

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)	
206093	Power Generation Site	06/06/2024	TBD	W-22	0.017	
Name(s) of Evaluator(s)		Lat (dd)	Long (dd)	Notes:		
Trevor Surgener		40.517674°	-79.190148°	PEM wetland		

General Comments: Wetland W-22 is a 0.017-acre PEM wetland located in the eastern central study area, in a depression. The AA includes the entire delineated wetland within the study area.

1. Wetland Zone of Influence Condition Index

	Condition Category																		CI = Total Score/20													
Wetland Zone of Influence (300 foot area around AA perimeter)	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.					<u>High Suboptimal:</u> 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.					<u>Low Suboptimal:</u> 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.					<u>High Marginal:</u> 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.				<u>Low Marginal:</u> 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.				<u>High Poor:</u> ZOI area vegetation consists of lawns, mowed, and maintained areas, nurseries; no-till cropland; actively grazed pasture, sparsely vegetated non-maintained area, previous trails, recently seeded and stabilized, or other comparable condition.				<u>Low Poor:</u> 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.														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.																																
Scoring:	Condition Category:		High Marginal			Low Marginal			High Poor			Low Poor			Low Poor						Total Score:											
	% ZOI Area:		10%			40%			45%			5%			0%			0%														
	Score:		9			6			4			3			2			2														
	Total Sub-score:		0.90			2.40			1.80			0.15			0.00			0.00			5.25											
																					0.26											

2. Roadbed Presence Index

a. Roadbed Presence Index																																								
a. Roadbed Presence (within 0 - 100 foot Wetland ZOI distance)	Condition Categories																																							
	Optimal					Suboptimal					Marginal					Poor																								
	<u>High Optimal:</u>		<u>Low Optimal:</u>			<u>High Suboptimal:</u>		<u>Low Suboptimal:</u>			<u>High Marginal:</u>		<u>Low Marginal:</u>			<u>High Poor:</u>		<u>Low Poor:</u>																						
	No roadbeds present within 100 feet of the AA boundary					Roadbed presence score within 0-100 feet of the AA boundary equal to or less than 2.					Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 2 but equal to or less than 4.					Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 4 but less than or equal to 6.					Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 6 but less than or equal to 8.					Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 8 but less than or equal to 10.					Roadbed presence score within 0-100 foot distance of the AA boundary is greater than 10 but less than or equal to 12.					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																				

Comments:

	Condition Categories																CI = Total Score/20			
b. Roadbed Presence (within 100 - 300 foot Wetland ZOI distance)	Optimal				Suboptimal				Marginal				Poor							
	<u>High Optimal:</u>		<u>Low Optimal:</u>		<u>High Suboptimal:</u>		<u>Low Suboptimal:</u>		<u>High Marginal:</u>		<u>Low Marginal:</u>		<u>High Poor:</u>		<u>Low Poor:</u>					
	No roadbeds present within 100 - 300 feet of the AA boundary		Roadbed presence score within 100 - 300 feet of the AA boundary equal to or less than 2.		Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 2 but equal to or less than 4.		Roadbed presence score within 100 - 300 feet AA boundary is greater than 4 but less than or equal to 6.		Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 6 but less than or equal to 8.		Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 8 but less than or equal to 10.		Roadbed presence score within 100 - 300 feet of the AA boundary is greater than 10 but less than or equal to 12.		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
																	0.79			
											Condition Score		Weighting		Sub-Scores					
											a. Roadbed 0-100:		19		* (0.67)			13		
											b. Roadbed 100-300:		9		* (0.33)			3		
															Total Score:		16			

Comments:

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3. Vegetation Condition Index

a. Invasive Species Presence	Condition Category														
	Optimal					Suboptimal					Marginal				
	High Optimal: No invasives present.					High Suboptimal: <5% of the total AA contains invasive species.					High Marginal: >20% but less than 30% of the total AA contains invasive species.				
	Low Optimal: <5% of the total AA contains invasive species.					Low Suboptimal: >5% but less than 10% of the total AA contains invasive species.					Low Marginal: >30% but less than 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				
	High Optimal: No vegetation stressors present within the AA boundary.					High Suboptimal: Two vegetation stressors present within the AA boundary.					High Marginal: Four vegetation stressors present within the AA boundary.				
	Low Optimal: One vegetation stressor present within the AA boundary.					Low Suboptimal: Three vegetation stressors present within the AA boundary.					Low Marginal: 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:		19	Total Score	
											b. Vegetation Sub-Score:		7	26	
														0.65	

4. Hydrologic Modification Index

Hydrologic Modification Stressor Presence	Condition Category														
	Optimal					Suboptimal					Marginal				
	High Optimal: No hydrologic stressors present within the AA boundary.					High Suboptimal: Two hydrologic stressors present within the AA boundary.					High Marginal: Four hydrologic stressors present within the AA boundary.				
	Low Optimal: One hydrologic stressor present within the AA boundary.					Low Suboptimal: Three hydrologic stressors present within the AA boundary.					Low Marginal: 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:		7		
														0.35	

5. Sediment Stressor Index

Sediment Stressor Presence	Condition Category														
	Optimal					Suboptimal					Marginal				
	High Optimal: No sediment stressors present within the AA boundary.					High Suboptimal: Two sediment stressors present within the AA boundary.					High Marginal: Four sediment stressors present within the AA boundary.				
	Low Optimal: One sediment stressor present within the AA boundary.					Low Suboptimal: Three sediment stressors present within the AA boundary.					Low Marginal: 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:		13		
														0.65	

6. Water Quality Stressor Index

Condition Category																				
a. Eutrophication Stressor Presence	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:																				

Condition Category																				
b. Contaminant / Toxicity Stressor Presence	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					13		Total Score:		0.43
											b. Contaminant Score					4		17		

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:

0.52