Stressor Presence	Condition Category															CI = Total Score/20																		
	Optimal					Suboptimal					Marginal						Poor																	
	High Optimal: No hydrologic stressors present within the AA boundary.					Low Optimal: One hydrologic stressor present within the AA boundary.					High Suboptimal: Two hydrologic stressors present within the AA boundary.						Low Suboptimal: Three hydrologic stressors present within the AA boundary.					High Marginal: Four hydrologic stressors present within the AA boundary.					Low Marginal: Five hydrologic stressors present within the AA boundary.					Poor: Greater than five hydrologic stressors present within the AA boundary.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Score: 14	0.70												
Comments:																																		
5. Sediment Stressor Index																																		
Sediment Stressor Presence	Condition Category															CI = Total Score/20																		
	Optimal					Suboptimal					Marginal						Poor																	
	High Optimal: No sediment stressors present within the AA boundary.					Low Optimal: One sediment stressor present within the AA boundary.					High Suboptimal: Two sediment stressors present within the AA boundary.						Low Suboptimal: Three sediment stressors present within the AA boundary.					High Marginal: Four sediment stressors present within the AA boundary.					Low Marginal: Five sediment stressors present within the AA boundary.					Poor: Greater than five sediment stressors present within the AA boundary.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	Score: 17	0.85												
Comments:																																		
a. Eutrophication Stressor Presence	Condition Category																																	
	Optimal					Suboptimal					Marginal						Poor																	
	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.						Three eutrophication stressors present within the AA boundary.																	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1														
Comments:																																		
b. Contaminant / Toxicity Stressor Presence	Condition Category															CI = Total Score/40																		
	Optimal					Suboptimal					Marginal						Poor																	
	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicity stressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.						Three contaminant / toxicity stressors present within the AA boundary.																	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	a. Eutrophication Score: 20	Total Score: 40	1.00											
Comments:																																		
Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.																	Overall Condition Index: 0.77																	

2/4/2017

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	AA #	Lat (dd)	Long (dd)	Notes:
	WE-38			

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.	1	1	1	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.		2	0
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	1			100-300 ft.	0		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002) Pennsylvania Department of Environmental Protection STRESSOR WORKSHEET		2/4/2017		
		Occurrence in AA		
		Y	#s	N
Vegetation Alteration				
Mowing				
Moderate livestock grazing (within one year)				
Crops (annual row crops, within one year)				
Selective tree harvesting/cutting (>50% removal, within 5 years)				
Right-of-way clearing (mechanical or chemical)				
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)				
Removal of woody debris				
Aquatic weed control (mechanical or herbicide)				
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)				
Plantation (conversion from typical natural tree species, including orchards)				
Other:				
Total Number:				
Hydrologic Modification				
Ditching, tile draining, or other dewatering methods				
Dike/weir/dam				
Filling/grading	1			
Dredging/excavation				
Stormwater inputs (culvert or similar concentrated urban runoff)				
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)	1			
Dead or dying trees (trunks still standing) *				
Stream alteration (channelization or incision)				
Other:				
Total Number:		2		
Sedimentation				
Sediment deposits/plumes				
Eroding banks/slopes				
Active construction (earth disturbance for development)				
Active plowing (plowing for crop planting in past year)	1			
Intensive livestock grazing (in one year, ground is >50% bare)				
Active selective forestry harvesting (within one year)				
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)				
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)				
Other:				
Total Number:		1		
Eutrophication				
Direct discharges from agricultural feedlots, manure pits, etc.				
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.				
Heavy or moderately heavy formation of algal mats				
Other:				
Total Number:				
Contaminant/Toxicity				
Severe vegetation stress (source unknown or suspected)				
Obvious spills, discharges, plumes, odors, etc.				
Acidic drainages (mined sites, quarries, road cuts)				
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites				
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)				
Fish or wildlife kills or obvious disease or abnormalities observed				
Excessive garbage/dumping				
Other:				
Total Number:				

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? **YES**

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%

Total % relative cover of all invasives, collectively on site: _____%

Comments:

Common Invasives/Aggressives List

Code	Common Name	Scientific	Status	Code	Common Name	Scientific	Status
aggi2	Redtop	<i>Agrostis gigantea</i>	FACW	luhe	Water primrose	<i>Ludwigia hexapetala</i>	OBLW
alg2	European Alder	<i>Alnus glutinosa</i>	FACW	lyvu	Garden loosestrife	<i>Lysimachia vulgaris</i>	OBLW
arhi3	Carpetgrass	<i>Arthraxon hispidus</i>	FAC-	lysa2	Purple loosestrife	<i>Lythrum salicaria</i>	FACW
beth	Japanese barberry	<i>Berberis thunbergii</i>	FACW	maqu	European waterclover	<i>Marsilea quadrifolia</i>	OBLW
bevu	European barberry	<i>Berberis vulgaris</i>	FACW	mivi	Japanese stiltgrass	<i>Microstegium vimineum</i>	FAC
butom	Flowering Rush	<i>Butomus umbellatus</i>	OBLW	nami2	Water cress	<i>Nasturtium officinale</i>	OBLW
calli6	Pond water-starwort	<i>Callitriche stagnalis</i>	OBLW	pelo	Low smartweed	<i>Persicaria longiseta</i>	FACW
egde	Brazilian waterweed	<i>Egeria densa</i>	OBLW	phar	Reed canary grass	<i>Phalaris arundinacea</i>	FACW
elan	Russian olive	<i>Elaeagnus angustifolia</i>	FACU	phau7	Common Reed	<i>Phragmites australis</i>	OBLW
elum	Autumn olive	<i>Elaeagnus umbellata</i>	FACU	potr	Rough bluegrass	<i>Poa trivialis</i>	FACW
ephi	Hairy willow-herb	<i>Epilobium hirsutum</i>	FACW	pocu6	Japanese knotweed	<i>Polygonum (Faloia) cuspidatum</i>	FAC-
eppa5	Willow-herb	<i>Epilobium parviflorum</i>	FACW	pgpf	Mile-a-minute	<i>Polygonum perfoliatum</i>	FAC-
fasa	Giant knotweed	<i>Fallopia sachalinensis</i>	OBLW	puera	Kudzu-vine	<i>Pueraria lobata</i>	FAC-
gldi	Mudmats	<i>Glossostigma diandrum</i>	OBLW	pysp1	Apple/crabapple/pear	<i>Pyrus sp.</i>	FAC?
hola	Velvetgrass	<i>Holcus lanatus</i>	FAC	rhfr	Glossy Buckthorn	<i>Rhamnus frangula</i>	FAC-
huja	Japanese Hops	<i>Humulus japonicus</i>	FACU	romu	Multiflora rose	<i>Rosa multiflora</i>	FACU
loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
lomo	Morrow's honeysuckle	<i>Lonicera morrowii</i>	NI	tygl	Hybrid cattail	<i>Typha x glauca</i>	OBLW
lota	Tartarian honeysuckle	<i>Lonicera tatarica</i>					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
	River Pointe	10/02/22	0.093	WE-39	.093	
Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:		
Stephen Dadio		40.905530	-75.094901			

General Comments:

1. Wetland Zone of Influence Condition Index

Wetland Zone of Influence (300 foot area around AA perimeter)	Condition Category														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
	ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.				High Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.				High Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.				Low Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.		High Poor: ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.		Low Poor: ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above. 2. Estimate the % area within each condition category. Calculators are provided for you below. 3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.															Total Score = SUM(%Areas*Scores)							
Condition Category:																						
% ZOI Area:															Total Score:							
Score:															0.20							
Total Sub-score:															4.00							

Comments:

2. Roadbed Presence Index

a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
	High Optimal: No roadbeds present within 100 feet of the AA boundary		Low Optimal: Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		

%

b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
	High Optimal: No roadbeds present within 100 - 300 feet of the AA boundary		Low Optimal: Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.		High Suboptimal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 100 - 300 feet AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
Condition Score															Weighting		Sub-Scores					
a. Roadbed 0-100:															17	* (0.67)		11				
b. Roadbed 100-300:															20	* (0.33)		7				
															Total Score:		18		0.90			

Comments:

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

3. Vegetation Condition Index																					
a. Invasive Species Presence	Condition Category																				
	Optimal					Suboptimal					Marginal						Poor				
	High Optimal: No invasives present.		Low Optimal: <5% of the total AA contains invasive species.			High Suboptimal: >5% but less than 10% of the total AA contains invasive species.		Low Suboptimal: >10% but less than 20% of the total AA contains invasive species.			High Marginal: >20% but less than 30% of the total AA contains invasive species.		Low Marginal: >30% but less than 50% of the total AA contains invasive species.				> 50% of the total AA contains invasive species.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Comments:																					
b. Vegetation Stressor Presence	Condition Category																				
	Optimal					Suboptimal					Marginal						Poor				
	High Optimal: No vegetation stressors present within the AA boundary.		Low Optimal: One vegetation stressor present within the AA boundary.			High Suboptimal: Two vegetation stressors present within the AA boundary.		Low Suboptimal: Three vegetation stressors present within the AA boundary.			High Marginal: Four vegetation stressors present within the AA boundary.		Low Marginal: Five vegetation stressors present within the AA boundary.				Greater than five vegetation stressors present within the AA boundary.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Comments:																					
															a. Invasive Sub-Score:		20	Total Score		1.00	
															b. Vegetation Sub-Score:		20	40		1.00	
4. Hydrologic Modification Index																					
Hydrologic Modification Stressor Presence	Condition Category																				
	Optimal					Suboptimal					Marginal						Poor				
	High Optimal: No hydrologic stressors present within the AA boundary.		Low Optimal: One hydrologic stressor present within the AA boundary.			High Suboptimal: Two hydrologic stressors present within the AA boundary.		Low Suboptimal: Three hydrologic stressors present within the AA boundary.			High Marginal: Four hydrologic stressors present within the AA boundary.		Low Marginal: Five hydrologic stressors present within the AA boundary.				Greater than five hydrologic stressors present within the AA boundary.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Comments:																					
															Score:		14	0.70			
5. Sediment Stressor Index																					
Sediment Stressor Presence	Condition Category																				
	Optimal					Suboptimal					Marginal						Poor				
	High Optimal: No sediment stressors present within the AA boundary.		Low Optimal: One sediment stressor present within the AA boundary.			High Suboptimal: Two sediment stressors present within the AA boundary.		Low Suboptimal: Three sediment stressors present within the AA boundary.			High Marginal: Four sediment stressors present within the AA boundary.		Low Marginal: Five sediment stressors present within the AA boundary.				Greater than five sediment stressors present within the AA boundary.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Comments:																					
															Score:		17	0.85			
a. Eutrophication Stressor Presence	Condition Category																				
	Optimal					Suboptimal					Marginal						Poor				
	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.						Three eutrophication stressors present within the AA boundary.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Comments:																					
b. Contaminant / Toxicity Stressor Presence	Condition Category																				
	Optimal					Suboptimal					Marginal						Poor				
	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicity stressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.						Three contaminant / toxicity stressors present within the AA boundary.				
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Comments:																					
															a. Eutrophication Score		20	Total Score:		1.00	
															b. Contaminant Score		20	40		1.00	
Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.															Overall Condition Index:		0.77				

2/4/2017

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)
 Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	AA #	Lat (dd)	Long (dd)	Notes:
	WE-38			

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.	1	1	1	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.		2	0
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.		1		100-300 ft.		0	

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002) Pennsylvania Department of Environmental Protection STRESSOR WORKSHEET		2/4/2017		
		Occurrence in AA		
		Y	#s	N
Vegetation Alteration				
Mowing				
Moderate livestock grazing (within one year)				
Crops (annual row crops, within one year)				
Selective tree harvesting/cutting (>50% removal, within 5 years)				
Right-of-way clearing (mechanical or chemical)				
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)				
Removal of woody debris				
Aquatic weed control (mechanical or herbicide)				
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)				
Plantation (conversion from typical natural tree species, including orchards)				
Other:				
Total Number:				
Hydrologic Modification				
Ditching, tile draining, or other dewatering methods				
Dike/weir/dam				
Filling/grading	1			
Dredging/excavation				
Stormwater inputs (culvert or similar concentrated urban runoff)				
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)	1			
Dead or dying trees (trunks still standing) *				
Stream alteration (channelization or incision)				
Other:				
Total Number:		2		
Sedimentation				
Sediment deposits/plumes				
Eroding banks/slopes				
Active construction (earth disturbance for development)				
Active plowing (plowing for crop planting in past year)	1			
Intensive livestock grazing (in one year, ground is >50% bare)				
Active selective forestry harvesting (within one year)				
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)				
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)				
Other:				
Total Number:		1		
Eutrophication				
Direct discharges from agricultural feedlots, manure pits, etc.				
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.				
Heavy or moderately heavy formation of algal mats				
Other:				
Total Number:				
Contaminant/Toxicity				
Severe vegetation stress (source unknown or suspected)				
Obvious spills, discharges, plumes, odors, etc.				
Acidic drainages (mined sites, quarries, road cuts)				
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites				
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)				
Fish or wildlife kills or obvious disease or abnormalities observed				
Excessive garbage/dumping				
Other:				
Total Number:				

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? **YES**

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%

Total % relative cover of all invasives, collectively on site: _____%

Comments:

Common Invasives/Aggressives List

Code	Common Name	Scientific	Status	Code	Common Name	Scientific	Status
aggi2	Redtop	<i>Agrostis gigantea</i>	FACW	luhe	Water primrose	<i>Ludwigia hexapetala</i>	OBLW
algi2	European Alder	<i>Alnus glutinosa</i>	FACW	lyvu	Garden loosestrife	<i>Lysimachia vulgaris</i>	OBLW
arhi3	Carpetgrass	<i>Arthraxon hispidus</i>	FAC-	lysa2	Purple loosestrife	<i>Lythrum salicaria</i>	FACW
beth	Japanese barberry	<i>Berberis thunbergii</i>	FACW	maqu	European waterclover	<i>Marsilea quadrifolia</i>	OBLW
bevu	European barberry	<i>Berberis vulgaris</i>	FACW	mivi	Japanese stiltgrass	<i>Microstegium vimineum</i>	FAC
butom	Flowering Rush	<i>Butomus umbellatus</i>	OBLW	nami2	Water cress	<i>Nasturtium officinale</i>	OBLW
calli6	Pond water-starwort	<i>Callitriche stagnalis</i>	OBLW	pelo	Low smartweed	<i>Persicaria longiseta</i>	FACW
egde	Brazilian waterweed	<i>Egeria densa</i>	OBLW	phar	Reed canary grass	<i>Phalaris arundinacea</i>	FACW
elan	Russian olive	<i>Elaeagnus angustifolia</i>	FACU	phau7	Common Reed	<i>Phragmites australis</i>	OBLW
elum	Autumn olive	<i>Elaeagnus umbellata</i>	FACU	potr	Rough bluegrass	<i>Poa trivialis</i>	FACW
ephi	Hairy willow-herb	<i>Epilobium hirsutum</i>	FACW	pocu6	Japanese knotweed	<i>Polygonum (Faloia) cuspidatum</i>	FAC-
eppa5	Willow-herb	<i>Epilobium parviflorum</i>	FACW	pgpf	Mile-a-minute	<i>Polygonum perfoliatum</i>	FAC-
fasa	Giant knotweed	<i>Fallopia sachalinensis</i>	OBLW	puera	Kudzu-vine	<i>Pueraria lobata</i>	FAC-
gldi	Mudmats	<i>Glossostigma diandrum</i>	OBLW	pysp1	Apple/crabapple/pear	<i>Pyrus sp.</i>	FAC?
hola	Velvetgrass	<i>Holcus lanatus</i>	FAC	rhfr	Glossy Buckthorn	<i>Rhamnus frangula</i>	FAC-
huja	Japanese Hops	<i>Humulus japonicus</i>	FACU	romu	Multiflora rose	<i>Rosa multiflora</i>	FACU
loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
lomo	Morrow's honeysuckle	<i>Lonicera morrowii</i>	NI	tygl	Hybrid cattail	<i>Typha x glauca</i>	OBLW
lota	Tartarian honeysuckle	<i>Lonicera tatarica</i>					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
	River Pointe	10/02/22	0.050	WE-40	0.050	
Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:		
Stephen Dadio		40.894297	-75.109094			

1. Wetland Zone of Influence Condition Index

Wetland Zone of Influence (300 foot area around AA perimeter)	Condition Category														CI = Total Score/20					
	Optimal				Suboptimal				Marginal				Poor							
ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	High Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.				High Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.				Low Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.		High Poor: ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.		Low Poor: ZOI area vegetation consists of impervious surfaces; mine spoil surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.			
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above. 2. Estimate the % area within each condition category. Calculators are provided for you below. 3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.															Total Score = SUM(%Areas*Scores)					
Condition Category:																				
Scoring:	% ZOI Area:	100%				0%				0%				0%				0%		Total Score:
	Score:	18				0				0				0				0		
	Total Sub-score:	18.00				0.00				0.00				0.00				0.00		
Comments:																				

2. Roadbed Presence Index

a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
No roadbeds present within 100 feet of the AA boundary	High Optimal: Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.				High Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
%																						
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
No roadbeds present within 100 - 300 feet of the AA boundary	High Optimal: Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.				High Suboptimal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 100 - 300 feet AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
															Condition Score	Weighting	Sub-Scores					
															a. Roadbed 0-100:	20	* (0.67)	13				
															b. Roadbed 100-300:	20	* (0.33)	7				
															Total Score:		20		1.00			
Comments:																						

Wetland Condition Assessment Form

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For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

3. Vegetation Condition Index																							
a. Invasive Species Presence	Condition Category																						
	Optimal					Suboptimal					Marginal						Poor						
	High Optimal: No invasives present.		Low Optimal: <5% of the total AA contains invasive species.			High Suboptimal: >5% but less than 10% of the total AA contains invasive species.		Low Suboptimal: >10% but less than 20% of the total AA contains invasive species.			High Marginal: >20% but less than 30% of the total AA contains invasive species.		Low Marginal: >30% but less than 50% of the total AA contains invasive species.				Poor: > 50% of the total AA contains invasive species.						
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
Comments:																							
4. Hydrologic Modification Index																							
b. Vegetation Stressor Presence	Condition Category															CI = Total Score/40							
	Optimal					Suboptimal					Marginal						Poor						
	High Optimal: No vegetation stressors present within the AA boundary.		Low Optimal: One vegetation stressor present within the AA boundary.			High Suboptimal: Two vegetation stressors present within the AA boundary.		Low Suboptimal: Three vegetation stressors present within the AA boundary.			High Marginal: Four vegetation stressors present within the AA boundary.		Low Marginal: Five vegetation stressors present within the AA boundary.				Poor: Greater than five vegetation stressors present within the AA boundary.						
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0.75		
Comments:																							
<table border="1" style="margin-left: auto; margin-right: 0;"> <tr> <td style="width: 150px;">a. Invasive Sub-Score:</td> <td style="width: 50px; text-align: center;">10</td> <td style="width: 50px; text-align: center;">Total Score</td> <td style="width: 50px; text-align: center;">30</td> </tr> <tr> <td>b. Vegetation Sub-Score:</td> <td style="text-align: center;">20</td> <td></td> <td></td> </tr> </table>																a. Invasive Sub-Score:	10	Total Score	30	b. Vegetation Sub-Score:		20	
a. Invasive Sub-Score:	10	Total Score	30																				
b. Vegetation Sub-Score:	20																						
5. Sediment Stressor Index																							
Hydrologic Modification Stressor Presence	Condition Category															CI = Total Score/20							
	Optimal					Suboptimal					Marginal						Poor						
	High Optimal: No hydrologic stressors present within the AA boundary.		Low Optimal: One hydrologic stressor present within the AA boundary.			High Suboptimal: Two hydrologic stressors present within the AA boundary.		Low Suboptimal: Three hydrologic stressors present within the AA boundary.			High Marginal: Four hydrologic stressors present within the AA boundary.		Low Marginal: Five hydrologic stressors present within the AA boundary.				Poor: Greater than five hydrologic stressors present within the AA boundary.						
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	1.00		
Comments:																							
<table border="1" style="margin-left: auto; margin-right: 0;"> <tr> <td style="width: 150px;">Score:</td> <td style="width: 50px; text-align: center;">20</td> </tr> </table>																Score:	20						
Score:	20																						
6. Sediment Stressor Index																							
Sediment Stressor Presence	Condition Category															CI = Total Score/20							
	Optimal					Suboptimal					Marginal						Poor						
	High Optimal: No sediment stressors present within the AA boundary.		Low Optimal: One sediment stressor present within the AA boundary.			High Suboptimal: Two sediment stressors present within the AA boundary.		Low Suboptimal: Three sediment stressors present within the AA boundary.			High Marginal: Four sediment stressors present within the AA boundary.		Low Marginal: Five sediment stressors present within the AA boundary.				Poor: Greater than five sediment stressors present within the AA boundary.						
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	1.00		
Comments:																							
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Score:	20																						
7. Eutrophication Stressor Index																							
a. Eutrophication Stressor Presence	Condition Category																						
	Optimal					Suboptimal					Marginal						Poor						
	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.						Three eutrophication stressors present within the AA boundary.						
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1			
Comments:																							
8. Contaminant / Toxicity Stressor Index																							
b. Contaminant / Toxicity Stressor Presence	Condition Category															CI = Total Score/40							
	Optimal					Suboptimal					Marginal						Poor						
	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicity stressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.						Three contaminant / toxicity stressors present within the AA boundary.						
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	1.00		
Comments:																							
<table border="1" style="margin-left: auto; margin-right: 0;"> <tr> <td style="width: 150px;">a. Eutrophication Score</td> <td style="width: 50px; text-align: center;">20</td> <td style="width: 50px; text-align: center;">Total Score:</td> <td style="width: 50px; text-align: center;">40</td> </tr> <tr> <td>b. Contaminant Score</td> <td style="text-align: center;">20</td> <td></td> <td></td> </tr> </table>																a. Eutrophication Score	20	Total Score:	40	b. Contaminant Score		20	
a. Eutrophication Score	20	Total Score:	40																				
b. Contaminant Score	20																						
Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.																Overall Condition Index:	0.94						

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)
Resource Identifier	AA #	Lat (dd)	Long (dd)	Notes:

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.		2	0
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.		2	0
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	0			100-300 ft.	0		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002) Pennsylvania Department of Environmental Protection STRESSOR WORKSHEET		2/4/2017		
		Occurrence in AA		
		Y	#s	N
Vegetation Alteration				
Mowing				
Moderate livestock grazing (within one year)				
Crops (annual row crops, within one year)				
Selective tree harvesting/cutting (>50% removal, within 5 years)				
Right-of-way clearing (mechanical or chemical)				
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)				
Removal of woody debris				
Aquatic weed control (mechanical or herbicide)				
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)				
Plantation (conversion from typical natural tree species, including orchards)				
Other:				
Total Number:				
Hydrologic Modification				
Ditching, tile draining, or other dewatering methods				
Dike/weir/dam				
Filling/grading	1			
Dredging/excavation				
Stormwater inputs (culvert or similar concentrated urban runoff)				
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)	1			
Dead or dying trees (trunks still standing) *				
Stream alteration (channelization or incision)				
Other:				
Total Number:		2		
Sedimentation				
Sediment deposits/plumes				
Eroding banks/slopes				
Active construction (earth disturbance for development)				
Active plowing (plowing for crop planting in past year)	1			
Intensive livestock grazing (in one year, ground is >50% bare)				
Active selective forestry harvesting (within one year)				
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)				
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)				
Other:				
Total Number:		1		
Eutrophication				
Direct discharges from agricultural feedlots, manure pits, etc.				
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.				
Heavy or moderately heavy formation of algal mats				
Other:				
Total Number:				
Contaminant/Toxicity				
Severe vegetation stress (source unknown or suspected)				
Obvious spills, discharges, plumes, odors, etc.				
Acidic drainages (mined sites, quarries, road cuts)				
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites				
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)				
Fish or wildlife kills or obvious disease or abnormalities observed				
Excessive garbage/dumping				
Other:				
Total Number:				

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? **YES**

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
Berberis thunbergii			25						

Total % relative cover of all invasives, collectively on site: 25 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	Scientific	Status	Code	Common Name	Scientific	Status
aggi2	Redtop	<i>Agrostis gigantea</i>	FACW	luhe	Water primrose	<i>Ludwigia hexapetala</i>	OBLW
alg12	European Alder	<i>Alnus glutinosa</i>	FACW	lyvu	Garden loosestrife	<i>Lysimachia vulgaris</i>	OBLW
arhi3	Carpetgrass	<i>Arthraxon hispidus</i>	FAC-	lysa2	Purple loosestrife	<i>Lythrum salicaria</i>	FACW
beth	Japanese barberry	<i>Berberis thunbergii</i>	FACW	maqu	European waterclover	<i>Marsilea quadrifolia</i>	OBLW
bevu	European barberry	<i>Berberis vulgaris</i>	FACW	mivi	Japanese stiltgrass	<i>Microstegium vimineum</i>	FAC
butom	Flowering Rush	<i>Butomus umbellatus</i>	OBLW	nami2	Water cress	<i>Nasturtium officinale</i>	OBLW
calli6	Pond water-starwort	<i>Callitriche stagnalis</i>	OBLW	pelo	Low smartweed	<i>Persicaria longiseta</i>	FACW
egde	Brazilian waterweed	<i>Egeria densa</i>	OBLW	phar	Reed canary grass	<i>Phalaris arundinacea</i>	FACW
elan	Russian olive	<i>Elaeagnus angustifolia</i>	FACU	phau7	Common Reed	<i>Phragmites australis</i>	OBLW
elum	Autumn olive	<i>Elaeagnus umbellata</i>	FACU	potr	Rough bluegrass	<i>Poa trivialis</i>	FACW
ephi	Hairy willow-herb	<i>Epilobium hirsutum</i>	FACW	pocu6	Japanese knotweed	<i>Polygonum (Faloia) cuspidatum</i>	FAC-
eppa5	Willow-herb	<i>Epilobium parviflorum</i>	FACW	pgpf	Mile-a-minute	<i>Polygonum perfoliatum</i>	FAC-
fasa	Giant knotweed	<i>Fallopia sachalinensis</i>	OBLW	puera	Kudzu-vine	<i>Pueraria lobata</i>	FAC-
gldi	Mudmats	<i>Glossostigma diandrum</i>	OBLW	pysp1	Apple/crabapple/pear	<i>Pyrus sp.</i>	FAC?
hola	Velvetgrass	<i>Holcus lanatus</i>	FAC	rhfr	Glossy Buckthorn	<i>Rhamnus frangula</i>	FAC-
huja	Japanese Hops	<i>Humulus japonicus</i>	FACU	romu	Multiflora rose	<i>Rosa multiflora</i>	FACU
loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
lomo	Morrow's honeysuckle	<i>Lonicera morrowii</i>	NI	tygl	Hybrid cattail	<i>Typha x glauca</i>	OBLW
lota	Tartarian honeysuckle	<i>Lonicera tatarica</i>					

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

Project #	Project Name	Date	Proposed Impact Size (acres)	AA #	AA Size (acres)	
	River Pointe	10/02/22	0.027	WE-42	1.02	
Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:		
Stephen Dadio		40.895183	-75.101252			

1. Wetland Zone of Influence Condition Index

Wetland Zone of Influence (300 foot area around AA perimeter)	Condition Category														CI = Total Score/20							
	Optimal				Suboptimal				Marginal				Poor									
ZOI area vegetation consists of a tree stratum present (diameter at breast height (dbh) > 3 inches) with greater than or equal to 60% tree canopy cover. Areas comprised of stream channels, wetlands (regardless of classification or condition) and lacustrine resources ≥ 10 acres are scored as optimal.	High Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover and containing both herbaceous and shrub layers or a non-maintained understory.				Low Suboptimal: ZOI area vegetation consists of a tree stratum (dbh > 3 inches) present, with greater than or equal to 30% and less than 60% tree canopy cover with a maintained understory.				High Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation with either a shrub layer or a tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover.				Low Marginal: ZOI area vegetation consists of non-maintained, dense herbaceous vegetation, riparian areas lacking shrub and tree stratum, areas of hay production, and ponds or open water areas (< 10 acres). If trees are present, tree stratum (dbh > 3 inches) present, with less than 30% tree canopy cover with maintained understory.		High Poor: ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, pervious trails, recently seeded and stabilized, or other comparable condition.		Low Poor: ZOI area vegetation consists of impervious surfaces; mine spoil lands, denuded surfaces, row crops, active feed lots, impervious trails, or other comparable conditions.					
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1		
1. Identify all applicable Condition Category areas within the wetland zone of influence using the descriptors above. 2. Estimate the % area within each condition category. Calculators are provided for you below. 3. Enter the % ZOI Area in decimal form (0.00) and Score for each category in the blocks below.															Total Score = SUM(%Areas*Scores)							
Condition Category:																						
% ZOI Area:															80%	20%	0%	0%	0%	0%	Total Score:	
Scoring:															4	6	0	0	0	0	4.40	
Total Sub-score:															3.20	1.20	0.00	0.00	0.00	0.00	4.40	
Comments:																						

2. Roadbed Presence Index

a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories														CI = Total Score/20											
	Optimal				Suboptimal				Marginal				Poor													
Roadbeds present within 100 feet of the AA boundary	High Optimal: No roadbeds present within 100 feet of the AA boundary				Low Optimal: Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.				High Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 12.	
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1						
%																										
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)																										
High Optimal: No roadbeds present within 100 - 300 feet of the AA boundary				Low Optimal: Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.				High Suboptimal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 2 but equal to or less than 4.				Low Suboptimal: Roadbed presence score within 100 - 300 feet AA boundary is greater than 4 but less than or equal to 6.				High Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 6 but less than or equal to 8.				Low Marginal: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 8 but less than or equal to 10.		High Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 10 but less than or equal to 12.		Low Poor: Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 12.		
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1						
															Condition Score	Weighting	Sub-Scores									
a. Roadbed 0-100:															20	* (0.67)	13									
b. Roadbed 100-300:															16	* (0.33)	5									
															Total Score:		19									
Comments:																										

40

Wetland Condition Assessment Form

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

For use in all wetland classifications found within Pennsylvania except those found within the banks of a watercourse.

3. Vegetation Condition Index																								
a. Invasive Species Presence	Condition Category																							
	Optimal					Suboptimal					Marginal						Poor							
	High Optimal: No invasives present.		Low Optimal: <5% of the total AA contains invasive species.			High Suboptimal: >5% but less than 10% of the total AA contains invasive species.		Low Suboptimal: >10% but less than 20% of the total AA contains invasive species.			High Marginal: >20% but less than 30% of the total AA contains invasive species.		Low Marginal: >30% but less than 50% of the total AA contains invasive species.				Poor: > 50% of the total AA contains invasive species.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
Comments:																								
4. Hydrologic Modification Index																								
b. Vegetation Stressor Presence	Condition Category															CI = Total Score/40								
	Optimal					Suboptimal					Marginal						Poor							
	High Optimal: No vegetation stressors present within the AA boundary.		Low Optimal: One vegetation stressor present within the AA boundary.			High Suboptimal: Two vegetation stressors present within the AA boundary.		Low Suboptimal: Three vegetation stressors present within the AA boundary.			High Marginal: Four vegetation stressors present within the AA boundary.		Low Marginal: Five vegetation stressors present within the AA boundary.				Poor: Greater than five vegetation stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
Comments:																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">a. Invasive Sub-Score:</td> <td style="width: 15%; text-align: center;">11</td> <td style="width: 15%;">Total Score</td> <td style="width: 15%; text-align: center;">0.78</td> </tr> <tr> <td>b. Vegetation Sub-Score:</td> <td style="text-align: center;">20</td> <td></td> <td></td> </tr> </table>																	a. Invasive Sub-Score:	11	Total Score	0.78	b. Vegetation Sub-Score:	20		
a. Invasive Sub-Score:	11	Total Score	0.78																					
b. Vegetation Sub-Score:	20																							
5. Sediment Stressor Index																								
Hydrologic Modification Stressor Presence	Condition Category															CI = Total Score/20								
	Optimal					Suboptimal					Marginal						Poor							
	High Optimal: No hydrologic stressors present within the AA boundary.		Low Optimal: One hydrologic stressor present within the AA boundary.			High Suboptimal: Two hydrologic stressors present within the AA boundary.		Low Suboptimal: Three hydrologic stressors present within the AA boundary.			High Marginal: Four hydrologic stressors present within the AA boundary.		Low Marginal: Five hydrologic stressors present within the AA boundary.				Poor: Greater than five hydrologic stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
Comments:																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Score:</td> <td style="width: 15%; text-align: center;">20</td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">1.00</td> </tr> </table>																	Score:	20		1.00				
Score:	20		1.00																					
6. Sediment Stressor Index																								
Sediment Stressor Presence	Condition Category															CI = Total Score/20								
	Optimal					Suboptimal					Marginal						Poor							
	High Optimal: No sediment stressors present within the AA boundary.		Low Optimal: One sediment stressor present within the AA boundary.			High Suboptimal: Two sediment stressors present within the AA boundary.		Low Suboptimal: Three sediment stressors present within the AA boundary.			High Marginal: Four sediment stressors present within the AA boundary.		Low Marginal: Five sediment stressors present within the AA boundary.				Poor: Greater than five sediment stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
Comments:																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Score:</td> <td style="width: 15%; text-align: center;">20</td> <td style="width: 15%;"></td> <td style="width: 15%; text-align: center;">1.00</td> </tr> </table>																	Score:	20		1.00				
Score:	20		1.00																					
7. Eutrophication Stressor Index																								
a. Eutrophication Stressor Presence	Condition Category																							
	Optimal					Suboptimal					Marginal						Poor							
	No eutrophication stressors present within the AA boundary.					One eutrophication stressors present within the AA boundary.					Two eutrophication stressors present within the AA boundary.						Three eutrophication stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
Comments:																								
8. Contaminant / Toxicity Stressor Index																								
b. Contaminant / Toxicity Stressor Presence	Condition Category															CI = Total Score/40								
	Optimal					Suboptimal					Marginal						Poor							
	No contaminant / toxicity stressors present within the AA boundary.					One contaminant / toxicity stressors present within the AA boundary.					Two contaminant / toxicity stressors present within the AA boundary.						Three contaminant / toxicity stressors present within the AA boundary.							
SCORE	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1				
Comments:																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">a. Eutrophication Score</td> <td style="width: 15%; text-align: center;">20</td> <td style="width: 15%;">Total Score:</td> <td style="width: 15%; text-align: center;">1.00</td> </tr> <tr> <td>b. Contaminant Score</td> <td style="text-align: center;">20</td> <td></td> <td></td> </tr> </table>																	a. Eutrophication Score	20	Total Score:	1.00	b. Contaminant Score	20		
a. Eutrophication Score	20	Total Score:	1.00																					
b. Contaminant Score	20																							
Overall Wetland Level 2 Condition Score: Sum all six of the Condition Indexes and divide by 6 to calculate the overall condition score.																								
															Overall Condition Index:	0.82								

2/4/2017

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)
 Pennsylvania Department of Environmental Protection

Roadbed Worksheet

Project Name / Identifier			Date	Name(s) of Evaluator(s)	
Resource Identifier	AA #	Lat (dd)	Long (dd)	Notes:	
	WE-42				

Roadbeds: Record the number of occurrences by roadbed type and distance category. Multiply the number of occurrences by the weighting factors for each roadbed type and distance category then sum the total score for each distance category. The total scores for each distance category are then compared to the condition category descriptions.

Roadbed Type	Distance	Occurrences	Weighting Factor	Score	Distance	Occurrences	Weighting Factor	Score
≥ 4 Lane Paved	0-100 ft.		4	0	100-300 ft.		4	0
2 Lane Paved	0-100 ft.		2	0	100-300 ft.	1	2	2
1 Lane Paved	0-100 ft.		1	0	100-300 ft.		1	0
Gravel Road	0-100 ft.		1	0	100-300 ft.		1	0
Dirt Road	0-100 ft.		2	0	100-300 ft.		2	0
Railroad	0-100 ft.		2	0	100-300 ft.		2	0
Other Roadbeds	0-100 ft.		1, 2 or 4		100-300 ft.		1, 2 or 4	
Total Scores:	0-100 ft.	0			100-300 ft.	2		

Road Comments:

Pennsylvania Wetland Condition Level 2 Rapid Assessment (Document No. 310-2137-002) Pennsylvania Department of Environmental Protection STRESSOR WORKSHEET		2/4/2017		
		Occurrence in AA		
		Y	#s	N
Vegetation Alteration				
Mowing				
Moderate livestock grazing (within one year)				
Crops (annual row crops, within one year)				
Selective tree harvesting/cutting (>50% removal, within 5 years)				
Right-of-way clearing (mechanical or chemical)				
Clear cutting or Brush cutting (mechanized removal of shrubs and saplings)				
Removal of woody debris				
Aquatic weed control (mechanical or herbicide)				
Excessive herbivory (deer, muskrat, nutria, carp, insects, etc.)				
Plantation (conversion from typical natural tree species, including orchards)				
Other:				
Total Number:				
Hydrologic Modification				
Ditching, tile draining, or other dewatering methods				
Dike/weir/dam				
Filling/grading				
Dredging/excavation				
Stormwater inputs (culvert or similar concentrated urban runoff)				
Microtopographic alterations (e.g., plowing, forestry bedding, skidder/ATV tracks)				
Dead or dying trees (trunks still standing) *				
Stream alteration (channelization or incision)				
Other:				
Total Number:				
Sedimentation				
Sediment deposits/plumes				
Eroding banks/slopes				
Active construction (earth disturbance for development)				
Active plowing (plowing for crop planting in past year)				
Intensive livestock grazing (in one year, ground is >50% bare)				
Active selective forestry harvesting (within one year)				
Active forest harvesting (within two years, includes roads, borrow areas, pads, etc.)				
Turbidity (moderate concentration of suspended solids in the water column, obvious sediment discharges)				
Other:				
Total Number:				
Eutrophication				
Direct discharges from agricultural feedlots, manure pits, etc.				
Direct discharges from septic or sewage treatment plants, fish hatcheries, etc.				
Heavy or moderately heavy formation of algal mats				
Other:				
Total Number:				
Contaminant/Toxicity				
Severe vegetation stress (source unknown or suspected)				
Obvious spills, discharges, plumes, odors, etc.				
Acidic drainages (mined sites, quarries, road cuts)				
Point discharges from adjacent industrial facilities, landfills, railroad yards, or comparable sites				
Chemical defoliation (majority of herbaceous and woody plants affected, within one year)				
Fish or wildlife kills or obvious disease or abnormalities observed				
Excessive garbage/dumping				
Other:				
Total Number:				

**** Dead or dying trees attributed to beaver activity or emerald ash borer (or other identifiable insect infestation) should not be recorded as a stressor present. The assessor is responsible for recording observations in the comment section concerning presence of these conditions.***

Pennsylvania Wetland Condition Level 2 Rapid Assessment

(Document No. 310-2137-002)

Pennsylvania Department of Environmental Protection

Invasive Species Presence Worksheet

Are invasive species (from list) present at the site in any layer? **YES**

If listed species present, enter the percent areal coverage for each species below:

Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%	Species Code	<5%	≥ 5-20%	≥ 20 - 50%	≥ 50%
Berberis thunbergii		20							

Total % relative cover of all invasives, collectively on site: 20 %

Comments:

Common Invasives/Aggressives List

Code	Common Name	Scientific	Status	Code	Common Name	Scientific	Status
aggi2	Redtop	<i>Agrostis gigantea</i>	FACW	luhe	Water primrose	<i>Ludwigia hexapetala</i>	OBLW
algl2	European Alder	<i>Alnus glutinosa</i>	FACW	lyvu	Garden loosestrife	<i>Lysimachia vulgaris</i>	OBLW
arhi3	Carpetgrass	<i>Arthraxon hispidus</i>	FAC-	lysa2	Purple loosestrife	<i>Lythrum salicaria</i>	FACW
beth	Japanese barberry	<i>Berberis thunbergii</i>	FACW	maqu	European waterclover	<i>Marsilea quadrifolia</i>	OBLW
bevu	European barberry	<i>Berberis vulgaris</i>	FACW	mivi	Japanese stiltgrass	<i>Microstegium vimineum</i>	FAC
butom	Flowering Rush	<i>Butomus umbellatus</i>	OBLW	nami2	Water cress	<i>Nasturtium officinale</i>	OBLW
calli6	Pond water-starwort	<i>Callitriche stagnalis</i>	OBLW	pelo	Low smartweed	<i>Persicaria longiseta</i>	FACW
egde	Brazilian waterweed	<i>Egeria densa</i>	OBLW	phar	Reed canary grass	<i>Phalaris arundinacea</i>	FACW
elan	Russian olive	<i>Elaeagnus angustifolia</i>	FACU	phau7	Common Reed	<i>Phragmites australis</i>	OBLW
elum	Autumn olive	<i>Elaeagnus umbellata</i>	FACU	potr	Rough bluegrass	<i>Poa trivialis</i>	FACW
ephi	Hairy willow-herb	<i>Epilobium hirsutum</i>	FACW	pocu6	Japanese knotweed	<i>Polygonum (Faloia) cuspidatum</i>	FAC-
eppa5	Willow-herb	<i>Epilobium parviflorum</i>	FACW	pgpf	Mile-a-minute	<i>Polygonum perfoliatum</i>	FAC-
fasa	Giant knotweed	<i>Fallopia sachalinensis</i>	OBLW	puera	Kudzu-vine	<i>Pueraria lobata</i>	FAC-
gldi	Mudmats	<i>Glossostigma diandrum</i>	OBLW	pysp1	Apple/crabapple/pear	<i>Pyrus sp.</i>	FAC?
hola	Velvetgrass	<i>Holcus lanatus</i>	FAC	rhfr	Glossy Buckthorn	<i>Rhamnus frangula</i>	FAC-
huja	Japanese Hops	<i>Humulus japonicus</i>	FACU	romu	Multiflora rose	<i>Rosa multiflora</i>	FACU
loja	Japanese honeysuckle	<i>Lonicera japonica</i>	FAC-	tyan	Cattail (hybrid)	<i>Typha angustifolia</i>	OBLW
lomo	Morrow's honeysuckle	<i>Lonicera morrowii</i>	NI	tygl	Hybrid cattail	<i>Typha x glauca</i>	OBLW
lota	Tartarian honeysuckle	<i>Lonicera tatarica</i>					