

Stantec Consulting Services Inc. 10509 Timberwood Circle Suite 100, Louisville KY 40223-5308

December 15, 2020 File: 172658241

Attention: Ms. Emily Truebner Martin County Solar Project, LLC 422 Admiral Blvd Kansas City, MO 64106

Dear Ms. Truebner,

Reference: Martin County Solar Project: Wetland Delineation Summary

Stantec was retained by Savion to identify, delineate, and report on any potentially jurisdictional water resources within the 1,053-acre proposed Martin County Solar site ("the Project") near Inez in Martin County, Kentucky (see mapping in **Attachment A**).

The Project is located within the Pigeonroost Fork (050702010504) and Upper Wolf Creek (050702010503) drainages within the Tug Fork watershed (HUC 05070201) and is drained by a combination of Pigeonroost Fork, Petercave Fork, a tributary to Pigeonroost Fork, and Wolf Creek (KYDOW 2020). The Project itself consists mainly of reclaimed mine land with small areas of intact native forested land on the periphery. As such, native vegetation is sparse, and the natural hydrology has been significantly altered. Soils within the Project are shallow, approx. 3-8 inches in depth, and are underlain by mine spoil (crushed up rock and coal residuals). The U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) identifies only two natural streams within the Project boundaries, Pigeonroost Fork and Petercave Fork. All other features are classified either as a canal/ditch or pipeline (see **Figure 2** in **Attachment A**). The pipeline feature is a subterranean pipeline (aqueduct) that was constructed to drain the upper section of Petercave Fork (south of the Project) to the lower section (north/east/south of the Project boundary). The pipeline runs north underneath the Project and exits at the head of the Petercave Fork drainage.

Due to gaps in aerial imagery in the area it is difficult to determine when exactly surface mining began on the Project. Imagery in 1957 shows that the site was untouched at this time; however, in 1983, the majority of the area was currently operating as a surface mine (NETR 2020). By 1995, most of the site was reclaimed and appears to be operating mainly as pasture/farmland. Two areas appear to still be operating as smaller surface mining operations, specifically, the northernmost and easternmost portions of the Project. Mining continued on the easternmost portion of the Project through 2003 and was reclaimed by 2004. The northernmost portion continued to be mined through 2009. By 2010 all of the site was reclaimed mine operating mainly as pasture/farmland with exception to the small areas of native forest remaining on the Project (NETR 2020).

This complex hydrology not only made the identification of surface waters challenging, but it also further complicated the question of jurisdiction under Section 404 of the Clean Water Act (CWA). Most of the streams on-site were observed to be dry with no flowing water, even one day after a significant rain event. Studies of the hydrology of reclaimed mine sites show that reclaimed mine sites, especially those with compacted soils, have increased peak flow and shorter storm-flow lag times. Additionally, it was found that

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mine sites reclaimed with soil mixed with overburden (as is likely the case within the Project) have increased infiltration rates due to increased subsurface void space (Evans et al. 2015).

There has been a recent change in the interpretation of waters subject to jurisdiction under Section 404 of the Clean Water Act (CWA). Previous regulations and guidance used the determination of a "significant nexus" for a hydrologic connection to identify streams and wetlands that fell under the protection of the CWA; allowing for the regulation of ephemeral streams. The recently passed Navigable Waters Protection Rule (NWPR) substantially narrows the scope of waterbodies subject to regulation under the CWA by a) excluding ephemeral streams/water features, b) requiring rivers, streams, and other natural channels, i.e., tributaries, to directly or indirectly contribute surface flow to a territorial sea or traditional navigable water, c) excluding lakes and wetlands that do not have a direct surface water connection to jurisdictional waters, and d) excluding water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining activity. For this reason, and to support the development of an *Approved Jurisdictional Determination* for the Project area, columns for "Receiving Water() and "Opinion of Jurisdiction" have been added to the resource tables below.

FIELD RESULTS

Field delineations of stream and wetland resources were completed by multiple field teams between October 30th and November 7th, 2020. Weather during the delineation was relatively mild. Temperatures ranged from 40-75° Fahrenheit and there was little to no precipitation. One significant rain event occurred the day/night before delineations began. According to the Inex 2 E, KY rain gauge approximately 1.16" of rain fell on October 29th and 30th (NOAA 2020).

These wetland delineations were conducted according to the standard methods set forth in the U.S. Army Corps of Engineers (USACE) *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region (Version 2.0)*. Stream determinations were made based on the presence of ordinary high-water mark indicators and indictors of flow duration (ephemeral, intermittent, or perennial). These field efforts resulted in the identification of 40 streams, 53 wetlands and 4 open water features.

STREAMS

Of the 40 streams identified within the project area, 33 were ephemeral channels that appear to only flow in direct response to precipitation and therefore are likely not considered jurisdictional under the NWPR (**Table 1**). Five (5) additional channels were determined to be intermittent streams with potential to fall under jurisdiction of the NWPR, however, the determination of whether these streams are jurisdictional is complicated by the historic mining conducted on the site and the determination of whether these features are natural or were constructed at the time the mine was reclaimed. As discussed earlier, the NWPR does not regulate water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining activity.

Five (5) intermittent streams and two (2) perennial streams were delineated within the Project. Under the NWPR it is anticipated that of the intermittent streams delineated within the Project, Streams 4, 10, and 27 are likely to be non-jurisdictional. Stream 4 is a man-made ditch and runs southeast along an access road until exiting the Project and flowing into a mine pond. Stream 10 is a likely non-jurisdictional man-made

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ditch with berms constructed on either side built to drain an onsite pond (OW-01) into a jurisdictional wetland (Wetland AF) and into a jurisdictional open water feature (OW-02). Stream 27 (intermittent) flows into a non-jurisdictional stream before entering offsite jurisdictional features. Stream 11, a jurisdictional intermittent stream, receives flow downstream of OW-02, Wetland AD, Wetland AE, and Wetland AF and flows to a confluence with Stream 12 (Petercave Fork). Stream 23 (intermittent) has a direct surface water connection to Stream 22 (Pigeonroost Fork) and, therefore, is jurisdictional.

Table 1. Delineated Channel Segments

Name	Flow Class	Length (ft)	Likely Jurisdiction	Latitude	Longitude
Stream 01	Ephemeral	3626.3	Non-Jurisdictional	37.75189683	-82.47149691
Stream 02	Ephemeral	299.9	Non-Jurisdictional	37.75192918	-82.46422837
Stream 03	Ephemeral	1340.6	Non-Jurisdictional	37.75130698	-82.46376551
Stream 04	Intermittent	1871.9	Non-Jurisdictional (Ditch)	37.75332938	-82.47411976
Stream 05	Ephemeral	170.1	Non-Jurisdictional	37.75217028	-82.47292611
Stream 06	Ephemeral	2333.6	Non-Jurisdictional	37.75027268	-82.46909607
Stream 07	Ephemeral	1426.2	Non-Jurisdictional	37.76300112	-82.47726942
Stream 08	Ephemeral	494.5	Non-Jurisdictional	37.74376756	-82.49007077
Stream 09	Ephemeral	1190.4	Non-Jurisdictional	37.75777042	-82.47627247
Stream 10	Intermittent	663.4	Non-Jurisdictional (Ditch)	37.76624443	-82.45929003
Stream 11	Intermittent	1914.5	Jurisdictional	37.76558856	-82.45863888
Stream 12 (Petercave Fork)	Perennial	281.8	Jurisdictional	37.7626547	-82.45816713
Stream 13	Ephemeral	135.1	Non-Jurisdictional	37.76408033	-82.45835007
Stream 14	Ephemeral	151.4	Non-Jurisdictional	37.76555921	-82.45920935
Stream 15	Ephemeral	579.9	Non-Jurisdictional	37.76564147	-82.45893353
Stream 16	Ephemeral	143.9	Non-Jurisdictional	37.76544999	-82.45924493
Stream 17	Ephemeral	988.2	Non-Jurisdictional	37.75844144	-82.45325437
Stream 18	Ephemeral	173.6	Non-Jurisdictional	37.75922398	-82.45242698
Stream 19	Ephemeral	387.6	Non-Jurisdictional	37.75512804	-82.45160772
Stream 20	Ephemeral	859.9	Non-Jurisdictional	37.75228479	-82.45840699
Stream 21	Ephemeral	1063.0	Non-Jurisdictional	37.75034618	-82.46115693
Stream 22 (Pigeonroost Fork)	Perennial	1344.2	Jurisdictional	37.73933842	-82.44162914

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Stream 23	Intermittent	249.1	Jurisdictional	37.73865887	-82.44004285
Stream 24	Ephemeral	42.2	Non-Jurisdictional	37.73887619	-82.44045959
Stream 25	Ephemeral	720.3	Non-Jurisdictional	37.73894375	-82.43996992
Stream 26	Ephemeral	1466.0	Non-Jurisdictional	37.74194678	-82.44812195
Stream 27	Intermittent	187.6	Jurisdictional	37.74230206	-82.44683565
Stream 28	Ephemeral	670.7	Non-Jurisdictional	37.74278944	-82.4489742
Stream 29	Ephemeral	462.5	Non-Jurisdictional	37.73876708	-82.44238002
Stream 30	Ephemeral	113.2	Non-Jurisdictional	37.73914148	-82.44307393
Stream 31	Ephemeral	232.1	Non-Jurisdictional	37.73981859	-82.44445076
Stream 32	Ephemeral	142.5	Non-Jurisdictional	37.73981787	-82.4450329
Stream 33	Ephemeral	616.7	Non-Jurisdictional	37.74047163	-82.4454396
Stream 34	Ephemeral	289.8	Non-Jurisdictional	37.74086673	-82.4458699
Stream 35	Ephemeral	822.8	Non-Jurisdictional	37.7418373	-82.44725334
Stream 36	Ephemeral	1247.9	Non-Jurisdictional	37.7426085	-82.45057116
Stream 37	Ephemeral	426.7	Non-Jurisdictional	37.74265407	-82.4500218
Stream 38	Ephemeral	1402.8	Non-Jurisdictional	37.74411224	-82.45250267
Stream 39	Ephemeral	701.5	Non-Jurisdictional	37.74321982	-82.45231713
Stream 40	Ephemeral	78.4	Non-Jurisdictional	37.74600391	-82.45360422
Total	40 Streams	31,312.6 ft	3,977.2 ft Jurisdictional	l	

WETLANDS

Most of the 53 wetland features delineated within the project area are closed depressions that have no direct surface connection to jurisdictional waters (**Table 2**). As a result, only six wetlands (Wetland AD, Wetland AE, Wetland AF, Wetland AH, Wetland AU and Wetland AV) would likely be considered jurisdictional. Wetland AF and AE have direct surface water connections with OW-02 which flows directly into Wetland AD, into Stream 11 and ending up in Stream 12 (Petercave Fork). Wetlands AH and AV are located within the floodplains of Petercave Fork and Pigeonroost Fork respectively and, as such, are both jurisdictional. Wetland AU has a direct surface water connection with stream Stream 23, which flows into Pigeonroost Fork. Because the remaining wetlands lack a direct connection to jurisdictional waters they would likely be considered isolated and not subject to regulation under the CWA.

Reference: Martin County Solar Project: Wetland Delineation Summary

Name	Cowardin Class	Area (ac)	Receiving Feature / Water	Likely Jurisdiction	Latitude	Longitude
		0.267	Stream-	Neg lurisolisticas	27 7/01010	00 450 (0/74
Wet-A	PEM	0.267	01(Ephemeral) None	Non-Jurisdictional	37.7681218	-82.45860674
Wet-B	PEM	0.067	None	Isolated	37.76758677	-82.46085395
Wet-C	PEM		None	Isolated	37.7674318	-82.46403343
Wet-D	PEM	0.096	None	Isolated	37.76819634	-82.46305892
Wet-E	PEM	0.115	None	Isolated	37.76929169	-82.46132324
Wet-F	PEM	0.209		Isolated	37.76867036	-82.46071603
Wet-G	PEM	0.169	None	Isolated	37.76538379	-82.46270271
Wet-H	PEM	0.031	None	Isolated	37.76499092	-82.46305549
Wet-I	PEM	0.174	None	Isolated	37.76469341	-82.46969527
Wet-J	PSS/PEM	0.817	None	Isolated	37.76572356	-82.47329661
Wet-K	PEM	0.084	None	Isolated	37.75897597	-82.4749662
Wet-L	PSS/PEM	0.072	None	Isolated	37.74108365	-82.49266307
Wet-M	PEM	0.335	None	Isolated	37.76098388	-82.47820066
Wet-N	PEM	0.089	None	Isolated	37.76304144	-82.47381593
Wet-O	PEM	0.421	None	Isolated	37.7661017	-82.47038843
Wet-P	PEM	0.151	None	Isolated	37.76682943	-82.45663596
Wet-Q	PEM	0.055	None	Isolated	37.76472573	-82.46028293
Wet-R	PEM	0.053	None	Isolated	37.76528876	-82.46000988
Wet-S	PSS/PEM	0.182	None	Isolated	37.76741256	-82.45868565
Wet-T	PEM	0.009	None	Isolated	37.76726586	-82.45870126
Wet-U	PEM	0.259	None	Isolated	37.76722901	-82.45919792
Wet-V	PEM	0.189	None	Isolated	37.76675534	-82.45914573
Wet-W	PEM	0.076	None	Isolated	37.76265035	-82.45824951
Wet-X	PEM	0.016	None	Isolated	37.7681218	-82.45860674
Wet-Y	PEM	0.090	None	Isolated	37.76758677	-82.46085395
Wet-Z	PEM	0.143	None	Isolated	37.7674318	-82.46403343
Wet-AA	PEM	0.407	None	Isolated	37.76819634	-82.46305892
Wet-AB	PEM	0.004	None	Isolated	37.76929169	-82.46132324
Wet-AC	PEM	0.049	OW-01 (Isolated)	Non-Jurisdictional	37.76867036	-82.46071603

Table 1. Delineated Wetland Resources

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Wet-AD	PEM	0.014	Stream-11 (Intermittent)	Jurisdictional	37.76538379	-82.46270271
Wet-AE	PEM	0.045	OW-02	Jurisdictional	37.76499092	-82.46305549
Wet-AF	PEM	0.022	OW-02	Jurisdictional	37.76469341	-82.46969527
Wet-AG	PEM	0.023	Stream-10 (Ditch)	Non-Jurisdictional	37.76572356	-82.47329661
Wet-AH	PEM	0.208	Stream-12 (Perennial)	Jurisdictional	37.75897597	-82.4749662
Wet-Al	PEM	0.042	None	Isolated	37.75059233	-82.45851739
Wet-AJ	PEM	0.336	None	Isolated	37.75154265	-82.45637072
Wet-AK	PEM	0.029	None	Isolated	37.75246602	-82.45346061
Wet-AL	PEM	0.103	None	Isolated	37.7525627	-82.45302473
Wet-AM	PEM	0.022	None	Isolated	37.75254418	-82.45249499
Wet-AN	PEM	0.017	None	Isolated	37.75561573	-82.45540107
Wet-AO	PEM	0.095	None	Isolated	37.75833701	-82.45163623
Wet-AP	PEM	0.108	None	Isolated	37.75483358	-82.45268184
Wet-AQ	PEM	0.171	None	Isolated	37.75523406	-82.45320026
Wet-AR	PEM	0.047	None	Isolated	37.74917999	-82.46230964
Wet-AS	PEM	0.241	None	Isolated	37.74737088	-82.45806182
Wet-AT	PEM	0.044	None	Isolated	37.73893291	-82.44034204
Wet-AU	PEM	0.017	Stream-23 (Intermittent)	Jurisdictional	37.73832992	-82.43988378
Wet-AV	PEM	0.148	Stream-24 (Ephemeral)	Jurisdictional	37.74251939	-82.44880571
Wet-AW	PEM	0.181	Stream-28 (Ephemeral)	Non-Jurisdictional	37.74233836	-82.44919424
Wet-AX	PEM	0.024	Stream-37 (Ephemeral)	Non-Jurisdictional	37.74254013	-82.45024191
Wet-AY	PEM	0.104	Stream-39 (Ephemeral)	Non-Jurisdictional	37.7443483	-82.4526321
Wet-AZ	PEM	0.015	None	Isolated	37.74538523	-82.45194287
Wet-BA	PEM	0.016	None	Isolated	37.74578788	-82.45213805
					0.454 a	cres Jurisdictional

OPEN WATER FEATURES

Of the four (4) open water features identified within the Project area (**Table 3**), three features have no direct surface water connection to jurisdictional waters; only one pond has a direct connection, OW-02. Feature OW-02 flows into wetland Wet-AD and then Stream 11 which is connected to Stream 12 (Petercave Fork). Because the remaining open water features lack a direct connection to jurisdictional waters they would likely be considered isolated and not subject to regulation under the CWA.

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Name	Cowardin Class	Area (ac)	Receiving Feature / Water	Likely Jurisdiction	Latitude	Longitude
OW-01	PUB	0.393	None	Isolated	37.765202	-82.460029
OW-02	PUB	0.178	Stream 11	Jurisdictional	37.767395	-82.459002
OW-03	PUB	0.007	Stream 28 (Ephemeral)	Non- Jurisdictional	37.74276	-82.44924
OW-04	PUB	0.002	None	Isolated	37.742709	-82.447465
Total	4 open water	0.58 ac				

Table 3. Delineated Open Water Resources

DISCUSSION

Due to the impact of surface mining and subsequent reclamation efforts on the majority of the Project are, hydrology, soils, and plant diversity have been severely altered from their natural conditions. Hydrology within the site likely vacates the Project rapidly through several man-made stream channels (ditches) or infiltrates quickly into subsurface voids of the underlaying mine residual after storm events. The presence of many isolated wetland features is likely attributable to this disturbance. Determination of jurisdiction for features on the project area is further complicated by NWPR provisions regarding the jurisdiction of stream and wetland features on mining sites. A total of 97 features were identified and delineated within the Project. Based on indicators encountered in the field and the connection of these features to jurisdictional waters it appears that of the 97 features delineated there are four (4) streams, one (1) open water area, and six (6) wetlands that would likely be considered jurisdictional. The remaining 86 features would likely be considered isolated/non-jurisdictional because they either have no surface water connection to jurisdictional waters or are ephemeral streams.

Regards,

Stantec Consulting Services Inc.

Shane Kelley Environmental Scientist Phone: 502 212 5021 Fax: 502 212 5055 Shane.Kelley@stantec.com

Attachment: Attachment A: Mapping Attachment B: Wetland Determination Data Forms Attachment C: Photograph Log Attachment D: Soil Report

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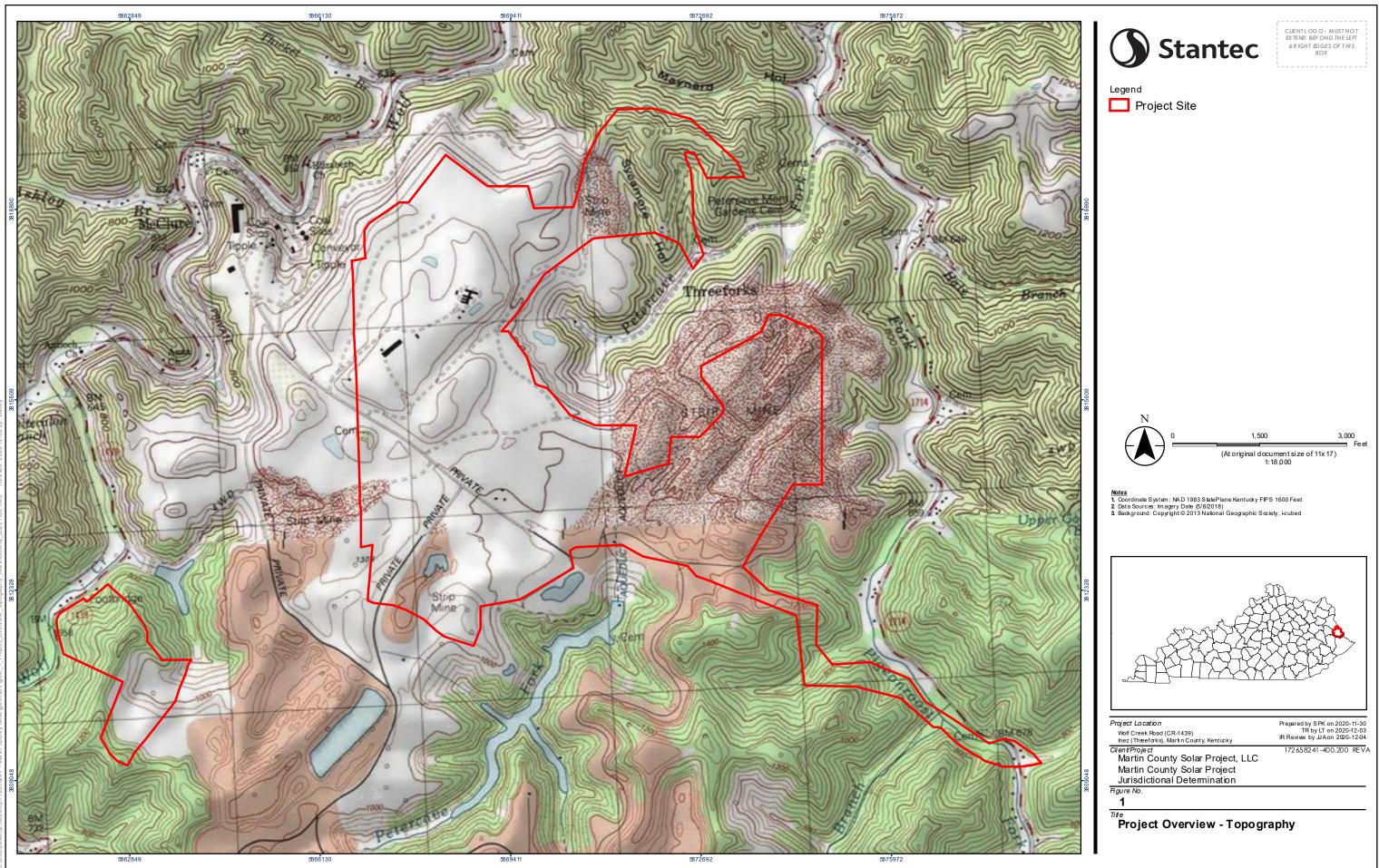
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Reference: Martin County Solar Project: Wetland Delineation Summary

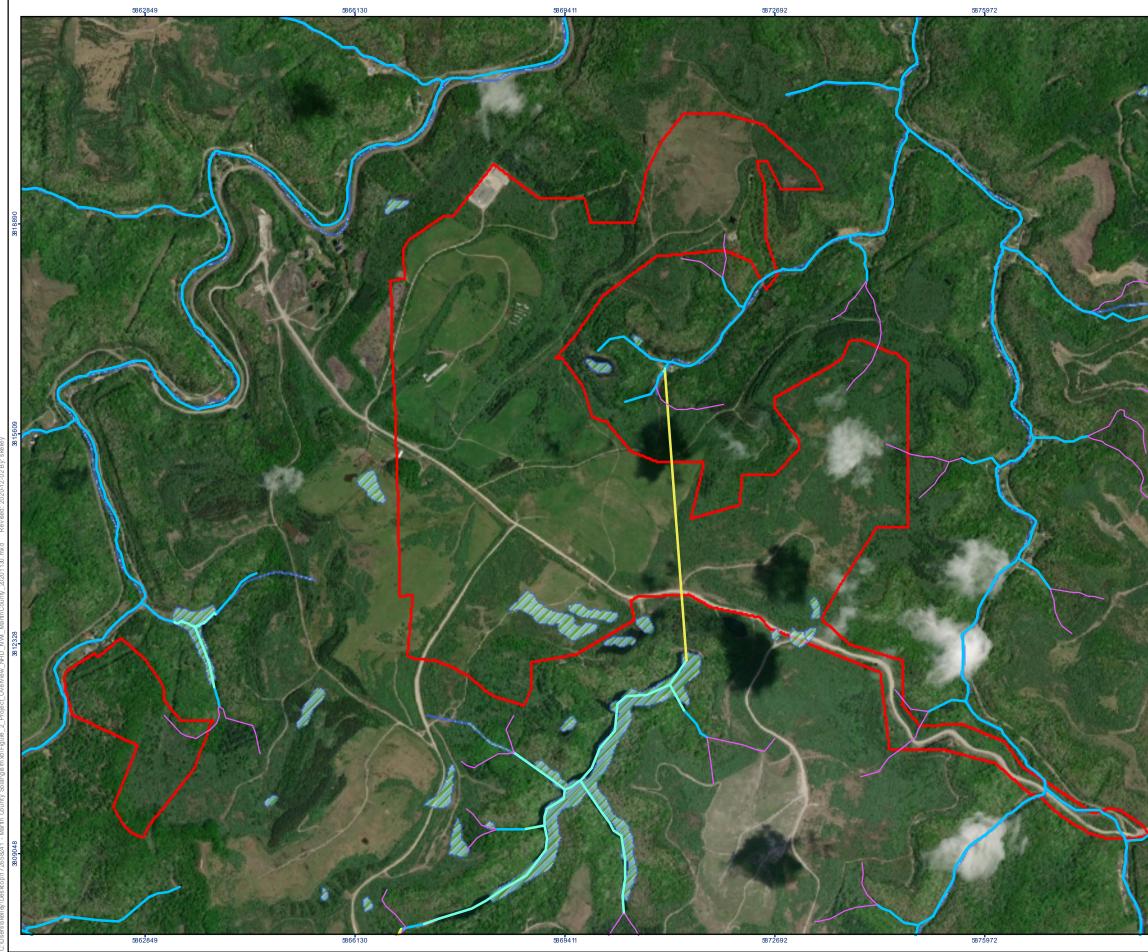
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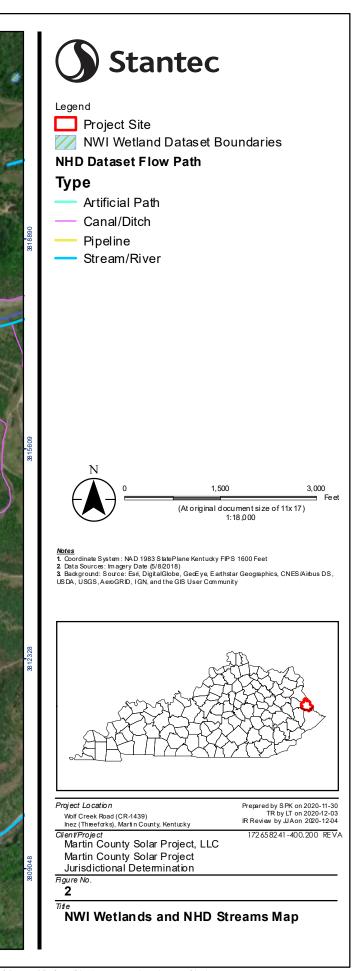
- Evans, Daniel M., Carl E. Zipper, Erich T. Hester, and Stephen H Scheonholtz. 2015. Hydrologic Effects of Surface Coal Mining in Appalachia (U.S.). *Journal of the American Water Resources Association* (JAWRA) 1-17. DOI: 10.1111/1752-1688.12322. Accessed: <u>https://aries.energy.vt.edu/content/dam/aries_energy_vt_edu/journal_paper_waste_and_water_ma_ nagement/Evans_DM_etal_Journal%20of%20the%20American%20Water%20Resources%20Asso ciation_2015.pdf. December 2020.</u>
- Kentucky Department of Water. 2020. Kentucky Watershed Viewer. Accessed: <u>https://eppcgis.ky.gov/watershed/</u>. December 2020.
- National Oceanic and Atmospheric Administration (NOAA). AgACIS. 2020. Daily Precipitation Data by Rain Gauge. Accessed: <u>http://agacis.rcc-acis.org/</u>. December 2020.
- Nationwide Environmental Title Research Online (NETR). 2020. Historic Aerials. Accessed: <u>https://www.historicaerials.com/</u>. December 2020.
- Navigable Waters Protection Rule: Definition of "Waters of the United States". 33 CFR Part 328. 85 Fed. Reg. 22250. April 21, 2020.

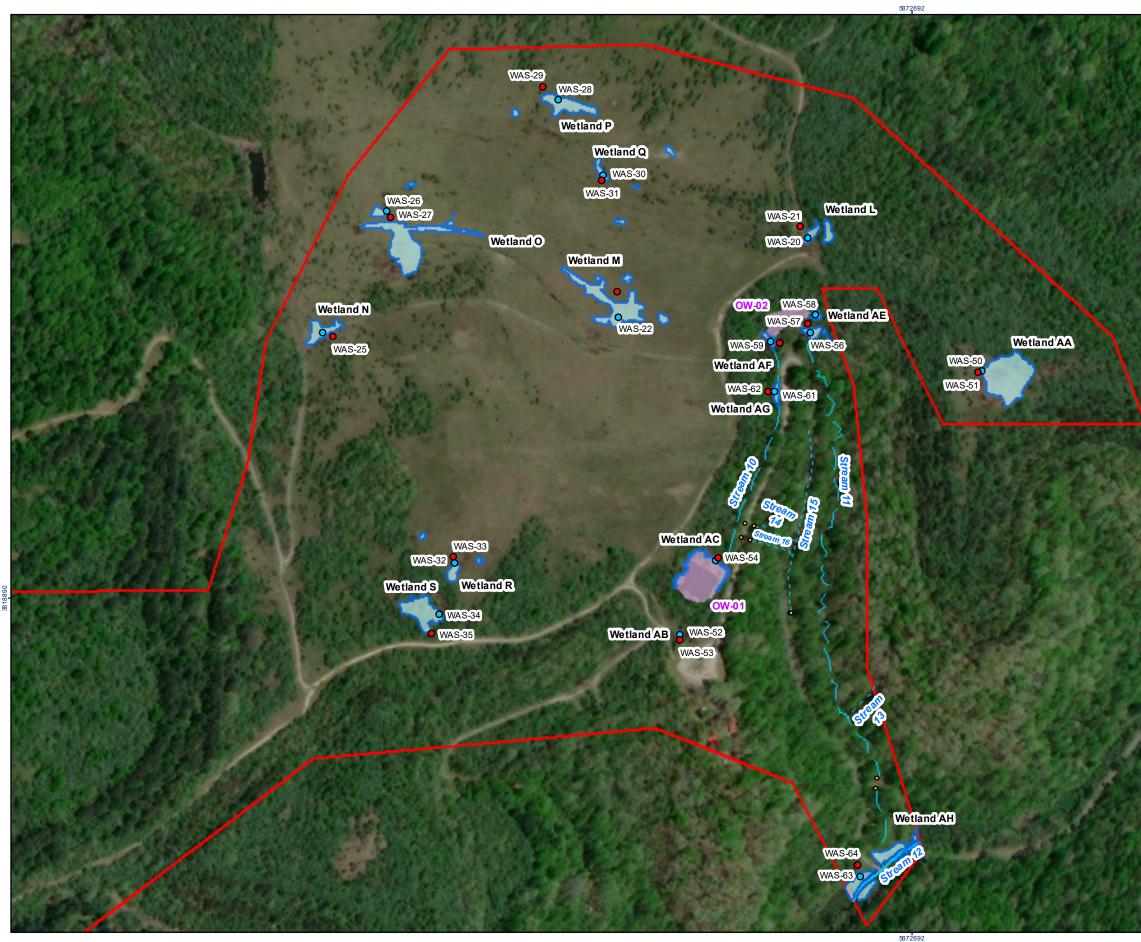
Attachment A



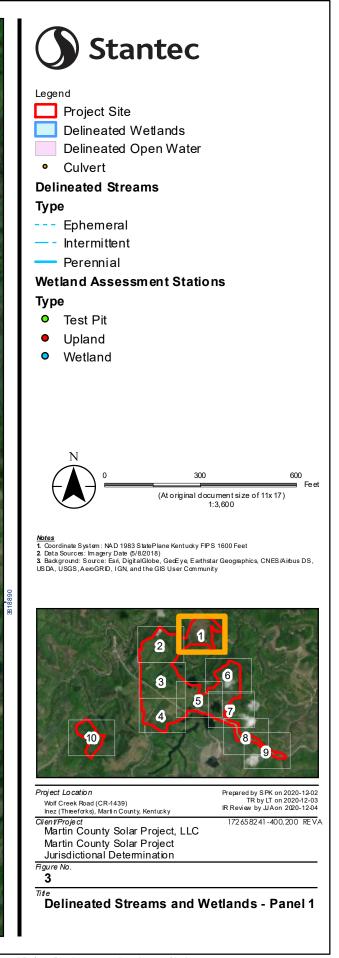
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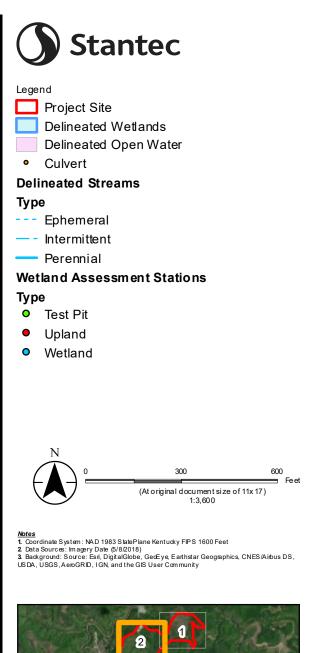


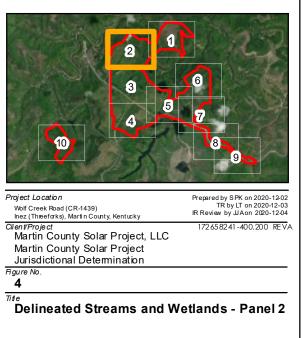


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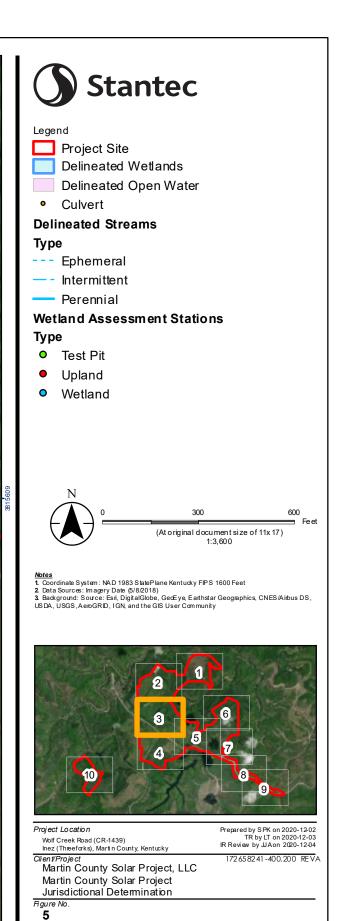




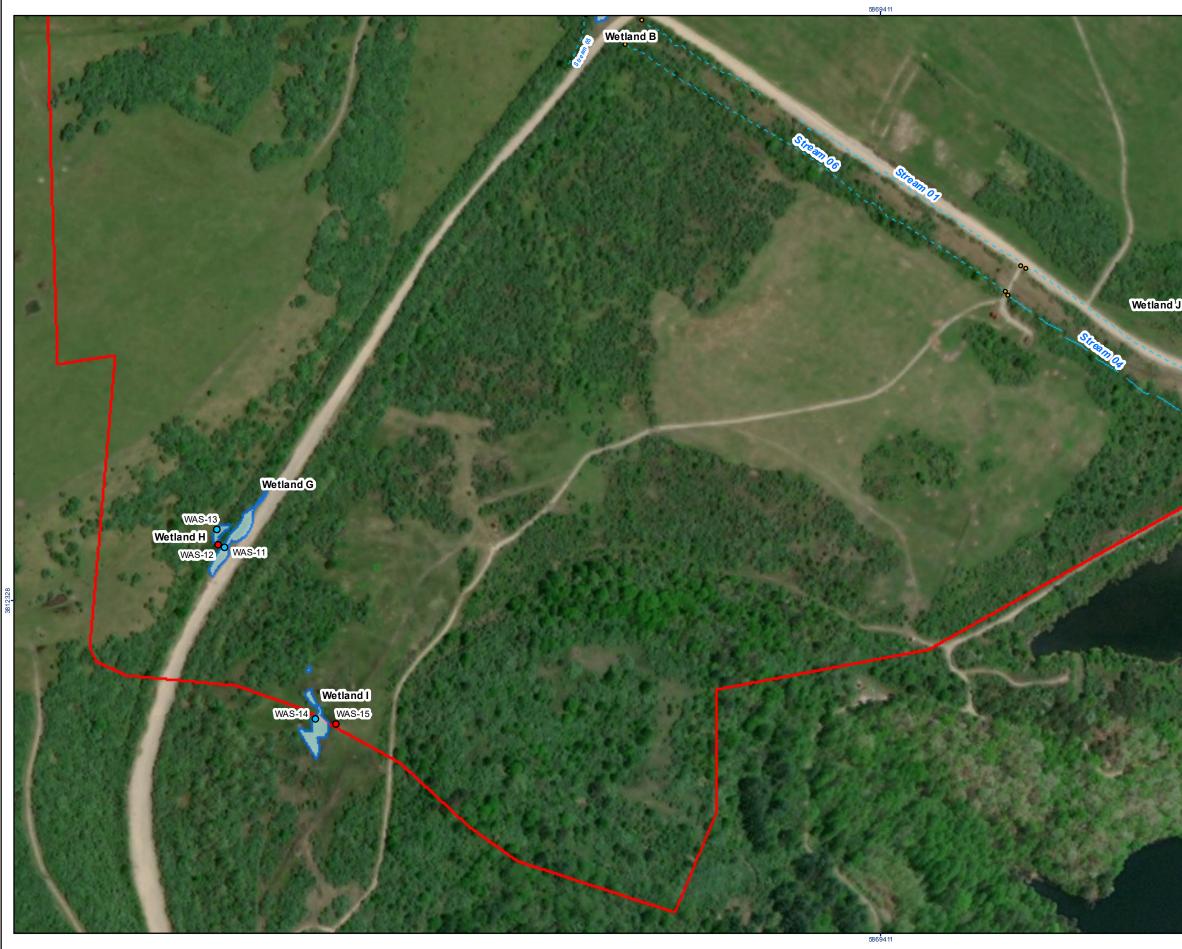


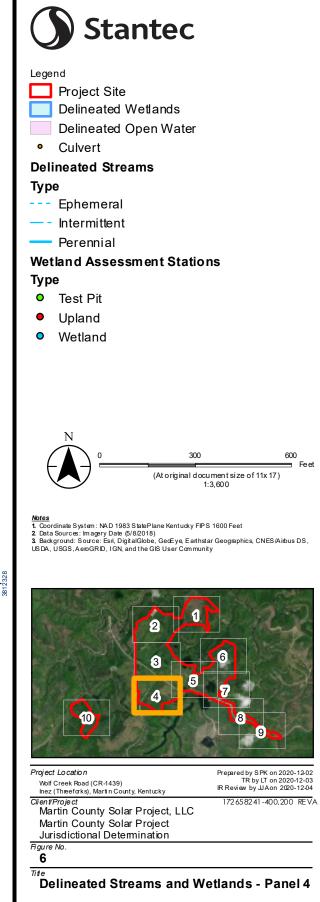


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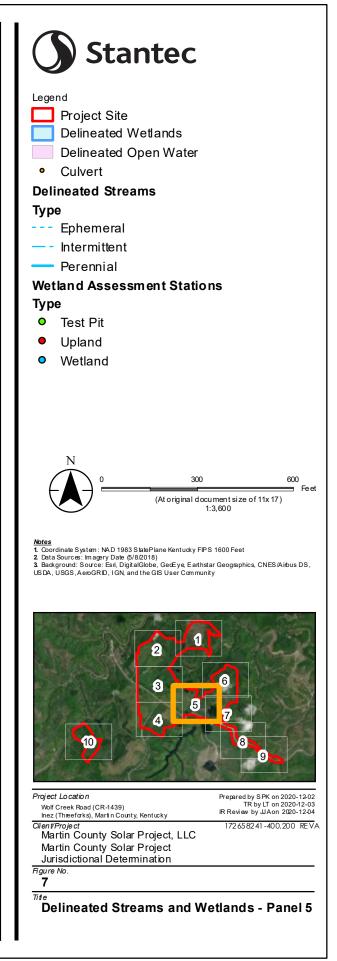
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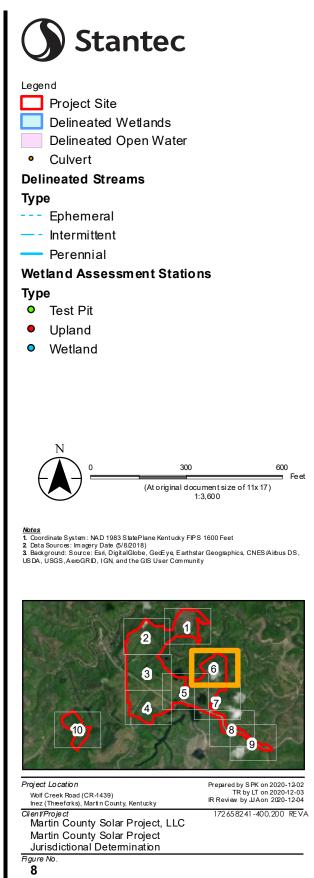




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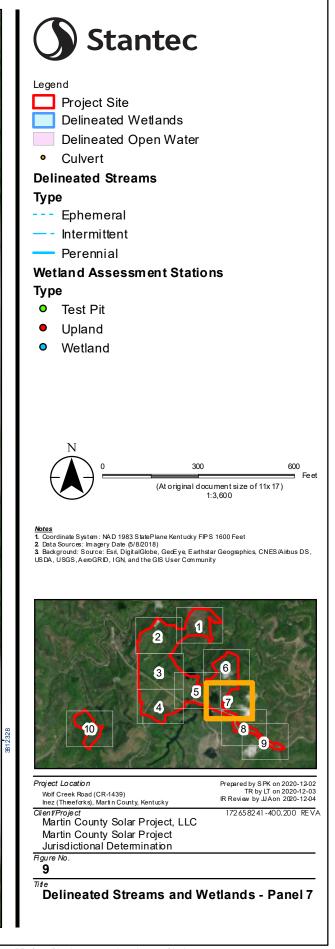




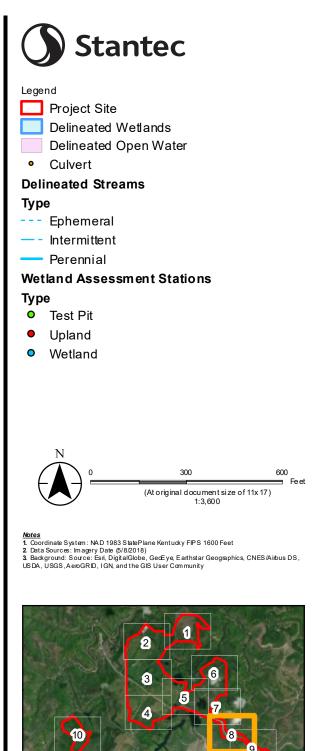
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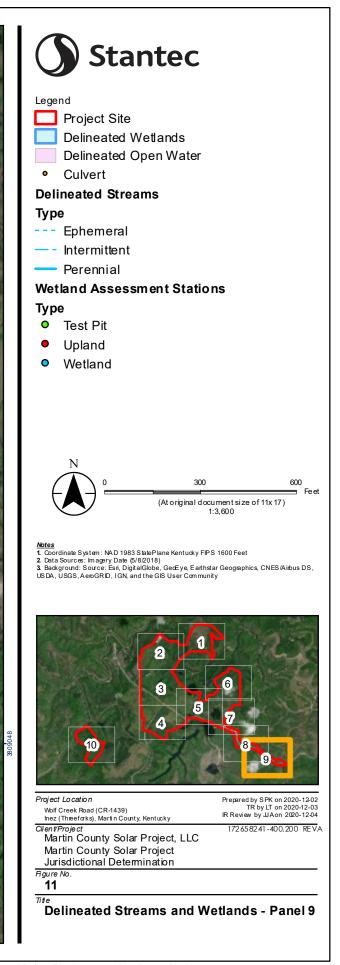


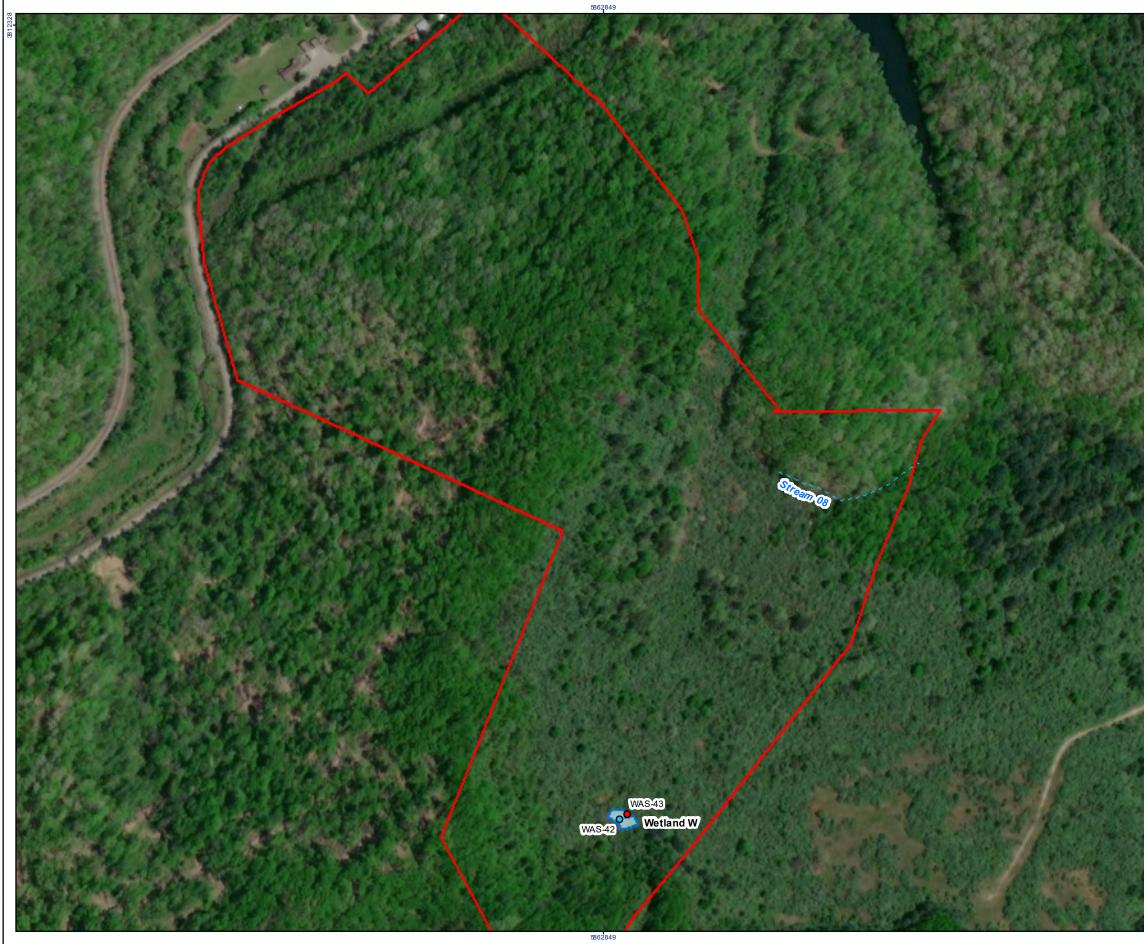




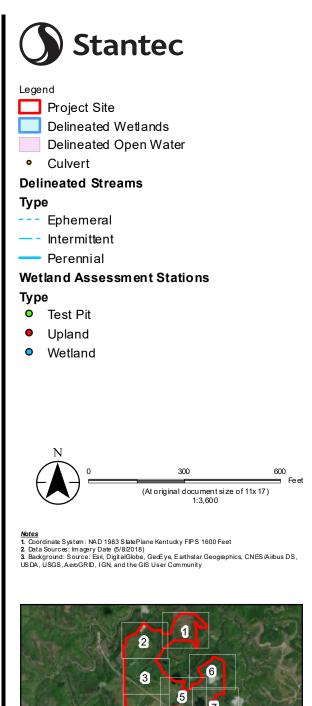


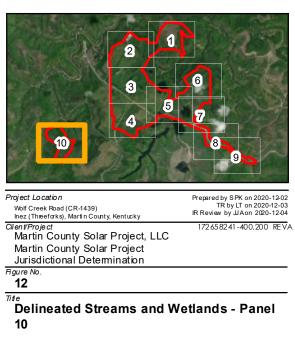






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Attachment B

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar	City/County: Martin C	county	Sampling Date: 11/2/20
Applicant/Owner: Savian			Sampling Point: TP-01
Investigator(s): S.Kelley, C. Knabel	Section, Township, Range:_		
	Local relief (concave, convex, r		Slope (%): 2
Subregion (LRR or MLRA): LRPN Lat: 37.764			
Soil Map Unit Name: FiB: Fivebbock, Faispoint + Kolunin			
, ,			
Are climatic / hydrologic conditions on the site typical for this time of			
Are Vegetation, Soil, or Hydrology signification		nal Circumstances" p	present? Yes No No
Are Vegetation, Soil, or Hydrology naturally	/ problematic? (If needed	d, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling point locat	tions, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No.	Is the Sampled Area		
Wetland Hydrology Present? Yes No	within a Wetland?	Yes	No
Remarks:			
			1.5
Test Pit	-		1
les. Pit			
	No hydro local - 1	upland	
HYDROLOGY	1 01		
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	y)	Surface Soil	Cracks (B6)
Surface Water (A1) True Aquat	ic Plants (B14)	Sparsely Ver	getated Concave Surface (B8)
	Sulfide Odor (C1)	Drainage Pa	tterns (B10)
	hizospheres on Living Roots (C3		140 5
	f Reduced Iron (C4)		Water Table (C2)
	Reduction in Tilled Soils (C6)	Crayfish Bur	
and the second sec	Surface (C7)		isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Expl Iron Deposits (B5)	ain in Remarks)		tressed Plants (D1) Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aqui	
Water-Stained Leaves (B9)			aphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral	
Field Observations:			
Surface Water Present? Yes No Depth (inc	hes):		
Water Table Present? Yes No Depth (inc	hes):		/
Saturation Present? Yes No Depth (inc	hes): Wetland	Hydrology Presen	nt? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspections), if a	vailable:	
	·····//		
Remarks:			
			·*

ą

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: TP-01

	Absolute	Dominant	Indiantor	Dominance Test worksheet:
Tree Stratum (Plot size: 30 m)		Dominant <u>Species?</u>		
				Number of Dominant Species
1. ACCT recently	20	1	PAC	That Are OBL, FACW, or FAC: (A)
2				
				Total Number of Dominant Species Across All Strate: 5 (B)
3				Species Across All Strata: (B)
4				
			- <u></u>	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
·				Total % Cover of:Multiply by:
		= Total Cove		
50% of total cover: _/D	20% of	total cover:_	4	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: <u>K M</u>)				FACW species x 2 =
		. /		
1. Acer negundo	40	1	FAL	FAC species x 3 =
20				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
	40	= Total Cove	er	
50% of total cover:20				4 - Morphological Adaptations ¹ (Provide supporting
hade and deal for	20 % 01	total cover	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 M)				
1. Microstegium vinineum	20	./	FAL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Persecon pennsylvanica	10		FACW	Indiantary of hydric anil and watland hydrology must
3. Appsirum cannaleinum	20		FALU	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4. Solidago gianten			FACUS	Definitions of Four Vegetation Strata:
5. Arthraxon hispidis	25		FAL	-
			FACU	Tree Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Achyminthes japonica	12		PAU	more in diameter at breast height (DBH), regardless of
7				height.
0				ů.
8				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
				,
11				Herb ~ All herbaceous (non-woody) plants, regardless
	100 :	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50		total cover:		· · · · · · · · · · · · · · · · · · ·
	20% 01	total cover	20	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
3				
		-		
4				Hydrophytic
5				Vegetation
				Present? Yes <u>No</u> No
		= Total Cove		
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate si	heat)			
Remarks. (include photo numbers here of on a separate si	leet.)			

Color (moist) % Color (moist) % Type! Loc ² Texture Remarks D = 5 [DNR \$\frac{1}{2}] PL [DNR \$\frac{1}{2}] PL [DNR \$\frac{1}{2}] PL [DNR \$\frac{1}{2}] [DNR \$	Depth	ription: (Describe Matrix	to the dep		x Feature		or comm	n me absenc	e or mulcate	015.)	
D-5 J01R4/A GA Io1R5/6 B C M SiL			%				Loc ²	Texture		Remarks	
lydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :	0-5		92		8	C	M				
lydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :											
lydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :											
lydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :	¹ Type: C=Co	Dincentration, D=Dep	letion, RM	=Reduced Matrix, M	 S=Masked	Sand Gr		² Location: I	PL=Pore Lini	ng, M=Matrix.	
	Hydric Soil I	ndicators:									dric Soils ³ :
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Dubric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, unless disturbed or problematic. testrictive Layer (if observed): Type:	Histic Ep Black His	vipedon (A2) stic (A3)		Polyvalue Be	elow Surfa Irface (S9 ed Matrix () (MLRA 1		, 148)	Coast Prairie (MLRA 14	e Redox (A16) 4 7, 148)	
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Iron-Manganese Masses (F12) (LRR N, MLRA 136) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, No termarks: Hydric Soil Present? Yes No termarks:				•				And And And And	10 C	2 (B)	
Thick Dark Surface (A12) Chick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) Itestrictive Layer (if observed): Type: Grave Layer Depth (inches): Semarks:			(0.44)								
Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 136, 122) Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. testrictive Layer (if observed): Type: for much layer Depth (inches): Hydric Soil Present? Yes No			e (A11)					_	Other (Expla	in in Remarks)	
MLRA 147, 148) MLRA 136)											
			KK N,			es (F12) (LKK N,				
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be present, 		22.5					6, 122)	³ In	dicators of h	vdrophytic veg	etation and
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic. testrictive Layer (if observed): Type: frace Depth (inches): Hydric Soil Present? Yes No temarks:										N (N (N) (N)	
Restrictive Layer (if observed): Type: 6 ravel buyer Depth (inches): 5 Remarks: Hydric Soil Present? Yes No									-	100 D	
Type: Gravel buyer Depth (inches): S Hydric Soil Present? Yes No No						/ .		1			
Depth (inches): <u>S</u> Hydric Soil Present? Yes No emarks:											
								Hydric So	I Present?	Yes	No
	Remarks:										
		×									

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar City/Co	punty: Machin County Sampling Date: 10/30/20
Applicant/Owner: Savin	State: KY Sampling Point: WAS- D(
Investigator(s): <u>3. kellup</u> , <u>C. Knobel</u> Section	1
	of (concave, convex, none): Concave, Slope (%):
	Long: -82,476686 Datum: NADB3/K1FIPS)
Soil Map Unit Name: FiD'S Evelblock, Enirpoint, and Kaymine So	
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	No. (If no ovolain in Domarks.)
Are Vegetation, Soil, or Hydrology significantly disturb	
Are Vegetation, Soil, or Hydrology naturally problemat	
SUMMARY OF FINDINGS – Attach site map showing sam	bing point locations, transects, important reatures, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Undria Cail Dracopt? Vac Na	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
	Δ
Wetland	
Roadside Ditch - Flows into Stream 01	PEM
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B	
High Water Table (A2)	
Saturation (A3) Oxidized Rhizospheres	
Water Marks (B1) Presence of Reduced	-
Sediment Deposits (B2) Recent Iron Reduction	in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7	
Algal Mat or Crust (B4) Other (Explain in Rema	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes Ves No Depth (inches): 01A	
Water Table Present? Yes No Depth (inches):i	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ	aux inspections), if available:
Describe Recorded Data (stream gauge, monitoring weil, aerial photos, previ	ous inspections), il available.
Remarks:	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 4)AS-01

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species	^	
1				That Are OBL, FACW, or FAC:	2	(A)
2		-				
3				Total Number of Dominant Species Across All Strata:	2	(B)
4NA				openee / horees / in culute.		(0)
E .				Percent of Dominant Species	IND	(. (.)
5 6				That Are OBL, FACW, or FAC:	_100	(A/B)
				Prevalence Index worksheet:		
7				Total % Cover of:	Multiply by:	
50% of total cover:		= Total Cov		OBL species x		
The second s	20% 01	total cover.		FACW species x		
Sapling/Shrub Stratum (Plot size:)				FAC species x		
1						20
2				FACU species x		
3			<u>. </u>	UPL species x		
4NA				Column Totals: (A	.)	_ (B)
5. N / H				Prevalence Index = B/A =		
6						-
7				Hydrophytic Vegetation Indica		
8				1 - Rapid Test for Hydrophy	-	
9		-		2 - Dominance Test is >50%		1
		= Total Cov		3 - Prevalence Index is ≤3.0		
50% of total cover:				4 - Morphological Adaptation	ns ¹ (Provide sup	porting
Herb Stratum (Plot size: 5 M)	20 % 01	total cover.		data in Remarks or on a	separate sheet)	
	14		021	Problematic Hydrophytic Ve	getation ¹ (Explai	n)
1. Carex Frankis	15		OBL		-	
2. JUNEUS EFFUSUS			FACW	¹ Indicators of hydric soil and wet	and hydrology r	nust
3. Lleyedera cuneata	10		FACU	be present, unless disturbed or p		lidot
4. Setacia punila	5		FAL	Definitions of Four Vegetation	Strata:	
5. Actorizion Dispidis	45	\checkmark	FAC	TTARA TRAVERSONDARIA PROFESSIONAL		_
				Tree – Woody plants, excluding more in diameter at breast heigh		
7				height.	t (DBH), legaloi	255 01
8						
9				Sapling/Shrub – Woody plants, than 3 in. DBH and greater than		
10				m) tall.	01 Equal to 5.20	
11.						
	05	= Total Cove		Herb – All herbaceous (non-woo of size, and woody plants less th		rdless
50% of total cover: 47,					an 5.20 it tail.	
Woody Vine Stratum (Plot size:)	20 /0 UI		· · ·	Woody vine - All woody vines g	reater than 3.28	ft in
				height.		
1						
23						
3N /1*						R
4				Hydrophytic		
5				Vegetation		
	=	Total Cove	er	Present? Yes _/	No	
50% of total cover:	20% of	total cover:				
Remarks: (Include photo numbers here or on a separate s	sheet.)					
						8

SOIL

Sampling Point: WAS-0

Profile Des	cription: (Describe	to the dept	th needed to docu	ment the i	indicator	or confirm	the absence of	indicators.)	
Depth	Matrix			ox Feature					
(inches)	Color (moist)	_%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-8	7.5YR 3/1	80	54R 5/6	8	C	M			
	104R 5/3	18							
	+								
	-				-				
				·					
					-				
1Tupe: C=C	oncentration, D=Dep	letion PM-	Poduced Matrix M	S-Maskor	- Sand Gr		² Location: PL~E	Pore Lining, M=Matrix.	
Hydric Soil		letion, Rivi-	Reduced Matrix, M	S-IVIASKED	J Sand Gra	anis.		rs for Problematic Hyd	ric Soils ³
-			Dark Surfac	0 (67)					
Histosol	oipedon (A2)		Polyvalue B		00 (89) /			n Muck (A10) (MLRA 14 st Prairie Redox (A16)	()
	stic (A3)		Thin Dark S		1000 N. N.			ILRA 147, 148)	
	en Sulfide (A4)		Loamy Gley			47, 140)		mont Floodplain Soils (F	10)
	d Lavers (A5)		Depleted Ma		(12)			ILRA 136, 147)	13)
	uck (A10) (LRR N)		Redox Dark		-6)			Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Da					er (Explain in Remarks)	,
	ark Surface (A12)	- ()	Redox Depr						
	lucky Mineral (S1) (L	.RR N,	Iron-Mangar			LRR N,			
	A 147, 148)		MLRA 13						
	Bleyed Matrix (S4)		Umbric Surfa	ace (F13) ((MLRA 13	6, 122)	³ Indicat	tors of hydrophytic vege	tation and
	Redox (S5)		Piedmont Fl	oodplain S	oils (F19)	(MLRA 14	8) wetlar	nd hydrology must be pr	esent,
Stripped	Matrix (S6)		Red Parent	Material (F	21) (MLR.	A 127, 147	') unless	s disturbed or problemat	ic.
Restrictive	Layer (if observed):						4		
Type:	sravel Layer						·-	,	
Depth (in	ches): 8:0						Hydric Soil Pre	esent? Yes	No
Remarks:									
1									
								2	
		2							

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Martin Caryty Solar City/Co	punty: Mactin Camty Sampling Date: 10/30/20
Applicant/Owner: Sources	State: K
	n, Township, Range: L/R
	of (concave, convex, none): <u>Convex</u> Slope (%): 2
Subregion (LRR or MLRA): Lat: Lat:	Long: -82.476836 Datum: NAV83(K1FIP3)
Soil Map Unit Name: FID: Fiveblock, Fairpoint, and Kolymine Soils,	6-30-25 Store Story NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	es No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturb	ed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problemat	
SUMMARY OF FINDINGS – Attach site map showing sample	
Hydrophytic Vegetation Present? Yes No	
Undria Sail Drasant? Vac No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
	*
11 de la constante sul	
Upland associated w	Wetland A
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B	14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor	
Saturation (A3) Oxidized Rhizospheres	s on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction	in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7	7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Rema	arks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	/
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ	ous inspections), if available:
Remarks:	
3	

35

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WAS-02

	Abaaluta	Dominant	Indicator	Deminance Test workshoet:
Tree Stratum (Plot size:		Dominant Species?		Dominance Test worksheet:
Tree Stratum (Plot size:)				Number of Dominant Species
1,				That Are OBL, FACW, or FAC: (A)
2				
				Total Number of Dominant
3				Species Across All Strata: (B)
4NR				
e				Percent of Dominant Species
5. 1				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
		= Total Cove	er	
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 M)				FACW species x 2 =
	1-	/		
1. Eleagnus unbellata	65		UPL	FAC species x 3 =
2. Pladanus occidentalis	20		FACIN	FACU species x 4 =
				UPL species x 5 =
3				
4				Column Totals: (A) (B)
_				
5				Prevalence Index = B/A =
6				
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				20 20 20 20 20 20 20 20 20 20 20 20 20 2
9.				2 - Dominance Test is >50%
5	DE			3 - Prevalence Index is ≤3.0 ¹
And the second se		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 425	20% of	total cover:	17	
Herb Stratum (Plot size: 5 ^M)			1	data in Remarks or on a separate sheet)
			1	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Splidage Ednudensis	_40	V	FACU	
2. Lespedera conerta	15	. /	FACU	
				¹ Indicators of hydric soil and wetland hydrology must
3. JULLUS effusios			FACW	be present, unless disturbed or problematic.
4. Davicus corata	11)		UPL	
				Definitions of Four Vegetation Strata:
5. Celet no gain				
6		-		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Capling/Chrub Mandu planta avaluding visas lass
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
		-		m) tall.
10				iii) tan.
11.				Harb All borbassous (non woody) planta, regardless
	80 :	Tabel Orac		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
112		 Total Cove 		of size, and woody plants less than 5.20 it tall.
50% of total cover: <u>40</u>	20% of	total cover:_	10	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				
				height.
1				
21				
3. NIA				
3V [1.				
4				Hydrophytic
5				Vegetation /
	1			Present? Yes No
		 Total Cove 		
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate st	neet)			
Remarks: (Include photo numbers here or on a separate sh	neet.)			
Remarks: (Include photo numbers here or on a separate sh	neet.)			

SOIL

Sampling Point: WA-02

2.1.000000	ription: (Describe	to the dept				or confirm	n the absen	ce of indicators.)
Depth	Matrix		Redo	x Features		1 . 2	.	2
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc ²	Texture	Remarks
0-6	104B\$1	100					CIL	
	•			-	6		3	-
	•		•		1		Q 	
			·	-	·			-
					-			
								3
							-	
				-	(<u></u>			
	-							-
	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil								icators for Problematic Hydric Soils ³ :
Histosol			Dark Surface					2 cm Muck (A10) (MLRA 147)
the second se	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
Black Hi			Thin Dark Su			47, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		F2)			Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Mal		6)			(MLRA 136, 147)
	ick (A10) (LRR N) Below Dark Surface	o (A11)	Redox Dark S Depleted Dar		•			Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	rk Surface (A12)	C (ATT)	Redox Depre		. ,			
	lucky Mineral (S1) (L	.RR N.	Iron-Mangane		•	RR N.		
	147, 148)		MLRA 13			,		
	leyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	³ II	ndicators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	- 8) \	wetland hydrology must be present,
	Matrix (S6)		Red Parent M	laterial (F2	21) (MLR	A 127, 147	7) u	unless disturbed or problematic.
Restrictive I	ayer (if observed):							
Type:						2		1 /
Depth (inc	ches):						Hydric So	oil Present? Yes No
Remarks:								

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar City/County: Martin County Sampling Date: 10/30/20
Applicant/Owner: <u>Swion</u> State: <u>KY</u> Sampling Point: <u>WITS-03</u>
Investigator(s): 5. Kelley, C. Knale Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): LRR.N Lat: Lat: Lot: Lot:Lot
Soil Map Unit Name: Fib: Fiveblock, Fairpoint, and Haymine 50:15, 0-690 slope; Stony NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Hydric Soil Present? Yes No within a Wetland? Wetland Hydrology Present? Yes No No Remarks: No No No
Overland flow into stream of and stream of
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16) Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
Scaline it Deposits (B2) // // // // // // // // // // // // //
Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)
Water-Stained Leaves (B9) Microtopographic Relief (D4)
Aquatic Fauna (B13) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes Vo O Depth (inches):
Water Table Present? Yes Vo Depth (inches):
Saturation Present? Yes Ves Depth (inches): Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
4

VEGETATION (Four Strata) – Use scientific na	ames of	plants.		Sampling Point: WAS-03
		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1,				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3N/A		-		Species Across All Strata: (B)
4. NIA				Barrant of Dervicent Creation
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
		= Total Cove		Total % Cover of:Multiply by:
50% of total cover:				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 M				FACW species x 2 =
1. Eleagnus un bellata	2		UPL	FAC species x 3 =
2. Platanus occidentalis	<u>a</u>			FACU species x 4 =
				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				
8				
0				2 - Dominance Test is >50%
ð	7.	Total Cove		3 - Prevalence Index is ≤3.0 ¹
50% of total cover:5				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5M)	_ 20/8 01	total cover.	<u></u>	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	HD	2-1	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Carex Frank.		_ <u>V_</u>	FAL	
2. Sptairio pumila	10_	_10		¹ Indicators of hydric soil and wetland hydrology must
3. Plotanus occidentalis	5	- L _J -	FACW	be present, unless disturbed or problematic.
4. Lespedera cuncata	5	5	FACU	Definitions of Four Vegetation Strata:
5. Perspectria pennsylvanicum	D	10	FAW	
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
				- 22 - 20430
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				
11				Herb – All herbaceous (non-woody) plants, regardless
25		Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>35</u>	20% of	total cover:_	14	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1		-		
2				
3.				
4.				
				Hydrophytic
J		Tatal Cause		Vegetation Present? Yes No
EQ9/ of total power		= Total Cove total cover:		·····
50% of total cover:		total cover		
Remarks: (Include photo numbers here or on a separate sh	neet.)			
(A)				
à				

7 93 36 10

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Eastern Mountains and Piedmont - Version 2.0

SOIL

Sampling Point: WAS-03

epth	Ma	trix	pth needed to docu Redo	ox Features				
nches)	Color (moi:	st) %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10 YR 41	2 95	10 YR3/6	5	C	PL	SLL	
	-9/ <u></u>					<u> </u>		
	-							
	·		· · · · · · · · · · · · · · · · · · ·					
-					, <u> </u>	<u> </u>		
		=Depletion, RM	I=Reduced Matrix, M	S=Masked	Sand Gra	ains.		ore Lining, M=Matrix.
dric Soil	Indicators:						Indicator	s for Problematic Hydric Soils ³ :
Histoso	ol (A1) Epipedon (A2)		Dark Surface		ce (S8) (M	LRA 147,		Muck (A10) (MLRA 147) tt Prairie Redox (A16)
	listic (A3) en Sulfide (A4)		Thin Dark So Loamy Gleye	ed Matrix (F		47, 148)		L RA 147, 148) mont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Ma					LRA 136, 147)
	luck (A10) (LRR		Redox Dark					Shallow Dark Surface (TF12)
	d Below Dark S		Depleted Da				Othe	r (Explain in Remarks)
	ark Surface (A1)		Redox Depre					
Sandy	Mucky Mineral (S	51) (LKK N,	Iron-Mangar	iese Masse	es (F12) (I	KKN,		
	A 447 440)		MIDA 42	(1)				
MLR	A 147, 148)		MLRA 13	•		(400)	31	
MLR Sandy (Gleyed Matrix (S	64)	Umbric Surfa	ace (F13) (I				ors of hydrophytic vegetation and
MLR Sandy (Sandy I	Gleyed Matrix (S Redox (S5)	64)	Umbric Surfa Piedmont Flo	ace (F13) (I podplain Sc	oils (F19)	(MLRA 14	.8) wetlan	d hydrology must be present,
MLR Sandy (Sandy I Stripped	Gleyed Matrix (S Redox (S5) d Matrix (S6)		Umbric Surfa	ace (F13) (I podplain Sc	oils (F19)	(MLRA 14	.8) wetlan	
MLR Sandy (Sandy f Stripped strictive	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser	ved): CF	Umbric Surfa Piedmont Flo	ace (F13) (I podplain Sc	oils (F19)	(MLRA 14	8) wetlan /> unless	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped strictive	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser	ved): CF	Umbric Surfa Piedmont Flo	ace (F13) (I podplain Sc	oils (F19)	(MLRA 14	.8) wetlan	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped strictive	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser	ved): CF	Umbric Surfa Piedmont Flo Red Parent I	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped Strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser	ved): CF	Umbric Surfa Piedmont Flo Red Parent I	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped Strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser	ved): CF	Umbric Surfa Piedmont Flo Red Parent I	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped Strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser Gravel lay Inches): <u>5 i n</u>	ved): CF	Umbric Surfa Piedmont Flo Red Parent I	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped Strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser Gravel lay Inches): <u>5 i n</u>	ved): CF	Umbric Surfa Piedmont Flo Red Parent I	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser Gravel lay Inches): <u>5 i n</u>	ved): CF	Umbric Surfa Piedmont File Red Parent I 	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped Strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser Gravel lay Inches): <u>5 i n</u>	ved): CF	Umbric Surfa Piedmont File Red Parent I 	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser Gravel lay Inches): <u>5 i n</u>	ved): CF	Umbric Surfa Piedmont File Red Parent I 	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser Gravel lay Inches): <u>5 i n</u>	ved): CF	Umbric Surfa Piedmont File Red Parent I 	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser Gravel lay Inches): <u>5 i n</u>	ved): CF	Umbric Surfa Piedmont File Red Parent I 	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser Gravel lay Inches): <u>5 i n</u>	ved): CF	Umbric Surfa Piedmont File Red Parent I 	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.
MLR Sandy (Sandy f Stripped Strictive Type: Depth (in	Gleyed Matrix (S Redox (S5) d Matrix (S6) Layer (if obser Gravel lay Inches): <u>5 i n</u>	ved): CF	Umbric Surfa Piedmont File Red Parent I 	ace (F13) (I podplain So Material (F2	bils (F19) 21) (MLR /	(MLRA 14 A 127, 147	8) wetlan ') unless Hydric Soil Pre	d hydrology must be present, disturbed or problematic.

WETLAND DETERMINATION DATA F	ORM – Eastern Mountains and Piedmont Region
Project/Site: Martin County Solar	City/County: Martin County Sampling Date: 10/30/20
Applicant/Owner: Sould A	State: KY Sampling Point: WAS-04
	Section, Township, Range: NA
	ocal relief (concave, convex, none): <u>Conve</u> Slope (%): 3
Subregion (LRR or MLRA): LRRN Lat:	
and a second	
Soil Map Unit Name: FiB: Five Hock, Fairpoint, and Kapping	
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significant	y disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No	Is the Sampled Area within a Wetland? Yes No
Upland point	For Wetland B
HYDROLOGY	9 B 1
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Water Marks (B1) Presence of R	fide Odor (C1) Drainage Patterns (B10) ospheres on Living Roots (C3) Moss Trim Lines (B16) ceduced Iron (C4) Dry-Season Water Table (C2) eduction in Tilled Soils (C6) Crayfish Burrows (C8) rface (C7) Saturation Visible on Aerial Imagery (C9)
Surface Water Present? Yes No Depth (inches	c).
Water Table Present? Yes No Depth (inches	
Saturation Present? Yes No Depth (inches	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), il available:
Remarks:	
*	
	6
3	

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VEGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Point: <u>\</u> A5-64
		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1,				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4NA				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Ū
7				Prevalence index worksheet:
		= Total Cov	er	Total % Cover of: Multiply by:
50% of total cover:				OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 M)				FACW species x 2 =
1. Eleagnis umbellata	95		UPL	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4		-		Column Totals: (A) (B)
5			-	
				Prevalence Index = B/A =
67				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8			. 	2 - Dominance Test is >50%
9	95	Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 47	5 20% of	= Total Cove	er ାର	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5 ^{30%} of total cover. <u>-</u>)	20% 01	total cover.		data in Remarks or on a separate sheet)
Hero Stratum (Plot size:)	. 5		TACI	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Solidage canadensis		·		
2. fonicera japonica				¹ Indicators of hydric soil and wetland hydrology must
3. hosa multiflora		v		be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	55 -	Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 275	20% of	total cover:	11	
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.
1				
2				
3				
4. M/B				
5.				Hydrophytic Vegetation
·		Total Cove		Present? Yes No
50% of total cover:				
Remarks: (Include photo numbers here or on a separate s				
remains. (include photo numbers here of on a separate s	neet.)			

US Army Corps of Engineers

	ription: (Describe t	to the depth				or confirm	the absence of	indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	ox Feature %	s Type ¹	Loc ²	Texture	Remarks
0-10	10.1R 4/2	. 70		- <u> </u>	C.	M		Kongrio
0 6			4) //		<u> </u>			
	404B 5/6	30						
					-			
¹ Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL=F	Pore Lining, M=Matrix.
Hydric Soil							Indicato	rs for Problematic Hydric Soils ³ :
Histosol			Dark Surfac	e (S7)				n Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue B		ce (S8) (N	ILRA 147.		st Prairie Redox (A16)
	stic (A3)		Thin Dark S					ILRA 147, 148)
	n Sulfide (A4)		Loamy Gley					mont Floodplain Soils (F19)
Stratified	Layers (A5)		Depleted Ma	atrix (F3)			(N	ILRA 136, 147)
2 cm Mu	ck (A10) (LRR N)		Redox Dark	Surface (F	-6)		Very	Shallow Dark Surface (TF12)
Depleted	Below Dark Surface	e (A11)	Depleted Date	ark Surface	e (F7)		Othe	er (Explain in Remarks)
	ark Surface (A12)		Redox Depr					
	lucky Mineral (S1) (L	RR N,	Iron-Mangar		es (F12) (LRR N,		
	147, 148)		MLRA 13				2	
	leyed Matrix (S4)		Umbric Surfa					tors of hydrophytic vegetation and
	edox (S5)		Piedmont FI					nd hydrology must be present,
	Matrix (S6)		Red Parent	Material (F	21) (MLR	A 127, 147) unles:	s disturbed or problematic.
	ayer (if observed):							
Type: <u>G</u>							-	
Depth (ind	ches):						Hydric Soil Pr	esent? Yes No
Remarks:								
								÷.
		۰.						
		÷						
								2

WETLANI	D DETERMINA	TION DATA FORM	– Eastern Mo	untains and Piedmont	Region
Project/Site: Martin Cour	Nty Solar	City/0	County: Marti	a Country Sam	pling Date: 10/20 30
Applicant/Owner:	1				ampling Point: WAS-05
Investigator(s): 5, Kelley	, C. Knabel	Secti	on, Township, Ra		
Landform (hillslope, terrace, etc.				vex, none): Concare	Slope (%): 2
Subregion (LRR or MLRA):	A CARL A STREET AND A CARL AND A C			g: -82,472097	Datum: NAD&3(A117A)
Soil Map Unit Name: F:B:Fiv					1
Are climatic / hydrologic conditio		/ / /	1 1	(If no, explain in Remark	
Are Vegetation Soil			· · · · ·	Normal Circumstances" preser	
Are Vegetation, Soil				eded, explain any answers in F	-
SUMMARY OF FINDING					
SOMMARY OF FINDING		e map showing sai			
Hydrophytic Vegetation Preser Hydric Soil Present? Wetland Hydrology Present?	nt? Yes	No No No	Is the Sampled within a Wetlan		lo
Remarks:					Isokuted
κ,		Wetland C	1		
Stepetotion recently	contract by cost	tled Horses - Hude	alon 1 Wale	flows overland town	de S-DI PEM
HYDROLOGY	June py cho	10, 10, 20, 10,	angy used	TO BE DOLL OF A TOWN	
Wetland Hydrology Indicator	'S:			Secondary Indicators (minimum of two required)
Primary Indicators (minimum o		heck all that apply)		Surface Soil Crack	the second s
Surface Water (A1)		True Aquatic Plants	(B14)		d Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Patterns	
Saturation (A3)		Oxidized Rhizospher			
Water Marks (B1)		Presence of Reduce	_	Dry-Season Water	
Sediment Deposits (B2)		Recent Iron Reduction	on in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3)		Thin Muck Surface (C7)	Saturation Visible	on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rei	marks)	Stunted or Stresse	d Plants (D1)
Iron Deposits (B5)				Geomorphic Positi	on (D2)
Inundation Visible on Aeria	al Imagery (B7)			Shallow Aquitard (D3)
Water-Stained Leaves (B9))			Microtopographic I	Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral Test	(D5)
Field Observations:	1				
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No	Depth (inches):			/
Saturation Present? (includes capillary fringe)	Yes No	Depth (inches):	We	tland Hydrology Present?	/es No
Describe Recorded Data (strea	am gauge, monitori	ng well, aerial photos, pre	vious inspections), if available:	
Demerke					
Remarks:					
(a)					

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant Species
1		That Are OBL, FACW, or FAC: (A)
2		
		Total Number of Dominant
		_ Species Across All Strata: (B)
4NR		Percent of Dominant Species
		- That Are OBL, FACW, or FAC: (A/B)
6		
		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
	= Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	_
Sapling/Shrub Stratum (Plot size:)		FACW species x 2 =
1		FAC species x 3 =
2		FACU species x 4 =
3		UPL species x 5 =
	··	Column Totals: (A) (B)
4		
5. <u>N/A</u>		Prevalence Index = B/A =
6	·	
7		Hydrophytic vegetation indicators.
		1 - Rapid Test for Hydrophytic Vegetation
8		2 - Dominance Test is >50%
9	·	3 - Prevalence Index is ≤3.0 ¹
	= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 5M)		data in Remarks or on a separate sheet)
1. Ranunculus hispidis	10 FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Persecaria pennsylvanica	30 FAW	
2. Terrecaria pennsylvanica	<u>30</u> <u>M</u>	¹ How the state of the data will be addressed by dealers and set of the state
3. Caren Frank:		be present, unless disturbed or problematic.
4. Vernonia gigantea	10 FAC	Definitions of Four Vegetation Strata:
	· · · · · · · · · · · · · · · · · · ·	
6		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
		more in diameter at breast height (DBH), regardless of
7		height.
8	·	Sapling/Shrub - Woody plants, excluding vines, less
9		than 3 in, DBH and greater than or equal to 3.28 ft (1
10		m) tall.
	65 = Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
FOR of total answer 21	5 20% of total cover: 13	or size, and woody plants less than 5.20 it tall.
	20% of total cover: 12	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)		height.
1,		
2.		
3		
N/N	· · · · · · · · · · · · · · · · · · ·	
4	· · · · · · · · · · · · · · · · · · ·	Hydrophytic
5		Vegetation
	= Total Cover	Present? Yes No No
50% of total cover:	20% of total cover:	
Remarks: (Include photo numbers here or on a separate s	sheet.)	

Profile Desc	ription: (Describe	to the dep	oth needed to docu	ment the i	indicator	or confirm	n the absenc	e of indicators.)
Depth	Matrix			x Feature		. 2	-	_
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc ²	Texture	Remarks
0-7	7.54A 3/1	88	54R4/4	12	<u> </u>	M	<u> </u>	
							R <u></u>	
						· ·		
	-				-		2	
					1 4		-	·
							-	
	(<u></u>						1	
							2	
Type: C=Co Hydric Soil		letion, RM	=Reduced Matrix, Ma	S=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix. cators for Problematic Hydric Soils ³ :
				(0-1)				-
Histosol	, ,		Dark Surface		(00) (1)			2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148)	Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		F2)		_ '	Piedmont Floodplain Soils (F19)
and the second s	Layers (A5)		Depleted Ma				,	(MLRA 136, 147)
1	ick (A10) (LRR N) d Below Dark Surfac	0 (011)	Redox Dark					Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre				_ `	
	lucky Mineral (S1) (I	RR N.	Iron-Mangan					
	147, 148)		MLRA 13		00 (1 12/ (
	leyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	³ Inc	dicators of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent			(0)		nless disturbed or problematic
	ayer (if observed)	:		•			Ī	
Туре:								
	ches): <u>7:n</u>						Hydric Soi	Present? Yes No
Remarks:							iijaiio coi	
ixemarks.								×
0								
N.								

WETLAND DETERMINATION DAT	A FORM – Eastern	Mountains and Piedr	nont Region
Projecusite: Martin County Solar	City/County: M	artin County	_ Sampling Date: 10/30/20
Applicant/Owner: Savien			Sampling Point: WAS-06
Investigator(s): 5. Kelley, C. Knabel	Section Townshi		outputing : output_ <u></u>
		, convex, none): Convex	Slope (%):
Subregion (LRR or MLRA): LRRN Lat:			Datum: NAD 85 (KIRPS)
Soil Map Unit Name: Fi Bi Fiveblack, Fourpoint, and K			
Are climatic / hydrologic conditions on the site typical for this tim	· · · · · · · · · · · · · · · · · · ·		
Are Vegetation, Soil, or Hydrology signifi	cantly disturbed?	Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology natura	ally problematic?	(If needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling po	int locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Yes No	Is the Sam within a W	· 100 000	No
Upland the cast of the	point for We	tland C & D	
Recently grazed by Cattle & Horses			
HYDROLOGY			
Wetland Hydrology Indicators:			ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that a		Surface Soi	
	uatic Plants (B14) n Sulfide Odor (C1)		egetated Concave Surface (B8) atterns (B10)
	Rhizospheres on Living		
	e of Reduced Iron (C4)		Water Table (C2)
	on Reduction in Tilled Se		
· · · · · · · · · · · · · · · · · · ·	k Surface (C7)		/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (E)	xplain in Remarks)	Stunted or S	Stressed Plants (D1)
Iron Deposits (B5)		Geomorphic	c Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aqu	
Water-Stained Leaves (B9)			aphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutra	I Test (D5)
Field Observations:			
Surface Water Present? Yes No Depth (in			
	nches): nches):	Wetley d Hudesley, Dese	
Saturation Present? Yes No Depth (in (includes capillary fringe)	icnes):	Wetland Hydrology Prese	nt? Yes <u>No</u>
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspec	tions), if available:	
Remarks:			
Kendika.			
		8	

en e ent

Sampling Point: WAS -86

	Absolute Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species?	Status	Number of Dominant Species
1		_	That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3VA			Species Across All Strata:(B)
4N N	·		Percent of Dominant Species
5			That Are OBL, FACW, or FAC: (A/B)
6			Describer on the description of a first state
7			Prevalence Index worksheet:
	= Total Cove		Total % Cover of: Multiply by:
50% of total cover:	20% of total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
1	······		FAC species x 3 =
2			FACU species x 4 =
3			UPL species x 5 =
4NA			Column Totals: (A) (B)
50/15			Development in days
6		- R	Prevalence Index = B/A =
7			Hydrophytic Vegetation Indicators:
8			1 - Rapid Test for Hydrophytic Vegetation
9			2 - Dominance Test is >50%
··	= Total Cove		3 - Prevalence Index is ≤3.0 ¹
50% of total cover:			4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size:)			data in Remarks or on a separate sheet)
1. Fifolium repense	30	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Plantago major	25	FACU	
3. solidago canadensis			¹ Indicators of hydric soil and wetland hydrology must
3. Solidado canadensi 2	_ <u></u>	FAW	be present, unless disturbed or problematic.
4. setaria pumila		FAC	Definitions of Four Vegetation Strata:
5. Ciperus striansus	<u> </u>	FACW	Tree - Woody planta evaluding vince 2 in (7.6 cm) or
6			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7	·		height.
8			Sapling/Shrub - Woody plants, excluding vines, less
9			than 3 in. DBH and greater than or equal to 3.28 ft (1
10			m) tall.
11			Herb – All herbaceous (non-woody) plants, regardless
	92 = Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 46	20% of total cover:	18.4	We device All we device seaton then 2.00.4 in
Woody Vine Stratum (Plot size:)			Woody vine – All woody vines greater than 3.28 ft in height.
1			
2			
3			
4			
5			Hydrophytic Vegetation
	= Total Cover	 r	Present? Yes No
50% of total cover:			v
Remarks: (Include photo numbers here or on a separate s			

Profile Description: (Describe to the depth	needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks
6-5 104B3/3 100		SiL
· · · · · · · · · · · · · · · · · · ·		
		·······
		· · · · · · · · · · · · · · · · · · ·
¹ Type: C=Concentration, D=Depletion, RM=R	educed Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7)	2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147,	148) Coast Prairie Redox (A16)
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)	(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)	(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark Surface (F7)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148)	MLRA 136)	
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122)	³ Indicators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 130, 122)	
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147	
Restrictive Layer (if observed):		j unless disturbed of problematic.
Type: Gravel layer	-	
Depth (inches): <u>5</u>	-	Hydric Soil Present? Yes No
Remarks:		

WETLAND DETERMINATION DATA FORM	 Eastern Mountains and Piedmont Region
Project/Site: Martin County Solar City/C	County: Martin County Sampling Date: 10/30/20
Applicant/Owner: Sauton	State: KN Sampling Point: WAS -07
Investigator(s): S. Kelky, C. Knabel Section	
Landform (hillslope, terrace, etc.): Terrace Local rel	
Subregion (LRR or MLRA): Lat: Lat:	
Soil Map Unit Name: FiB: Fiveblock, Fairpoint, f Kay mine soils	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing san	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks:	
Recently cattle grazed / Veg is inpacted Wetland	
Wetland	
Isolated feature originating from hillside see	P PEM
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (
High Water Table (A2) Hydrogen Sulfide Od	
And a second s	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Sediment Deposits (B2) Recent Iron Reduction	
The contract of the cont	
Algal Mat or Crust (B4) Other (Explain in Rer	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): 6	_
Water Table Present? Yes No Depth (inches): 4	
Saturation Present? Yes Ves Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	

	Absolute Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species?		Number of Dominant Species
1			That Are OBL, FACW, or FAC: (A)
2	<u> </u>		Total Number of Dominant
3			Species Across All Strata: (B)
4NA			Percent of Dominant Species
5			That Are OBL, FACW, or FAC: (A/B)
6			
7			Prevalence Index worksheet:
	= Total Cove	er	Total % Cover of:Multiply by:
50% of total cover:	20% of total cover:_		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)			FACW species x 2 =
1			FAC species x 3 =
2			FACU species x 4 =
3			UPL species x 5 =
4			Column Totals: (A) (B)
	·		
-20			Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
8			2 - Dominance Test is >50%
9			3 - Prevalence Index is ≤3.0 ¹
	= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5M)			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Cara Frankii		OBL	
2. JUNCUS effusus	20 1	FACW	1) - directory of building only and supficient builded any equation
3. Setaria pumila	10	FAL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Trifolium reperse	10	FACU	Definitions of Four Vegetation Strata:
5. CUPERUS STRIGOSUS			Definitions of Four Vegetation Strata.
6. Persicaria nennsylvanica		FACUS	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
7. Ranunculus hispidis		FAC	more in diameter at breast height (DBH), regardless of height.
			neight.
8			Sapling/Shrub - Woody plants, excluding vines, less
9			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10			ny tan.
11	92 = Total Cove		Herb - All herbaceous (non-woody) plants, regardless
11		10 4	of size, and woody plants less than 3.28 ft tall.
50% of total cover: _40	20% of total cover:	10,1	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)			height.
1			
2			
3NA	······································		
4			Hydrophytic
5			Vegetation
	= Total Cove	r	Present? Yes No
50% of total cover:	20% of total cover:		
Remarks: (Include photo numbers here or on a separate sl	heet.)		
	101 J.C		

Profile Desc	cription: (Describe	to the dep	oth needed to docum	nent the i	ndicator	or confirm	n the absence of	of indicators.)	
Depth <u>Matrix</u>				x Features					
(inches)	Color (moist)	%	Color (moist)	_%	Type ¹	_Loc ²	Texture	Ren	narks
0-5	544/1	90	7.5 YR 5/8	10	_C	M	SICL	-	
5-7	104B 6/8	70					<u>SL</u>		
	7.54B7/3	30							
					-		-		
			****		-		() 	-	
							5 		
					(**
							· <u> </u>		
								8	
		etion, RM	=Reduced Matrix, MS	S=Masked	Sand Gra	ains.		=Pore Lining, M=N	Natrix. Itic Hydric Soils ³ :
Hydric Soil			Darly Conferen	(07)					-
Histosol	(A1) bipedon (A2)		Dark Surface Polyvalue Be		(SP) /M			cm Muck (A10) (M bast Prairie Redox	AV
	stic (A3)		Thin Dark Su					(MLRA 147, 148)	(A10)
	n Sulfide (A4)		Loamy Gleye			47, 140)		edmont Floodplain	Soils (F19)
	Layers (A5)		Depleted Mat		-)			(MLRA 136, 147)	
	ick (A10) (LRR N)		Redox Dark S		6)			ry Shallow Dark S	urface (TF12)
	Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)			her (Explain in Re	
	ark Surface (A12)		Redox Depre		0.K.				
constraint in the	lucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) (I	LRR N,			
	147, 148)		MLRA 130				3		
	ileyed Matrix (S4)		Umbric Surfa					ators of hydrophy	
	edox (S5) Matrix (S6)		Piedmont Flo Red Parent N					land hydrology mu ess disturbed or pr	
	ayer (if observed):			alenai (F		A 127, 147) unie	ess disturbed or pr	
Type: (AVER							
Depth (inc	4						Hydric Soil F	Present? Yes	No
Remarks:							Tryunc Son P	resentr res_	¥
Remarks.									
6									
1									- Y
(
1									

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar City/C	county: Martin County Sampling Date: 10/30/20
Applicant/Owner: Savian	State: K Sampling Point: WAS-08
Investigator(s): 5. Kelley C. Knabe Section	on, Township, Range: NA
Landform (hillslope, terrace, etc.): <u>Terrare</u> Local reli	
Subregion (LRR or MLRA): LRRN Lat: 37.756136	
Soil Map Unit Name: FiB=Fiveblack, Fairpoints and Kaymine soils,	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	
	······································
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
Vernal Pool - Isolated	104 III III III III III III III III III I
	r
Wetland	
Veg imputed - Recent cuttle grazing	PEM
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (I	
High Water Table (A2) Hydrogen Sulfide Odd	
	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	
Sediment Deposits (B2) Recent Iron Reduction	
Drift Deposits (B3) Thin Muck Surface (C Algal Mat or Crust (B4) Other (Explain in Rem	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): D	·
Water Table Present? Yes No Depth (inches):	_ / /
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	vious inspections), if available:
Remarks:	
	Y .

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Sampling Point: WAS-08

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1)		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2 3				Total Number of Dominant Species Across All Strata:
4NA		· · · · · · · · · · · · · · · · · · ·		Percent of Dominant Species That Are OBL, FACW, or FAC: 00 (A/B)
6. l				(==)
7.				Prevalence Index worksheet:
		= Total Cove		Total % Cover of:Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals: (A) (B)
5NA				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5 M)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Persicaria pennsylvinnica			1.00	
	20	\checkmark		¹ Indicators of hydric soil and wetland hydrology must
3. Trifolium terense				be present, unless disturbed or problematic.
4. Ranunculus hispidis	_15_	\checkmark		Definitions of Four Vegetation Strata:
5. Arthranon hispidic	10		FAC	
6. TURCUS OFFUSUS	_5_		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7		·		height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>3</u> ス・	5_ 20% of	total cover:_	(3	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
3NA		-		
4			<u> </u>	Hydrophytic
5				Vegetation
		= Total Cove	er	Present? Yes No
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate s	sheet.)			
			_	

Indexist Color (modil) % Toole	Depth	Matrix	. to the dep	oth needed to docu Red	ox Feature		er comm				
		Color (moist)	%	Color (moist)			Loc ²	Texture		Remarks	
	0-6	104R 5/1	70	54R4/6	5	C	PL	SiC			
"Type: C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hydric Soil Indicators: Indicators: Histos (A1) Dark Surface (S7) Histos (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Hydres Sulfac (A3) Thin Dark Surface (S9) (MLRA 147, 148) Learny Glegved Matrix (C3) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (F6) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) 2 cm Muck (A10) (LRR N) Redox Dark Surface (F7) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122) MulRA 137, 148) Stripted Matrix (S4) Umbric Surface (F13) (MLRA 135, 122) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 147, 147) Stripted Matrix (S4) Immodel Material (F21) (MLRA 147, 147) Stripted Matrix (S4) Immodel Material (F21) (MLRA 148, 127, 147) Red Parent Material (F21) (MLRA 147, 148) *Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic. Trype: C_arcack \ (L1) trd Red Parent Material (F21) (MLRA 147, 147) Depht (inches): (L Hydric Soil Present? Yes \lefty Nc Remarks: No <td></td> <td>10425/8</td> <td>25</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		10425/8	25								
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Suffide (A4) Learny Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F2) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122) andicators of hydrophytic vegetation and wetsing hydroidogy must be present, unless disturbed or problematic. Sandy Mucky (S6) Piedmont Floodplain Soils (F19) (MLRA 127, 147) wetsing hydroidogy must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Crace (U4) Mydric Soil Present? Yes (No Type: Crace (U4) Hydric Soil Present? Yes (No No Remarks: Hydric Soil Present? Yes (No No		10 11 10		¥1							
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Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147, 148) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Suffide (A4) Learny Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F2) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122) andicators of hydrophytic vegetation and wetsing hydroidogy must be present, unless disturbed or problematic. Sandy Mucky (S6) Piedmont Floodplain Soils (F19) (MLRA 127, 147) wetsing hydroidogy must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: Crace (U4) Mydric Soil Present? Yes (No Type: Crace (U4) Hydric Soil Present? Yes (No No Remarks: Hydric Soil Present? Yes (No No	1							100			
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 147) Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Pietdmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 145, 147) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Stripde Matrix (S4) Iron-Manganese Masses (F12) (LRR N, Wetland hydrology must be present, Stripde Matrix (S6) Red Parent Material (F21) (MLRA 148) Wetland hydrology must be present, Unbric Surface (F13) (MLRA 148) Wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (If observed): Type: Crower (Ct) No No Type: Crower (Ct) Wetland hydrology must be present, unless disturbed or problematic. Remarks: Remarks: No No			pletion, RM	=Reduced Matrix, M	IS=Masked	d Sand Gra	ains.				
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16) Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) Depleted Matrix (F3) (MLRA 147, 148) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A12) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Sandy Mucky Mineral (S1) (LRR N, MLRA 136) Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148) Other (Explain in Remarks) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) vertiant hydrology must be present, unless disturbed or problematic. Type: Crace (10 beerved): Type: Crace (10 beerved): Yes (10 beerved): Very Soil Present? Yes (No Remarks: Remarks: No No No	-				(0-)					-	
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148) Hydrogen Sulfde (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Solis (F19) Stratified Layers (A5) Depleted Matrix (F3) Piedmont Floodplain Solis (F19) Depleted Below Dark Surface (A11) Depleted Dark Surface (F6) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Gleyed Matrix (S4) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: (arcuse) (MLRA 147, 147) Wetland hydrology must be present, unless disturbed or problematic. Type: (arcuse) (M_Lett) Hydric Soil Present? Yes (No No Remarks: Soil Present? Yes (No No Soil Present? Yes (No				 A second s		00 (69) /8					47)
	2							140)			
							47, 140/				(F19)
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks) Thick Dark Surface (A12) Redox Depressions (F8) Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N, MLRA 136) Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type: CraceL (If Hermitian (F21) (MLRA 127, 147) Hydric Soil Present? Yes No Remarks:						. ,		_			. ,
					,						
			ce (A11)						Other (Expla	in in Remarks)	
MLRA 147, 148) MLRA 136)							DON				
Sandy Gleyed Matrix (S4)Umbric Surface (F13) (MLRA 136, 122) 3 ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Restrictive Layer (if observed): Type:			LKK N,			es (F12) (LKK N,				
						(MLRA 13	6, 122)	³In	dicators of h	vdrophytic vea	etation and
Type: Gravet Auget Depth (inches): Le Remarks: No											
Depth (inches):		AND REAL PROPERTY AND A DATA STREET, AND A STREET,							3.0		di.
Remarks:			-							/	
	Depth (in	ches):						Hydric So	il Present?	Yes 📈	Ňo
	Remarks:							A17		9	
											24 W -
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											2

WETLAND DETERMINATION DATA FORM	- Eastern Mountains and Piedmont Region
Project/Site: Martin County Solar City/C	County: Martin County Sampling Date: 10 31 20
Applicant/Owner: Savis	State: \underline{K} Sampling Point: $\underline{UAS} - 07$
Investigator(s): 5, Kelley, C., Knaled Secti	
	lief (concave, convex, none): CONCASE Slope (%): O
	Long: -82, 469032 Datum: NADA3 (KY FIPS
Soil Map Unit Name: FiB: Five block, Fairpoint, & Kayming Soils,	0-690 Slope, Stony NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problem.	
SUMMARY OF FINDINGS – Attach site map showing san	
Sommart of Findings – Attach site map showing san	iping point locations, transects, important leatures, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sempled Area
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
Verni end - Isolated	
	and F
Veg impacted - recent catle grazing	PEM
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants ((B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Od	lor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizosphere	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	
Sediment Deposits (B2) Recent Iron Reductio	
Drift Deposits (B3) Thin Muck Surface (C	
Algal Mat or Crust (B4) Other (Explain in Rer	
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	<u> </u>
Surface Water Present? Yes Ves Depth (inches): O	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Z Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	

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July 5. 1. 34

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1	-			That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3			<u> </u>	Species Across All Strata: (B)
4NA				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence index worksheet:
7				Total % Cover of: Multiply by:
		= Total Cove		OBL species x 1 =
50% of total cover:	20% of	total cover:_		
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
				UPL species x 5 =
3				Column Totals: (A) (B)
4N	-			(5)
574 [1 *				Prevalence Index = B/A =
6	. <u> </u>			Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
		-		2 - Dominance Test is >50%
9		[3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5n)		,		
1. Carex Frankii	30		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Ressection pennsylvanica	8		FACW	
3. TriEdium repense	2	-	FALL	¹ Indicators of hydric soil and wetland hydrology must
5. Triedlium repende		· · · · · · · · · · · · · · · · · · ·		be present, unless disturbed or problematic.
4. Tox: codendron radicans	0		FAC	Definitions of Four Vegetation Strata:
5. Persecaria punctata	8		OBL	
6. JUNUIS CEFUSIOS	15		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7. Setaria oumila	5		FAC	height.
8.				
				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	70	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:3 5	20% of	total cover:_	14	
Woody Vine Stratum (Plot size:)		1000 DE2000198	1.	Woody vine – All woody vines greater than 3.28 ft in beight
				height.
1				
2				
3NA				
41				Hydrophytic /
5				Vegetation
		= Total Cove	r	Present? Yes No
50% of total cover:				
Remarks: (Include photo numbers here or on a separate s	neet.)			

Sampling Point: WAS-09

32.)			e absence of indicat	0.0.)
Depth <u>Matrix</u> Inches) Color (moist)	6 Color (moist) %	Type ¹ Loc ²	Texture	Remarks
		0		Remarks
0-5 104R5/1 6		<u> </u>		
104B514 3	D			
	, RM=Reduced Matrix, MS=Masked	Sand Grains. ² L	ocation: PL=Pore Lin	
dric Soil Indicators:			Indicators for P	roblematic Hydric Soils ³ :
_ Histosol (A1)	Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface	e (S8) (MLRA 147, 14		
Black Histic (A3)	Thin Dark Surface (S9)		(MLRA 14	
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F			oodplain Soils (F19)
_ Stratified Layers (A5)	Depleted Matrix (F3)	-,	(MLRA 13	
_ 2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6	١		v Dark Surface (TF12)
_ Depleted Below Dark Surface (A1		10		
				in in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)			
_ Sandy Mucky Mineral (S1) (LRR N		s (F12) (LRR N,		
MLRA 147, 148)	MLRA 136)		2	
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (N			ydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soi		wetland hydro	ology must be present,
Stripped Matrix (S6)	Red Parent Material (F2	1) (MLRA 127, 147)	unless disturb	ed or problematic.
estrictive Layer (if observed):				
Type: Gravel layer				
Depth (inches): <u>5 in</u>			lydric Soil Present?	Yes No
		r	hydric Son Present?	Yes No
emarks:				
				8:

WETLAND DETERMINATION DATA FORM – Eastern	n Mountains and Piedmont Region
Project/Site: Martin County Solar City/County: M	actin Caunty Sampling Date: 10/31/20
Applicant/Owner: Savion	State: KY Sampling Point: WAS-10
Investigator(s): S. Kelley, C. Knabel Section, Townsh	a second and a second sec
	e, convex, none): <u>CONVCL</u> Slope (%): 0.5
Subregion (LRR or MLRA): <u>LRRN</u> Lat: <u>37.7555666</u>	
Soil Map Unit Name: Fill: Fireblock, Frispoint, & Kermine soils, O-6.	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil, or Hydrology significantly disturbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling po	int locations, transects, important features, etc.
Hydric Soil Present? Yes No within a V	npled Area Vetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
Upland associated w/ viet Veg impacted - Recently cattle grazed	hand E & F
Veg impacted - Recently cattle Grazed	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living	
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled S	oils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	Microtopographic Relief (D4)
Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No , Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	ctions), if available:
Remarks:	
	N

	Absolute	Dominant I	ndicator	Dominance Test worksheet:		
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species	15	1
1				That Are OBL, FACW, or FAC:		(A)
2				Total Number of Dominant	0	
3				Total Number of Dominant Species Across All Strata:	3	(B)
4N A						(-)
5 NIN				Percent of Dominant Species	0	(4/5)
s	<u> </u>			That Are OBL, FACW, or FAC:		(A/B)
6	<u> </u>		+(i)	Prevalence Index worksheet:		
7			·	Total % Cover of:	Multiply by:	
		= Total Cove		OBL species x		
50% of total cover:	20% of	total cover:_		FACW species x		
Sapling/Shrub Stratum (Plot size:)						2.1
1				FAC species x 3		12
2				FACU species X 4		
3				UPL species x	5 =	-
4				Column Totals: (A))	_ (B)
5.						
NIK				Prevalence Index = B/A =		
				Hydrophytic Vegetation Indicat	tors:	
7				1 - Rapid Test for Hydrophyti	ic Vegetation	
8				2 - Dominance Test is >50%		
9				3 - Prevalence Index is ≤3.0 ¹		
		= Total Cove		4 - Morphological Adaptation	s ¹ (Provide sup	oorting
50% of total cover:	20% of	total cover:_		data in Remarks or on a s		
Herb Stratum (Plot size: 5//)		1		Problematic Hydrophytic Veg	· · · · · · · · · · · · · · · · · · ·	n)
1. Mantago majon	30	$ \rightarrow $	FAW			.,
2. Trifolium regense	_1D		FACU	1		
3. Setaria rumila	5		FAC	Indicators of hydric soil and wetle be present, unless disturbed or p		iust
4. Divitaria sanguinalis	20		FACU			
5. Fratuca arundinacea	30		UPL	Definitions of Four Vegetation	Strata:	
6. Alliver vineale	5	\rightarrow	FACU	Tree - Woody plants, excluding v	vines, 3 in. (7.6	cm) or
			TUD	more in diameter at breast height	(DBH), regardle	ess of
7				height.		
8				Sapling/Shrub - Woody plants, o	excluding vines,	less
9				than 3 in. DBH and greater than o		
10				m) tall.		
11				Herb – All herbaceous (non-wood	dv) plants, rega	dless
	/00 =	Total Cove	r	of size, and woody plants less that		
50% of total cover: <u>50</u>	_ 20% of	total cover:_	20	Mandu dan Allumadu dan s		A :
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines gu height.	reater than 3.20	n in
1						
2						
3						
NIA						
4				Hydrophytic	/	
5				Vegetation Present? Yes	No	
		= Total Cove				
50% of total cover:		total cover:_				
Remarks: (Include photo numbers here or on a separate st	heet.)					

Profile Description: (Describe to the depth ne	eded to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	
	olor (moist) <u>%</u> <u>Type¹ Loc²</u>	Texture Remarks
0-4 104R 3/A 100		SIL
	· · · · · · · · · · · · · · · · · · ·	
· · · · · · · · · · · · · · · · · · ·		
		· · · · · · · · · · · · · · · · · · ·
		· · · · · · · · · · · · · · · · · · ·
·		
¹ Type: C=Concentration, D=Depletion, RM=Redu	uced Matrix, MS=Masked Sand Grains,	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	too many no mane can crane.	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7)	2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147, 1	
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)	(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)	(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	_ Depleted Dark Surface (F7)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depressions (F8)	*
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148) Sondy Cloved Matrix (S4)	MLRA 136)	³ Indicators of hydrophytic vegetation and
Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Umbric Surface (F13) (MLRA 136, 122) Piedmont Floodplain Soils (F19) (MLRA 148	 ³Indicators of hydrophytic vegetation and wetland hydrology must be present,
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147)	
Restrictive Layer (if observed):		
Type: Gravel layer		,
Depth (inches): _4		
		Hydric Soil Present? Yes No
Remarks:		
		ř.

WETLAND DETERMINATION DATA FORM	- Eastern	Mountains and Piedmont Region
Project/Site: Martin County Solor City/	County Ma	whin County Sampling Date: 10/31/20
Applicant/Owner: Savian		State: KY Sampling Point: UAS - []
	ion Townshir	p, Range: N/A
	·	
		Long: -82, 476954 Datum: NAO 83(AVFIPS)
Soil Map Unit Name: Fi B: Five Hock Estopolat, & Kaymine Soils, 1		, ,
Are climatic / hydrologic conditions on the site typical for this time of year?		
Are Vegetation, Soil, or Hydrology significantly distu	rbed?	Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	natic?	(If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	npling poi	int locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sam within a W	npled Area Vetland? Yes Ves No
Remarks: Roudside ditch		Tsolated
Wetland G		ā -
Area is pould due to berm on side of	Road	PEM
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants	(B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Od		Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospher		
Water Marks (B1) Presence of Reduced		Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reductio Drift Deposits (B3) Thin Muck Surface (0		oils (C6) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Rei		Stundadon Visible on Achian Integery (66)
Iron Deposits (B5)	,	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)
Water-Stained Leaves (B9)		Microtopographic Relief (D4)
Aquatic Fauna (B13)		FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes No Depth (inches): O		
Water Table Present? Yes No Depth (inches): Seturation Present? Vac		
Saturation Present? Yes No Depth (inches): (includes capillary fringe)		Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspect	tions), if available:
Remarks:		
8		* *
		9
		,
		19 E

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
1				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3		-		Species Across All Strata:(B)
4.				
5 N A				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				That Are OBL, FACW, OF FAC (AB)
6				Prevalence Index worksheet:
7			-	Total % Cover of: Multiply by:
		= Total Cov		
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 M)				FACW species x 2 =
1. Platanus accidentalis	5		FACU	FAC species x 3 =
2		•		FACU species x 4 =
				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
				Hydrophytic Vegetation Indicators:
7		*		1 - Rapid Test for Hydrophytic Vegetation
8	·			2 - Dominance Test is >50%
9		<u> </u>		3 - Prevalence Index is ≤3.0 ¹
	5	= Total Cov	er	1. <u> </u>
50% of total cover: _2,5	20% of	total cover:	1	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5M)				data in Remarks or on a separate sheet)
1. Caret Franki	10	1	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
	10			
2. JUNCOS CTEVOUS	2	\rightarrow	FACW	¹ Indicators of hydric soil and wetland hydrology must
3. Bidens Frandosa	5		FACW	be present, unless disturbed or problematic.
4. Persecuria Demsulvanica	5		FACUS	
- Personaia aunistata	2		NBL	Definitions of Four Vegetation Strata:
	2		-	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Boehmenia cylindrica			FACW	more in diameter at breast height (DBH), regardless of
7. Arthraxon hispidis	10		PAC	height.
8. Betaria pumila	2		FAC	
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
10				
11	111			Herb - All herbaceous (non-woody) plants, regardless
	46 =	Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: _26.5	_ 20% of	total cover:	8.2	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2.				
10				
3NA		<u> </u>		
4				Hydrophytic
5				Vegetation
	2	Total Cove	er	Present? Yes No
50% of total cover:				•
Remarks: (Include photo numbers here or on a separate sh	ieet.)			
				a

Sampling Point: WAS- 1

	•	to the depti				or comm	the absence of	maicators.)	
Depth	Matrix	%	Rede Color (moist)	ox Features		Loc ²	Toxture	Remar	ko
(inches)	Color (moist)				Type'		Texture	Remar	KS
0-4	1048 4/1	94	54B 3/4	_4	<u> </u>	<u>M</u>	SL		
-									
	2								
	-								
-				. <u> </u>					
¹ Type: C=C	oncentration, D=Dep	letion, RM=F	educed Matrix. M	S=Masked	Sand Gra	ains.	² Location: PL=F	Pore Lining, M=Mat	rix.
	Indicators:						Indicato	rs for Problematic	Hydric Soils ³ :
Histoso			Dark Surface	e (S7)				Muck (A10) (MLR	
	pipedon (A2)		Polyvalue Be		e (S8) (N	I RA 147		st Prairie Redox (A	
the second se	istic (A3)		Thin Dark Si					ILRA 147, 148)	,
	en Sulfide (A4)		Loamy Gley			,		mont Floodplain Sc	oils (F19)
	d Layers (A5)		V Depleted Ma		-)			ILRA 136, 147)	
	uck (A10) (LRR N)		Redox Dark		6)			Shallow Dark Surf	ace (TF12)
	d Below Dark Surface	e (A11)	Depleted Da					er (Explain in Rema	
	ark Surface (A12)		Redox Depr						,
	Mucky Mineral (S1) (L	RR N.	Iron-Mangar		·	RR N.			
	A 147, 148)		MLRA 13						
	Gleyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	³ Indica	tors of hydrophytic	vegetation and
	Redox (S5)		Piedmont Fl					nd hydrology must l	
	d Matrix (S6)		Red Parent					s disturbed or probl	
Restrictive	Layer (if observed):	8							
Type: C									1
	ches): 4		_				Hydric Soil Pr	esent? Yes	No
Remarks:	0100).		=				inguine contrib		
Remarko.									
Romano.		7.							
Noniano.		7 -							
i temarko.		7-							·
nomento.	14	2-							
romano.	в	7.							
remarko.	В	7.							
remarko.	В								
	В	7-							
remarko.	14	7-							
remarko.	14								
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WETLAND DETERMINATION DATA FORM -	Eastern Mountains and Piedmont Region
Project/Site: Martin County Solar City/Co	unty: Martin County Sampling Date: 10/31/20
Applicant/Owner: Soution	State: K) Sampling Point: WAS-12
Investigator(s): S. Kelley, C. Knabel Section	
Landform (hillslope, terrace, etc.): houside Local relief	
Subregion (LRR or MLRA): <u>LRRN</u> Lat: <u>37,147937</u>	
Soil Map Unit Name: FiB: Fiveblock, Fairpoint, & Kaymine soil, O-6	ono slope, stony NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	s No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbe	ed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problemati	c? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing samp	ling point locations, transects, important features, etc.
Lludria Cail Dragant? Vag Na	s the Sampled Area within a Wetland? Yes No
Upland point associated	w/ Wetland G and H Berm between Wetlands 64 H
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B'	14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor	
Saturation (A3) Oxidized Rhizospheres	
Water Marks (B1) Presence of Reduced II	
Sediment Deposits (B2) Recent Iron Reduction	
Drift Deposits (B3) Thin Muck Surface (C7	
Algal Mat or Crust (B4) Other (Explain in Rema Iron Deposits (B5)	rks) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	_ /
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	ous inspections), if available:
Remarks:	
No we we have a set	
2	

1/4

14.

Sampling Point: UAS-12

	Absolute			Dominance Test worksheet:		
Tree Stratum (Plot size:)		Species?		Number of Dominant Species	٨	
1,				That Are OBL, FACW, or FAC:	٥	(A)
2				Total Number of Dominant	r	
3				Species Across All Strata:	5	(B)
4. N A				Percent of Dominant Species	č	
5				That Are OBL, FACW, or FAC:	0	(A/B)
6						·/
7		71. E		Prevalence Index worksheet:		
	11	= Total Cove		Total % Cover of:	Multiply by:	
50% of total cover:				OBL species x 1 =	=	-
Sapling/Shrub Stratum (Plot size: 15M)	_			FACW species x 2 =	=	_
1. Eleagnus umbollida	מר	/	UPL	FAC species x 3 =	=	
2. Platagues occidentalls	10	_ v	FACW	FACU species x 4 =		5. I
				UPL species x 5 =		
3. Fratings americana				Column Totals: (A)		
4						_ (D)
5				Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indicator		
7						
8				1 - Rapid Test for Hydrophytic	vegetation	
9				2 - Dominance Test is >50%		
	95	= Total Cove		3 - Prevalence Index is ≤3.0 ¹		
50% of total cover: 47.5				4 - Morphological Adaptations ¹	(Provide supp	porting
Herb Stratum (Plot size: 54)	_ 20% 01	total cover.	·	data in Remarks or on a sep	parate sheet)	
	10	1	LOI	Problematic Hydrophytic Veget	tation ¹ (Explai	n)
1. Eleagnis umbellata	10		UPL			
2. Lonicera japonica	<u> </u>	\checkmark		¹ Indicators of hydric soil and wetlan	ad bydrology n	nuet
3. Tritolium repease	2		FACU	be present, unless disturbed or pro		lust
4. Persecuria pennsylvanica	2		FACW	Definitions of Four Vegetation St		
5. Rosa multiflora	5			Deminions of Four Vegetation St	liata.	
6				Tree - Woody plants, excluding vin		
				more in diameter at breast height (I	DBH), regardle	ess of
7				height.		
8				Sapling/Shrub - Woody plants, ex		
9				than 3 in. DBH and greater than or	equal to 3.28	ft (1
10				m) tall.		
11				Herb - All herbaceous (non-woody	/) plants, regar	dless
	24 =	Total Cove	er	of size, and woody plants less than		
50% of total cover: 12	20% of	total cover:	4.8			
Woody Vine Stratum (Plot size: 25M)				Woody vine – All woody vines great height.	ater than 3.28	πin
1. Lonicesa japonica	5	/	FACU	neight.		
2						
2						
3						
4				Hydrophytic		
5				Vegetation	/	
	5 =	Total Cove	er	Present? Yes	No	
50% of total cover: <u>2,5</u>	20% of	total cover:	<u> </u>			
Remarks: (Include photo numbers here or on a separate s	heet.)					
				14		-

.....

Profile Desc	cription: (Describe	to the depth	needed to docun	nent the i	ndicator	or confirm	the absence of	Indicators.)	
Depth	Matrix			x Features	<u> </u>				
(inches)	Color (moist)		Color (moist)	%	Туре	Loc ²		Remar	ks
0-9	104R 3/2	98	5483/4	a	_C	M	SiL		
9-12	101R4/3	100							
		·							
		-							
						_			
·	1								
	Y								
	oncentration, D=Depl	etion, RM=Re	duced Matrix, MS	S=Masked	Sand Gra	ains.		Pore Lining, M=Mat	
Hydric Soil								rs for Problematic	- 1
Histosol			Dark Surface					n Muck (A10) (MLR	· ·
	pipedon (A2)		Polyvalue Bel					st Prairie Redox (A	16)
	stic (A3)		Thin Dark Su			47, 148)		ALRA 147, 148)	
	n Sulfide (A4)		Loamy Gleye		-2)			Imont Floodplain Sc	pils (F19)
	Layers (A5)	-	Depleted Mat		C)			ALRA 136, 147)	(TE40)
	ick (A10) (LRR N) J Below Dark Surface		[*] Redox Dark S Depleted Darl				_ '	Shallow Dark Surf	· /
·	ark Surface (A12)	(ATT) .	Redox Depres					er (Explain in Rema	rks)
	lucky Mineral (S1) (L	RR N.	Iron-Mangane	•		RRN			
	A 147, 148)		MLRA 136		23 (1 12) (1	,			
	leyed Matrix (S4)		Umbric Surfac		MLRA 13	6, 122)	³ Indica	tors of hydrophytic	vegetation and
	edox (S5)	-	Piedmont Flor					nd hydrology must l	- 1
	Matrix (S6)		Red Parent M					s disturbed or probl	· ·
	Layer (if observed):		174.2				1		
Type:									
	ches): 12						Hydric Soil Pr	esent? Yes	No
Remarks:			2	_					
Remarks.					1				
			-						
						9			
		(#)							-
		£							
									2

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin (oundy	Solar	City/	County: <u>Ma</u>	urtin c	Sampling Date	10(31/20
Applicant/Owner: Savian		_					oint: WAS-13
Investigator(s): 50 Kelley		nabel	Sect	ion, Township	, Range:		
1	1					ne): <u>Concerve</u> s	lope (%): 0.5
Subregion (LRR or MLRA):			37,748066				um: NA D83 (KYFIP)
Soil Map Unit Name:B:							
			3133//c21 (h)		15		
Are climatic / hydrologic condi			-			(If no, explain in Remarks.)	1.
Are Vegetation, Soil						I Circumstances" present? Yes	•
Are Vegetation, Soil	7	19475				explain any answers in Remarks.)	
SUMMARY OF FINDIN	GS – Atta	ach site n	nap showing sar	npling poi	nt locatio	ons, transects, important	features, etc.
Hydrophytic Vegetation Pres Hydric Soil Present?	ent?	Yes	No	Is the Sam within a W		Yes No	
Wetland Hydrology Present?		Yes	No		euanu?		-
Remarks:							
		1	Wetland H				
Area is wet due	to Mau	made R	ecm.				PEM
HYDROLOGY							
Wetland Hydrology Indicate	ors:					Secondary Indicators (minimum of	of two required)
Primary Indicators (minimum	of one is re	quired; chec	k all that apply)			Surface Soil Cracks (B6)	
Surface Water (A1)			True Aquatic Plants	(B14)		Sparsely Vegetated Concave	e Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Od			Drainage Patterns (B10)	,
Saturation (A3)			Oxidized Rhizospher	-	Roots (C3)	Moss Trim Lines (B16)	
Water Marks (B1)			Presence of Reduce			Dry-Season Water Table (C2	2)
Sediment Deposits (B2)		_	Recent Iron Reduction		oils (C6)	Crayfish Burrows (C8)	(20)
Drift Deposits (B3)		_	Thin Muck Surface (Saturation Visible on Aerial I	
Algal Mat or Crust (B4) Iron Deposits (B5)		_	Other (Explain in Rei			Stunted or Stressed Plants (I Geomorphic Position (D2)	
Inundation Visible on Ae	rial Imagerv	(B7)				Shallow Aquitard (D3)	20
Water-Stained Leaves (E	5,5					Microtopographic Relief (D4)	
Aquatic Fauna (B13)						FAC-Neutral Test (D5)	
Field Observations:							
Surface Water Present?	Yes 📈	🖊 No	Depth (inches):				
Water Table Present?	Yes	No	Depth (inches):				,
Saturation Present? (includes capillary fringe)	Yes	No	Depth (inches):		Wetland H	lydrology Present? Yes	No
Describe Recorded Data (stre	eam gauge,	monitoring v	well, aerial photos, pre	evious inspect	tions), if ava	ilable:	
Remarks:							
÷							

1. . . 4

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:)		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:	
1					
2	<u> </u>			Total Number of Dominant Species Across All Strata:	
4NA				Species Across All Strata: (B)	
4N				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: _/00 (A/B)
6					_
7				Prevalence Index worksheet:	
		= Total Cov	er	Total % Cover of: Multiply by:	
50% of total cover:				OBL species x 1 =	
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =	
				FAC species x 3 =	
1				FACU species x 4 =	
2				UPL species x 5 =	
3	<u> </u>			Column Totals: (A) (B)	
4NA	<u> </u>		. <u> </u>		
5. <u>N</u>				Prevalence Index = B/A =	
6				Hydrophytic Vegetation Indicators:	23
7					
8				1 - Rapid Test for Hydrophytic Vegetation	
				2 - Dominance Test is >50%	
9				3 - Prevalence Index is ≤3.0 ¹	
		= Total Cov		4 - Morphological Adaptations ¹ (Provide supporting	g
50% of total cover:	20% 01	total cover:		data in Remarks or on a separate sheet)	
Herb Stratum (Plot size: 5M)				Problematic Hydrophytic Vegetation ¹ (Explain)	
1. Carex vulpensidia			OBL		
2. Carel Frankli	15		OBL	¹ Indicators of hydric coll and watered hydrology must	
3. Vernonia giganteca	5		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
4. Banunculus hispidis	20	1	FAL	Definitions of Four Vegetation Strata:	-
5. l'ersecaria pennsylvanica	35		FACUL	Deminions of Four Vegetation Strata.	
6. Echdonpehloa gerus-gelli	15		FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or	
			110	more in diameter at breast height (DBH), regardless of	ł.
7				height.	
8				Sapling/Shrub - Woody plants, excluding vines, less	
9				than 3 in. DBH and greater than or equal to 3.28 ft (1	
10				m) tall.	
11				Herb - All herbaceous (non-woody) plants, regardless	
	100 =	Total Cove	er	of size, and woody plants less than 3.28 ft tall.	
50% of total cover: <u>50</u>	_ 20% of	total cover:	20	Mandusing Allywood wines greater than 2.29 ft in	
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.	
1.					-
2					
2					
NIN NIN					
4				Hydrophytic	
5				Vegetation Present? Yes No	
		= Total Cove			
50% of total cover:	20% of	total cover:	-		_
Remarks: (Include photo numbers here or on a separate sh	neet.)				
3					
	_				

epth	Matrix		Rede	ox Feature	S					
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	_	Remarks	
)-4	104R4/1	93	54R 4/4	7	C	M	SICL			
	and the state					-				
	-			· · · · · · · · · · · · · · · · · · ·						_
<u></u>			(_	
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	-									_
	-									_
					1					
_	-			· · · · · · · · · · · · · · · · · · ·						
be: C=Co	oncentration, D=D	epletion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ins.	² Location: PL=	Pore Lining	, M=Matrix.	
	Indicators:								blematic Hyd	dric Soils ³
Histosol	(A1)		Dark Surface	e (S7)			2 c	m Muck (A1	0) (MLRA 14	17)
Histic Ep	pipedon (A2)	<u>8</u> 7	Polyvalue Be		ce (S8) (M	LRA 147,		ast Prairie R		
Black Hi			Thin Dark Si					MLRA 147,		
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix (F2)		Pie	dmont Flood	dplain Soils (F19)
Stratified	d Layers (A5)		Depleted Ma	atrix (F3)			(MLRA 136,	147)	
2 cm Mu	ick (A10) (LRR N)		Redox Dark	Surface (F	6)		Ve	ry Shallow D	oark Surface	(TF12)
Depleted	d Below Dark Surfa	ace (A11)	Depleted Da	rk Surface	(F7)		Oth	ner (Explain	in Remarks)	
Thick Da	ark Surface (A12)		Redox Depre	essions (Fa	8)					
Sandy N	lucky Mineral (S1)	(LRR N,	Iron-Mangar	ese Mass	es (F12) (L	.RR N,				
	A 147, 148)		MLRA 13							
Sandy G	Bleyed Matrix (S4)		Umbric Surfa	aco /E13) (MI DA 126	1001		stees of house		han and
									rophytic vege	
Sandy R	edox (S5)		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	(8) wetla	and hydrolog	gy must be p	resent,
Sandy R Stripped	edox (S5) Matrix (S6)			oodplain S	oils (F19) (MLRA 14	(8) wetla	and hydrolog		resent,
Sandy R Stripped	edox (S5) Matrix (S6) L ayer (if observed		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	(8) wetla	and hydrolog	gy must be p	resent,
Sandy R Stripped strictive L	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau	1): per	Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be p	resent, itic.
Sandy R Stripped trictive L	edox (S5) Matrix (S6) L ayer (if observed		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	(8) wetla	and hydrolog ss disturbed	gy must be p	resent,
Sandy R Stripped strictive L	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau Ches): <u>4</u>		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Brauch Lau		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetla 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau Ches): <u>4</u>		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetl: 7) unle	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau Ches): <u>4</u>		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetla 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L Type: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau Ches): <u>4</u>		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) wetla 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be problema	resent, itic.
Sandy R Stripped trictive L Type: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau Ches): <u>4</u>		Piedmont Flo	oodplain S	oils (F19) ((MLRA 14 A 127, 147	18) weth 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be pi l or problema Yes	nesent, tic.
Sandy R Stripped trictive L Type: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau Ches): <u>4</u>		Piedmont Flo	oodplain S	oils (F19) (MLRA 14	18) weth 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be problema	nesent, tic.
Sandy R Stripped trictive L Type: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau Ches): <u>4</u>	<u>e</u> r	Piedmont Fla Red Parent I	oodplain S Material (F	oils (F19) (21) (MLRA	(MLRA 14	18) weth 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be pi l or problema Yes	nesent, tic.
Sandy R Stripped trictive L Type: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau ches): <u>4</u>	<u>e</u> r	Piedmont Flo	oodplain S Material (F	oils (F19) ((MLRA 14	18) weth 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be pi l or problema Yes	nesent, tic.
Sandy R Stripped trictive L Type: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau ches): <u>4</u>	<u>e</u> r	Piedmont Fla Red Parent I	oodplain S Material (F	oils (F19) (21) (MLRA	(MLRA 14	18) weth 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be pi l or problema Yes	nesent, tic.
Sandy R Stripped trictive L Type: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau ches): <u>4</u>	<u>e</u> r	Piedmont Fla Red Parent I	oodplain S Material (F	oils (F19) (21) (MLRA	(MLRA 14	18) weth 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be pi l or problema Yes	nesent, tic.
Sandy R Stripped trictive L Type: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau ches): <u>4</u>	<u>e</u> r	Piedmont Fla Red Parent I	oodplain S Material (F	oils (F19) (21) (MLRA	(MLRA 14	18) weth 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be pi l or problema Yes	nesent, tic.
Sandy R Stripped trictive L ype: Depth (inc	Redox (S5) Matrix (S6) Layer (if observed Grave Iau ches): <u>4</u>	<u>e</u> r	Piedmont Fla Red Parent I	oodplain S Material (F	oils (F19) (21) (MLRA	(MLRA 14	18) weth 7) unle Hydric Soil P	and hydrolog ss disturbed	gy must be pi l or problema Yes	nesent, tic.

	Attach site map sh	urally problematic?		explain any answers in Remarks.) Ins, transects, important features
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No_ Yes No_ Yes No_	1.00	Sampled Area	Yes No
Remarks: Isolated				
		Wetland I	-	
Veg impacted - recent cat	tlearazine			PEM
IYDROLOGY	0 0			
Wetland Hydrology Indicators:				Secondary Indicators (minimum of two requ
Primary Indicators (minimum of one i	s required; check all that	t apply)		Surface Soil Cracks (B6)
Surface Water (A1)		quatic Plants (B14)		Sparsely Vegetated Concave Surface (
High Water Table (A2)		en Sulfide Odor (C1)		Drainage Patterns (B10)
Saturation (A3)		ed Rhizospheres on L		Moss Trim Lines (B16)
Water Marks (B1)		ce of Reduced Iron (,	Dry-Season Water Table (C2)
Sediment Deposits (B2)		Iron Reduction in Till	ed Solls (C6)	Crayfish Burrows (C8)
Drift Deposits (B3) Algal Mat or Crust (B4)		uck Surface (C7) Explain in Remarks)		Saturation Visible on Aerial Imagery (C Stunted or Stressed Plants (D1)
Iron Deposits (B5)				Geomorphic Position (D2)
Inundation Visible on Aerial Image	perv (B7)			Shallow Aquitard (D3)
Water-Stained Leaves (B9)	5 5 (7			Microtopographic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral Test (D5)
Field Observations:	1			
Surface Water Present? Yes_	Vo Depth	(inches):		
Water Table Present? Yes_	No Depth	(inches):		
Saturation Present? Yes_	No Depth	(inches):	Wetland H	ydrology Present? Yes No
(includes capillary fringe)	uge, monitoring well, aer	ial photos, previous ir	Ispections), if avai	lable:
Describe Recolueu Dala (silearri yal				
Describe Recorded Data (stream gat	5			191

.

Sampling Point: WAS - 14

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size:) 1)	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC;	3 (A	A)
2						
2				Total Number of Dominant	3	D \
4. NA				Species Across All Strata:	(E	в)
				Percent of Dominant Species	100	
5				That Are OBL, FACW, or FAC:	(A	A/B)
6		14 <u></u> 21		Prevalence Index worksheet:		
7					1	
		= Total Cove	er	Total % Cover of:		
50% of total cover:	20% of	total cover:_		OBL species x 1 =		
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =	·	
1				FAC species x 3 =		
2				FACU species x 4 =	·	
3				UPL species x 5 =	£	
4	-			Column Totals: (A)		(B)
4. 5 N A					······································	
				Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indicator	rs:	
7				1 - Rapid Test for Hydrophytic		
8				$\sqrt{2}$ - Dominance Test is >50%		
9	-			2^{-2} - Dominance rest is $< 3.0^{1}$		
		Total Cove	er			-
50% of total cover:				4 - Morphological Adaptations ¹		rting
Herb Stratum (Plot size: 5m)				data in Remarks or on a sep		
1. Carex vulpersidia	25		0BL	Problematic Hydrophytic Veget	ation' (Explain)	
2. JUNCUS EFFUSUS	20	./	FACU			- 1
2. JUNEUS EFFUSUS 3. SCIENUS CYPERINUS	10		FACIN	¹ Indicators of hydric soil and wetland		st
			FITCO	be present, unless disturbed or prot	plematic.	
4. Symphistrichum dumosum	_50_	-V	FAC	Definitions of Four Vegetation St	rata:	
5				Tree - Woody plants, excluding vin	00 2 in (7 6 cm	
6			·	more in diameter at breast height (E		
7				height.		
8						
9				Sapling/Shrub – Woody plants, exe than 3 in. DBH and greater than or o		
10				m) tall.		·
11.						
	85	Total Cove		Herb – All herbaceous (non-woody) of size, and woody plants less than		ess
50% of total cover: 42.5	20% of	total cover:				
			1.4	Woody vine - All woody vines grea	ater than 3.28 ft i	in
Woody Vine Stratum (Plot size:)				height.		-
2						
3N						
4				Hydrophytic	/	
5		<u></u>		Vegetation		- 1
		Total Cove	r	Present? Yes	No	
50% of total cover:	20% of	total cover:_				
Remarks: (Include photo numbers here or on a separate s	heet.)					

Eastern Mountains and Piedmont - Version 2.0

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Profile Description: (Describe to Depth Matrix		ox Features	or commit	the absence of the	icators.
(inches) Color (moist)	Color (moist)	<u>% Type¹</u>	Loc ²	Texture	Remarks
0-6 104R4/1	92 7.54R 5/8	8 C	<u>M</u>	S;CL	
¹ Type: C=Concentration, D=Deple Hydric Soil Indicators:	etion, RM=Reduced Matrix, M	IS=Masked Sand Gr	ains.	² Location: PL=Pore	e Lining, M=Matrix. or Problematic Hydric Soils ³ :
 Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) (LRR N) Depleted Below Dark Surface Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LF MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) 	A11) Thin Dark S Loamy Gley Depleted M Redox Dark (A11) Depleted Da Redox Depr RR N, Iron-Manga MLRA 13 Umbric Surf Piedmont Fl	elow Surface (S8) (M urface (S9) (MLRA red Matrix (F2) atrix (F3) Surface (F6) ark Surface (F7) ressions (F8) nese Masses (F12) (LRR N, 6, 122) (MLRA 148	2 cm Mi Coast P (MLR Piedmoi (MLR Very Sh Other (E ^3Indicators wetland h	uck (A10) (MLRA 147) rairie Redox (A16) A 147, 148) nt Floodplain Soils (F19) A 136, 147) allow Dark Surface (TF12) Explain in Remarks) of hydrophytic vegetation and hydrology must be present, sturbed or problematic.
Restrictive Layer (if observed): Type: Grand Layer Depth (inches): Le				Hydric Soil Prese	nt? Yes 🖌 No
Remarks:					
en. V					

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

	and a state
Project/Site: Martin County Solar City/County: Martin C	
Applicant/Owner: <u>Savion</u>	State: Sampling Point:AS - / 5
Investigator(s): 5. Kelley, C. Knabel Section, Township, Range:_	NA
Landform (hillslope, terrace, etc.): Hilltop Local relief (concave, convex, m	one): None Slope (%): 0.5
	82,47582 Datum: NAD82(KYFIPS)
Soil Map Unit Name: FiB: Fiveblock, Fairpoint, & Kaynaine Soile, 0-690 510pe, Sto	
	(If no, explain in Remarks.)
	al Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed SUMMARY OF FINDINGS – Attach site map showing sampling point locat	, explain any answers in Remarks.) ions, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Yes No
Remarks:	
Upland point associated w/	Wetland I
Optaria pour asses	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3)Oxidized Rhizospheres on Living Roots (C3)	
Water Marks (B1) Presence of Reduced iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Drift Deposits (B3) Thin Muck Surface (C7)	Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	/
Saturation Present? Yes No Depth (inches): Wetland	Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	vailable:
Remarks:	

VEGETATION (Four Strata) – Use scientific n	ames of	plants.		Sampling Point: WID-15
		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant 3
3				Species Across All Strata:
3NA				Derest of Derestant Creation
5				Percent of Dominant Species 33.3 (A/B)
7.	-			Prevalence Index worksheet:
		= Total Cove	er	Total % Cover of:Multiply by:
50% of total cover:				OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1/				FAC species x 3 =
2				FACU species x 4 =
				UPL species x 5 =
3				Column Totals: (A) (B)
4A(
4				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5M)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Lespedeza concuta	20	~	FALU	
2. Ambrodia arremistrolia	25	\checkmark	FACU	1. We share of build's call and configurate builded and second
3. Juncus tenuous	20	_/_	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Tridens Flavos			FACU	Definitions of Four Vegetation Strata:
5. Plantago major				Deminitoris of Four Vegetation Strata.
6. Seturia pumila	5		FAL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
8				in igna
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
-				m) tall.
10			·	
11	95			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 47,	the second se	= Total Cove		of size, and woody plants less than 3.20 it tail.
Woody Vine Stratum (Plot size:)	20/001	total oover.		Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
2				
3NA				
4				Hydrophytic
5				Vegetation
	-	= Total Cove		Present? Yes No
50% of total cover:		total cover:_	<u></u>	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Ctrata) II-TATION /C 1000

Dainty 11AC -10 н.

Profile Des	cription: (Describe	to the dep	oth needed to docu	ment the i	ndicator	or confirm	n the absence of i	indicators.)	
Depth	Matrix		Red	ox Features	s				
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	_Loc ²		Rem	arks
0-1	10YR R/1	100					Sih _		
1-5	10484/1	60					SICL		
-	10 YR 5/6	25							
	10 40 6/4	15					·		
	10 18 - 7 -			7					
A									
	-								
	-								
	oncentration, D=Dep	oletion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL=P	ore Lining, M=N	latrix.
Hydric Soil				(07)					tic Hydric Soils ³ :
Histosol			Dark Surface Polyvalue Be					Muck (A10) (ML	
	pipedon (A2) istic (A3)		Thin Dark S					t Prairie Redox (LRA 147, 148)	A10)
	en Sulfide (A4)		Loamy Gley			47, 140)		nont Floodplain	Soils (F19)
	d Layers (A5)		Depleted Ma		,			LRA 136, 147)	. ,
2 cm Mu	uck (A10) (LRR N)		Redox Dark	•			Very	Shallow Dark Su	urface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Da				Other	(Explain in Ren	narks)
	ark Surface (A12)		Redox Depr						
	/lucky Mineral (S1) (I A 147, 148)	LKK N,	Iron-Mangar MLRA 13		es (F12) (I	LKK N,			
	Gleyed Matrix (S4)		Umbric Surfa		MLRA 13	6, 122)	³ Indicat	ors of hydrophyt	ic vegetation and
	Redox (S5)		Piedmont Fl					d hydrology mus	
	Matrix (S6)		Red Parent					disturbed or pro	
Restrictive	Layer (if observed):	:							
Type: 6	rowel layer								,
Depth (in	ches): <u>5</u>					-	Hydric Soil Pre	sent? Yes _	No
Remarks:									
				-					
				ð.					

WETLAND DETERMINATION DATA FORM	 Eastern Mountains and Piedmont Region
Project/Site: Martin County Solar City/C	County: Martin County Sampling Date: 10/3/20
Applicant/Owner: 54.10	State: K- Sampling Point: WAS-16
Investigator(s): S. Kelley, C. Knabel Section	
Landform (hillslope, terrace, etc.): Hill hottom Local reli	
	Long: -82,466087 Datum: NAD 03(N1F1P3)
Soil Map Unit Name: FiD: Fireblock, Fairpoint, & Kaumine soils, 6	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology asymication given by a set of the s	
SUMMARY OF FINDINGS – Attach site map showing sam	iping point locations, transects, important reatures, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No No	Is the Sampled Area within a Wetland? Yes <u>V</u> No
Porsed depression - Isolated	
	Σ
5-02, 5-03, 4 5-21 Flow towards this wetland	DECIDEM
	201 + 35/1 EN
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (I High Water Table (A2) Hydrogen Sulfide Odd	
	es on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1)	
Sediment Deposits (B2)	
Drift Deposits (B3) Thin Muck Surface (C	C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Ren	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13) Field Observations:	FAC-Neutral Test (D5)
Surface Water Present? Yes Ves Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes Ves Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre-	vious inspections), ir available:
Remarks:	
а. С	e

ъ.

46	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u> , <u>M</u>)	% Cover	Species?	- 100 - 100 - - 10	Number of Dominant Species
1. Platanus occidentalis	20		FACUS	That Are OBL, FACW, or FAC: (A)
2. Salix nigra	10		UBL	Total Number of Dominant
30				Species Across All Strata: (B)
4.				
5	· · · · · · · · · · · · · · · · · · ·			Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7		() <u> </u>		Total % Cover of:Multiply by:
		= Total Cove	r ,	
50% of total cover: 15	20% of	total cover:_	6	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 M)			001	FACW species x 2 =
1. Salit nigra	80	$-\vee$	OBL	FAC species x 3 =
2				FACU species x 4 =
3				UPL species x 5 =
4	· · · · · · · · · · · · · · · · · · ·			Column Totals: (A) (B)
5				Prevalence Index = B/A =
6	02			Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8		<u> </u>		2 - Dominance Test is >50%
9				3 - Prevalence Index is $\leq 3.0^{1}$
	60 :	= Total Cove	r	
50% of total cover:	20% of	total cover:		4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5M)				data in Remarks or on a separate sheet)
1. Galix nigra	5		OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. SELTOUS ASSOCIANS	15		FACW	
2. Serrous radio mus	12		rnu	¹ Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4	. <u> </u>			Definitions of Four Vegetation Strata:
5				-
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				-
6 7				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
6 7 8				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
6 7 8 9				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
6 7 8 9 10				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
6 7 8 9				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
6 7 8 9 10 11				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
6 7 8 9 10 11 50% of total cover: 50% of total cover:				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6 7 8 9 10 11				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
6 7 8 9 10 11 50% of total cover: 50% of total cover:				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11 50% of total cover: 50% of total cover:				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6		Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6		Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	20% of	Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	20% of	Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	20% of	Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	20% of	Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	20% of	Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	20% of	Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	20% of	Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	20% of	Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	20% of	Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	20% of	Total Cover	4	 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redo	x Features	3			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-8	10435/1	70	54R 3/4	3	C	M	SIC	
	INVR 5/2	27	12					
	1010.74							÷
	· · · · · · · · · · · · · · · · · · ·				<u> </u>			·
	k						17 — ž	

		6					<u> </u>	
		90 G. 91		0				
	-							(
¹ Type: C=Co	oncentration, D=Depl	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Location: P	L=Pore Lining, M=Matrix.
Hydric Soil I								ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		e (S8) (M	LRA 147.		Coast Prairie Redox (A16)
Black Hi			Thin Dark Su					(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye				F	Piedmont Floodplain Soils (F19)
Stratified	Layers (A5)		Depleted Mat	trix (F3)	<u></u>			(MLRA 136, 147)
2 cm Mu	ck (A10) (LRR N)		Redox Dark S	Surface (F6	6)		v	ery Shallow Dark Surface (TF12)
Depleted	Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)			Other (Explain in Remarks)
Thick Da	rk Surface (A12)		Redox Depre	ssions (F8	5)			
	lucky Mineral (S1) (L	.RR N,	Iron-Mangane	ese Masse	es (F12) (L	.RR N,		
	147, 148)		MLRA 13					
	leyed Matrix (S4)		Umbric Surfa					icators of hydrophytic vegetation and
A	edox (S5)		Piedmont Flo					atland hydrology must be present,
	Matrix (S6)		Red Parent M	laterial (F2	21) (MLR/	A 127, 147) un	less disturbed or problematic.
	ayer (if observed):							
Type: _	cavel layer							
Depth (inc	:hes): 8		<u> </u>				Hydric Soil	Present? Yes No No
Remarks:								
		2						

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar City/County: Martin Count	
	tate: K-1 Sampling Point: WAS-[7
Investigator(s): S. Kelley C. Junabel Section, Township, Range: N	
Landform (hillslope, terrace, etc.): Hills loop Local relief (concave, convex, none):	
Subregion (LRR or MLRA): LRRN Lat: 37.749696 Long: -80,4	66045 Datum: NADO3 (KY FIPS)
Soil Map Unit Name: FiD: Fiveblock, Fairprint, & Kaymine poils, 6-3090 slope Story	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If not	1
	cumstances" present? Yes No
	ain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations	
Lindrashutis Vagatation Drasant2 Vag	
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	
Wetland Hydrology Present? Yes No.	Yes No
Remarks:	
Upland point associated w/ Wetland	1
alitary bould association of meridian	
HYDROLOGY	
	condary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3)Oxidized Rhizospheres on Living Roots (C3)	
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) This Much Surface (O7)	Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5)	Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
	ology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available	<u>.</u>
beschoe Recorded Data (stream gauge, monitoring weil, aenai protos, previous inspections), il availabi	е.
Remarks:	

	Absolute Dominant In	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30		Status	
	10 /	FAL	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. Frakings americana	20	FACU	
2. Prokings ramericana			Total Number of Dominant
3. Gleditsia trincanthos	15 1	FAL	Species Across All Strata: (B)
4			
5.			Percent of Dominant Species That Are OBL, FACW, or FAC: 42,9 (A/B)
			That Are OBL, FACW, or FAC: 42.9 (A/B)
6			Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
	45 = Total Cover	0	
50% of total cover: 222.		9	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 5			FACW species x 2 =
1. Eleannus umbellata		UPL	FAC species x 3 =
. ()	V		FACU species x 4 =
2			UPL species x 5 =
3			
4			Column Totals: (A) (B)
5			Dravelance lades - D/A -
6			Prevalence Index = B/A =
			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
8			2 - Dominance Test is >50%
9			3 - Prevalence Index is $\leq 3.0^1$
	90 = Total Cover	-	
50% of total cover:			4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5M)			data in Remarks or on a separate sheet)
1. Rosa multi Flora	100 /	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Eleagnus umbellata	10	UPL	¹ Indicators of hydric soil and wetland hydrology must
3. Boonmeria cylindrica	5	FACUS	be present, unless disturbed or problematic.
4.			Definitions of Four Vegetation Strata:
5			Deminuons of Four Vegetation Strata.
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6			more in diameter at breast height (DBH), regardless of
7	· ·		height.
8			Sapling/Shrub – Woody plants, excluding vines, less
9	· · · · · · · · · · · · · · · · · · ·		than 3 in. DBH and greater than or equal to 3.28 ft (1
10			m) tall.
11.			
	30 = Total Cover		Herb – All herbaceous (non-woody) plants, regardless
			of size, and woody plants less than 3.28 ft tall.
50% of total cover:5	20% of total cover:	6	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 35 M)			height.
1. Toxicalendron radicans	5 1	FAC	
2			
3.			
3			
4			Hydrophytic
5			Vegetation
	5 = Total Cover		Present? Yes No
50% of total cover:	20% of total cover:		-
Remarks: (Include photo numbers here or on a separate s	sheet.)		

Pepth <u>Matrix</u> nches) Color (moist) %	<u>Redox Features</u> <u>Color (moist)</u> <u>%</u> <u>Type¹</u> <u>Loc²</u>	Tosture	Domorko
nches) <u>Color (moist)</u> % D-6 <u>I04R 4/3</u> 100	<u>Color (moist)</u> <u>%</u> <u>Type¹</u> Loc ²		Remarks
(1 <u> </u>			

/pe: C=Concentration, D=Depletion, RM dric Soil Indicators:	=Reduced Matrix, MS=Masked Sand Grains.		Pore Lining, M=Matrix. ors for Problematic Hydric Soils ³ :
_ Histosol (A1)	Dark Surface (S7)		n Muck (A10) (MLRA 147)
Histic Epipedon (A2)	 Polyvalue Below Surface (S8) (MLRA 147, 		st Prairie Redox (A16)
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)	•	MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		Imont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)		MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)		/ Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Dark Surface (F7) Redox Depressions (F8)		er (Explain in Remarks)
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N,		
MLRA 147, 148)	MLRA 136)		
_ Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122)	³ Indica	tors of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14)		nd hydrology must be present,
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147		s disturbed or problematic.
strictive Layer (if observed):			
Type: Gravel layer			
Depth (inches):		Hydric Soil Pr	resent? Yes No
emarks:			
	£		
	£		

WETLAND DETERMINATION DATA FORM	- Eastern Mountains and Piedmont Region
Project/Site: Martin County Solar City/C	County: Martin County Sampling Date: 11/1/20
Applicant/Owner: Saulon	Ştate: _ K1 Sampling Point: []) K18
	ion, Township, Range: NA
	lief (concave, convex, none): COACAVC Slope (%): 0.5
Subregion (LRR or MLRA): LAt: Lat: Lat:	Long: -82.47291 Datum: NAD83(MAFIPS)
Soil Map Unit Name: FiB: Fareblock, Fairpoint, & Kay Mine Soil, 0-	-190 slope, Stony NWI classification: N A
Are climatic / hydrologic conditions on the site typical for this time of year? Y	Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur	rbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No No	Is the Sampled Area within a Wetland? Yes No
Vegimpacted - Recent actile grazing	
Wetland	K
Isolated	PEM
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (
High Water Table (A2) Hydrogen Sulfide Od Saturation (A3) Oxidized Rhizosphere	for (C1) Drainage Patterns (B10) res on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced	
Sediment Deposits (B2) Recent Iron Reductio	
Drift Deposits (B3)	
Algal Mat or Crust (B4) Other (Explain in Ren	marks) Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): 0	
Water Table Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
Keniaks.	
	3

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	Absolute Dominant Indicato	
Instruction (Plot size:) Instruction Instruction	<u>% Cover Species? Status</u>	Number of Dominant Species (A)
3		Total Number of Dominant Species Across All Strata: 3 (B)
N/A		Percent of Dominant Species
B		That Are OBL, FACW, or FAC: (A/E
	= Total Cover	Prevalence Index worksheet: Total % Cover of: Multiply by:
	20% of total cover:	OBL species x 1 = FACW species x 2 =
Sapling/Shrub Stratum (Plot size:) 1		FAC species X2 = FAC species X3 =
2.		FACU species x 4 =
3 4 h		UPL species x 5 = Column Totals: (A) (B)
5NA		Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
3		 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
o		\sim 3 - Prevalence Index is $\leq 3.0^{1}$
50% of total cover:	= Total Cover 20% of total cover:	4 - Morphological Adaptations ¹ (Provide supportin
Herb Stratum (Plot size: 5m)		data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
Cares frank!	- 20 - 4 OBL	
Renunculus hispidis	EAL	 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Setaria pumila	FAL	
Trifolium increase		 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of more in diameter at breast height (DBH).
		height.
l		 Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
0		m) tall.
1	= Total Cover	 Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:		Woody vine – All woody vines greater than 3.28 ft in
Voody Vine Stratum (Plot size:)	10 10 10 10 10 10 10 10 10 10 10 10 10 1	height.
//////////////////////////////////////		
·		
, N/R		-
		- - Hydrophytic
N/K	= = Total Cover	- - - - Hydrophytic - Vegetation Present? YesNo
50% of total cover:	20% of total cover:	Vegetation /
N/K	20% of total cover:	Vegetation /
50% of total cover:	20% of total cover:	Vegetation /

 1 e

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Sampling Point: 6145-67

Depth	cription: (Describe			x Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks
0-6	2.54 4/1	90	51R4/6	10	<u> </u>	<u>M</u>	S:C	
Type: C=C	oncentration, D=Depl	letion, RM=F	Reduced Matrix, M	S=Masked		ains.	² Location: PL=P	ore Lining, M=Matrix.
Hydric Soil							Indicator	s for Problematic Hydric Soils ³ :
Histoso Histic E Black H Hydroge Stratifie 2 cm Mi Deplete Thick D Sandy M MLR/ Sandy F Sandy F			 Dark Surface Polyvalue Be Thin Dark St Loamy Gleys ✓ Depleted Ma Redox Dark Depleted Da Redox Depression Iron-Mangan MLRA 13 Umbric Surfa Piedmont Flo Red Parent I 	elow Surfa urface (S9) ed Matrix (trix (F3) Surface (F rk Surface (F ese Masse 6) ace (F13) (podplain S	(MLRA 1 F2) 6) (F7) 8) es (F12) (MLRA 13 oils (F19)	47, 148) LRR N, 6, 122) (MLRA 14		Muck (A10) (MLRA 147) tt Prairie Redox (A16) LRA 147, 148) mont Floodplain Soils (F19) LRA 136, 147) Shallow Dark Surface (TF12) r (Explain in Remarks) ors of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
Type: <u>C</u>	Layer (if observed): rave layer ches): (-				Hydric Soil Pre	esent? Yes
Remarks:								
æ								
							ź	

WETLAND DETERMINATION DATA FORM -	Eastern Mountains and Piedmont Region
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Project/Site: Martin County Solar City/County: Martin County Sampling Date: 11/1/20
Applicant/Owner: Savian State: KY Sampling Point: UAK-19
Investigator(s): S. Keller, C. Knaleel Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Hillfop Local relief (concave, convex, none): Convex Slope (%): 0-5
Subregion (LRR or MLRA): <u>LBBN</u> Lat: <u>37,755688</u> Long: <u>-62,473699</u> Datum: <u>NAD83 (K1F185</u>
Soil Map Unit Name: FiB: Fiveblock Fairpoint, ! Kaymine soil 0-690 slope stony NWI classification: N/R
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Hydric Soil Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No No Yes No Remarks: Kernerks: Kernerks Kernerks Kernerks Kernerks Kernerks
Veg impacted - Recent grazing Upland point associated wil Wetland K
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1)True Aquatic Plants (B14)Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10) Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)
Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes No , Depth (inches):
Water Table Present? Yes No Z Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

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	Absolute	Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1.	<u>% Cover</u>	<u>Species?</u> <u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:
0			
3N/A			Total Number of Dominant 5 Species Across All Strata: 5
4 <u>IV [/t</u>			Percent of Dominant Species
5			That Are OBL, FACW, or FAC: _2O (A/B)
6		<u> </u>	Prevalence Index worksheet:
7			Total % Cover of: Multiply by:
50% of total cover:		= Total Cover	OBL species x 1 =
	20% 0	total cover	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)			FAC species x 3 =
1			FACU species
2			
3	·		UPL species x 5 =
4		·	Column Totals: (A) (B)
		·	Prevalence Index = B/A =
6			Hydrophytic Vegetation Indicators:
7			1 - Rapid Test for Hydrophytic Vegetation
8			2 - Dominance Test is >50%
9	. <u> </u>	·	3 - Prevalence Index is ≤3.0 ¹
		= Total Cover	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5M_)		1	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Setaria pumila	20	FAL FAL	
2. Plantago major	5	FAW	Indiaston of hudric coll and watland hudrology must
3. TE: Folium repense	15	J FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Cunadon Jartylon	25	FACU	Definitions of Four Vegetation Strata:
5. PLISECASIA DEMOSILUCIA! CON	5	FACUL	beimitene er i eur vegetaten en au.
6. Tridens Flaurs	15	FAW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7. ASCLEPIOS SYRIACA	5	FACU	more in diameter at breast height (DBH), regardless of height.
8			
9			Sapling/Shrub – Woody plants, excluding vines, less
10			than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
11.			
	100 -	Total Cover	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50		total cover: 20	 Ministration and an and a statement of the s
Woody Vine Stratum (Plot size:)			Woody vine – All woody vines greater than 3.28 ft in height.
1			
2			
3. N/R			
4.			
5.			Hydrophytic Vegetation
		Total Cover	Present? Yes No
50% of total cover:	the second se		
Remarks: (Include photo numbers here or on a separate s	heet.)		
			/

Profile Desc	ription: (Describe	to the depti	n needed to docum	nent the i	ndicator	or confirm	the absence	ce of indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4.5	104R 4/3	100					Sic	
		· ·				-		
							-	
				_				
							-	-
							-	-
	-	· ;						
	-					2	-	
	oncentration, D=Dep	letion, RM=F	Reduced Matrix, MS	=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I								cators for Problematic Hydric Soils ³ :
Histosol			Dark Surface					2 cm Muck (A10) (MLRA 147)
	ipedon (A2)		Polyvalue Bei				148)	Coast Prairie Redox (A16)
Black His			Thin Dark Su			47, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye		-2)			Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Mat	a a				(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark S					Very Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dar					Other (Explain in Remarks)
	rk Surface (A12)		Redox Depres					
	ucky Mineral (S1) (L	.KK N,	Iron-Mangane		es (F12) (L	_KK N,		
	147, 148) leyed Matrix (S4)		MLRA 136			6 122)	³ In	dicators of hydrophytic vegetation and
	edox (S5)		Piedmont Flor					vetland hydrology must be present,
	Matrix (S6)		Red Parent M					inless disturbed or problematic.
	ayer (if observed):					- 12/, 14/	/ u	iness distarbed of problematic.
Type: _6								/
	11							
	thes): <u>4,5</u>						Hydric So	il Present? Yes No 🗸
Remarks:								

WETLAN	ID DETER	MINATIO	ON DATA FORM	 Eastern 	Mounta	ins and Piedr	nont Region	
Project/Site: Mactio C	aunty 50	lar	City/C	County: M	artin C	county	_ Sampling Date:	1/20
Applicant/Owner: Savian						State: KY	Sampling Point:	1
Investigator(s): 5-Kelley.		1	Secti	on, Township	, Range:			
Landform (hillslope, terrace, et				-		one): Contant	Slope (9	%): 0.5
Subregion (LRR or MLRA):			37-768071			32.450732		VAD 83 (RYFPS)
Soil Map Unit Name: F:F:		and the second sec		30-80%				
Are climatic / hydrologic condit		1 1	1		4 6	(If no, explain in		
Are Vegetation, Soil						al Circumstances"		No
Are Vegetation, Soil		100 CD 10				explain any answ		
-	-							
SUMMARY OF FINDIN	GS – Atta	ch site n	hap showing san	npiing poi	nt locati	ons, transect	s, important reatu	res, etc.
Hydrophytic Vegetation Prese Hydric Soil Present? Wetland Hydrology Present?		Yes Yes Yes	No No No	Is the Sam within a W	-	Yes	No	
Remarks: Isolated								
-701004								
		u	lettand L					
Polygon 5 separated	by rood						PEM P	55
HYDROLOGY								
Wetland Hydrology Indicate	ors:					Secondary Indic	ators (minimum of two	required)
Primary Indicators (minimum	of one is req	uired; chec	k all that apply)			Surface Soi	il Cracks (B6)	
Surface Water (A1)			True Aquatic Plants ((B14)		Sparsely Ve	egetated Concave Surfa	ice (B8)
High Water Table (A2)		_	Hydrogen Sulfide Od				atterns (B10)	
Saturation (A3)		_	Oxidized Rhizosphere		Roots (C3)			1
Water Marks (B1)		_	Presence of Reduced				Water Table (C2)	
Sediment Deposits (B2)			Recent Iron Reductio		oils (C6)	Crayfish Bu		
Drift Deposits (B3)			Thin Muck Surface (C				visible on Aerial Imager	y (C9)
Algal Mat or Crust (B4)		-	Other (Explain in Rer	narks)			Stressed Plants (D1)	
Iron Deposits (B5)							c Position (D2)	
Inundation Visible on Ae		B7)				Shallow Aq	crists and in	
Water-Stained Leaves (E	39)						raphic Relief (D4)	
Aquatic Fauna (B13)						FAC-Neutra	al Test (D5)	
Field Observations: Surface Water Present?	Yes	No	Depth (inches):					
Water Table Present?	Yes		Depth (inches):					
Saturation Present?	Yes		Depth (inches):		Wetland	Hydrology Prese	ent? Yes / No	
(includes capillary fringe)				uieus lesses				
Describe Recorded Data (stre	earn gauge, n	nonitoring v	veii, aeriai priotos, pre	evious inspect	lions), ir av	allable:		
Remarks:								

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	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1)	% Cover	Species?		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3 4N/A				Species Across All Strata: (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
50% of total cover:		= Total Cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15 M)	20% 0	IOIAI COVEL.		FACW species x 2 =
1. Solix nigra	15	/	na	FAC species x 3 =
2			Line	FACU species x 4 =
3				UPL species x 5 =
				Column Totals: (A) (B)
4 5				
6				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
	15	= Total Cove	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:5	20% of	total cover:	3	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5M)				data in Remarks or on a separate sheet)
1. Scirpus cuperious	50	1	FACUS	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Tuoha anaustiFolia	15		OBL	The management of the second
3. Echinochioa crus-galli	5		FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Rersectaria pennsylvanica	5		FALLY	Definitions of Four Vegetation Strata:
5. Bidens Frandosa	15		FACW	
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of height.
8			_	
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Herb – All herbaceous (non-woody) plants, regardless
	100 -	Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of			We dealer Allowed a feet and the COD & in
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.
1				
2				
3N/P				
4	<u></u>			Hydrophytic /
5				Vegetation
4		Total Cove		Present? Yes V No
50% of total cover:		total cover:_		
Remarks: (Include photo numbers here or on a separate si	heet.)			
7				

Sampling Point: WAS-20

Depth	107 BALL T. N					or contirm	the absence of	indicators.)
inches)	Color (moist)	% (Redo Color (moist)	x Features %	Type ¹	Loc ²	Texture	Remarks
0-5	104R 4/1		NR 4/6	8	C	M		Kemarks
		11	11. 14					
		· · · · · ·						
00: C-C	oncentration, D=Dep	lation PM-Per	luced Matrix MS	-Mackad S	Sand Gra	ine	² Location: PI = P	Pore Lining, M=Matrix.
	Indicators:		Incer Matrix, Mc	-masked (s for Problematic Hydric Soils ³
Histosol			_ Dark Surface	(\$7)				Muck (A10) (MLRA 147)
	pipedon (A2)	-	_ Polyvalue Be		e (S8) (M	LRA 147.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	st Prairie Redox (A16)
Black Hi		_	_ Thin Dark Su					LRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye		2)		Pied	mont Floodplain Soils (F19)
- 10	Layers (A5)	-	Depleted Mat			ä.,		LRA 136, 147)
	ick (A10) (LRR N)		_ Redox Dark S					Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11) _	_ Depleted Dar Bodey Depres		-		Othe	r (Explain in Remarks)
	ark Surface (A12) lucky Mineral (S1) (L	RR N	_ Redox Depre Iron-Mangane			RRN		
	147, 148)		MLRA 130		, (i 12/(E			
	leyed Matrix (S4)		Umbric Surfa		LRA 136	i, 122)	³ Indicat	ors of hydrophytic vegetation and
	edox (S5)		Piedmont Flo	S. S. S.				d hydrology must be present,
	Matrix (S6)		_ Red Parent M	laterial (F2	1) (MLRA	127, 147)	unless	disturbed or problematic.
	ayer (if observed):							
Туре:								/
Depth (inc	ches): <u>5</u>						Hydric Soil Pre	esent? Yes 🔽 No
emarks:								
								•
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WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin Courty Solar City/County: Mar	
Applicant/Owner: Savien	State: KY Sampling Point: WAS- 21
Investigator(s): S. Kelley, C. Knales Section, Township,	Range: NA
	onvex, none): Slope (%): 0.5
	ong: -82,458819 Datum: NAU83 (K1 FIPS)
Soil Map Unit Name: FFFFinddock, Fairpoint Kaymine soils, 30 +08000 slop	, , , , , , , , , , , , , , , , , , , ,
	, ,
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	
	re "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling poin	t locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sample within a Wet Hydric Soil Present? Yes No No within a Wet Wetland Hydrology Present? Yes No No No No	
Remarks: Upland point associated w/ l	Netland L
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Ro Water Marks (B1) Presence of Reduced Iron (C4)	oots (C3) Moss Trim Lines (B16) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils	
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): No No Depth (inches): No NON NO NON NO	Netland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspectio	ns), if available:
Remarks:	
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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				
			· ·)	Total Number of Dominant
ALL ALL A				Species Across All Strata: (B)
4N				Percent of Dominant Species
5	·		· · · · · · · · · · · · · · · · · · ·	That Are OBL, FACW, or FAC: (A/B)
6				Decusiones in decusionistic hands
7				Prevalence Index worksheet:
	:	= Total Cov	er	Total % Cover of:Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 5m)				FACW species x 2 =
1. Eleachus umbellata	20	./	1182	FAC species x 3 =
			Uni	FACU species x 4 =
2			:)	UPL species x 5 =
3				
4			0.0	Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				
8				1 - Rapid Test for Hydrophytic Vegetation
9			08 0	2 - Dominance Test is >50%
	20 -	= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: <u>5M</u>)		total cover.		data in Remarks or on a separate sheet)
De DE	36	1	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
		_ /		
	15		FACU	¹ Indicators of hydric soil and wetland hydrology must
3. Setaria pumila	10		FAL	be present, unless disturbed or problematic.
4. Ambrosia artemisifolia	20	\checkmark	FAW	Definitions of Four Vegetation Strata:
5. Lespedeză cureater	15		FALL	
6	2.4 N		· · · · · · ·	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7	<i>a</i> ?			more in diameter at breast height (DBH), regardless of height.
8				
				Sapling/Shrub - Woody plants, excluding vines, less
			·	than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10	·			
11	06	and the second second		Herb All herbaceous (non-woody) plants, regardless
		Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>45</u>	20% of	total cover:	10	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2			·	
3NA				
4		A 0		Understant
5.				Hydrophytic Vegetation
		Total Cove	er	Present? Yes No
50% of total cover:				
Remarks: (Include photo numbers here or on a separate s				
	1001.7			

		to the de	pth needed to docu			or contirn	n the absence	of indicati	ors.)	
epth	Matrix Color (moist)	%	Color (moist)	ox Features %	S Type ¹	Loc ²	Texture		Remarks	
iches)							-		Remarks	
-10	1048 4/1	90	54R4/6	_ <u> </u> 6		<u></u>				
			0							
	oncentration, D=Dep	letion, RM	Reduced Matrix, M	S=Masked	Sand Gra	ains.			ng, M=Matrix. oblematic Hydric	Soils ³ :
Histosol			Dark Surfac	e (S7)					A10) (MLRA 147)	
Histic Ep Black Hi Hydroge Stratified 2 cm Mu Depleted Thick Da Sandy M MLRA	bipedon (A2) stic (A3) in Sulfide (A4) i Layers (A5) ick (A10) (LRR N) d Below Dark Surfac ark Surface (A12) fucky Mineral (S1) (I A 147, 148)		Polyvalue B Thin Dark S Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Iron-Mangar MLRA 13	elow Surfac urface (S9) ed Matrix (F atrix (F3) Surface (Ff ark Surface essions (F8 nese Masse 36)	(MLRA 1 =2) 6) (F7) 3) es (F12) (L	47, 148) .RR N,	.148) C P V 0	oast Prairie (MLRA 14 iedmont Flo (MLRA 13 ery Shallow ther (Expla	e Redox (A16) 7 , 148) bodplain Soils (F19 6, 147) / Dark Surface (TF in in Remarks)	12)
Sandy R Stripped	ileyed Matrix (S4) edox (S5) Matrix (S6)		Umbric Surf Piedmont Fl Red Parent	oodplain So	oils (F19)	(MLRA 14	18) we	tland hydro	ydrophytic vegetati logy must be prese ed or problematic.	
Type: 🧕	-ayer (if observed): Dravel lager Ches): <u>10</u>						Hydric Soil	Present?	Yes 📈 N	0

WETLAN	ID DETER	RMINATI	ON DATA FORM	– Eastern	Mountai	ins and Piedmont R	egion
Project/Site: Martin Co	untry Sol	ar	City/C	County: M	artin Co	Samp	ling Date: (1/1/20
Applicant/Owner: Savion	,						mpling Point: WAS - 22
Investigator(s): 5. Kelley	C. Knike	1	Secti	on, Townshi	o, Range:		
- 11	Investigator(s): <u>5. Kelley , C. Knobel</u> Section, Township, Range: <u>NA</u> Landform (hillslope, terrace, etc.): <u>Hillslope</u> Local relief (concave, convex, none): <u>Concave</u> Slope (%): <u>0.5</u>						
Subregion (LRR or MLRA):							Datum: NAD83 (M/FIPS
Soil Map Unit Name: F:F:							
Are climatic / hydrologic condit							
Are Vegetation, Soil							? Yes No
Are Vegetation, Soil	, or Hy	drology	naturally problema	atic?	(If needed,	explain any answers in Re	emarks.)
SUMMARY OF FINDIN	GS – Atta	ch site r	map showing san	npling po	int locatio	ons, transects, imp	ortant features, etc.
Hydrophytic Vegetation Prese Hydric Soil Present? Wetland Hydrology Present? Remarks:		Yes Yes	No No No Field	Is the Sam within a W		Yes No	·
Closed pondel depres	121012	· · ·					
			Westand N	(
							PEM
HYDROLOGY							
Wetland Hydrology Indicate	ors:					Secondary Indicators (m	inimum of two required)
Primary Indicators (minimum	of one is rec	uired; chec	ck all that apply)			Surface Soil Cracks	(B6)
Surface Water (A1)			True Aquatic Plants (Concave Surface (B8)
High Water Table (A2)			Hydrogen Sulfide Od			Drainage Patterns (
Saturation (A3)			Oxidized Rhizosphere	-	Roots (C3)	Moss Trim Lines (B	
Water Marks (B1)			Presence of Reduced		ii- (00)	Dry-Season Water 1	e (53)
Sediment Deposits (B2) Drift Deposits (B3)			Recent Iron Reductio Thin Muck Surface (C			Crayfish Burrows (C	
Algal Mat or Crust (B4)			Other (Explain in Ren			Stunted or Stressed	
Iron Deposits (B5)				ilanio)		Geomorphic Position	12 N N
Inundation Visible on Aer	rial Imagery	(B7)				Shallow Aquitard (D	
Water-Stained Leaves (B	(9)					Microtopographic Re	elief (D4)
Aquatic Fauna (B13)						FAC-Neutral Test (D	15)
Field Observations:		/					
Surface Water Present?	Yes 🗸	No					
Water Table Present?		_ No					/
Saturation Present? (includes capillary fringe)	Yes	_ No	_ Depth (inches):		Wetland H	Hydrology Present? Ye	s No
Describe Recorded Data (stre	am gauge, r	monitoring	well, aerial photos, pre	vious inspec	tions), if ava	ilable:	
Remarks:						9	
Kondika							
					1		

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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		The Charles of the second s
1				Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3			·	Species Across All Strata: (B)
4. MA				Demont of Deminent Origina
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
		= Total Cov		
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size:)				FACW species x 2 =
1				FAC species x 3 =
2				FACU species x 4 =
			(UPL species x 5 =
3				
4				Column Totals: (A) (B)
5. NA				Provolonce Index ~ B/A -
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 ¹
		= Total Cove	er	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size: 5M)				data in Remarks or on a separate sheet)
1. Scippus auperinus	25		FALWS	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Tupha annusti Folia	30		081	
				¹ Indicators of hydric soil and wetland hydrology must
3. Setaria punila	15		FAL	be present, unless disturbed or problematic.
4. Bidens Frondosa	15		FACU	Definitions of Four Vegetation Strata:
5. JUNUS REFUSUS	5		FACW	25
6. Symphia trichum dumosum			FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
7. Arthraxon hispidis	3		FAL	more in diameter at breast height (DBH), regardless of
	_		Price	height.
8	<u> </u>			Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	98	Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 49		total cover:		
		total oover.	1.0.4	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2				
3IA				
4				
E	-			Hydrophytic
3				Vegetation Present? Yes No
		Total Cove		
50% of total cover:		total cover:		
Remarks: (Include photo numbers here or on a separate si	heet.)			
×				

and a strategy and a strategy and a strategy and	ription: (Describe	to the dep				or confirm	the absence	of indicators.)
Depth	Matrix	0/	Red	ox Features		1 2 2	Tautura	Demode
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc	Texture	Remarks
0-10	104R4/1	95	51R4/6	7	6			
					(* <u>*</u>)			
		·						
·								
			-					
			-					
17.00						(21	
	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	IS=Masked	Sand Gra	ins.	"Location: PL	=Pore Lining, M=Matrix. tors for Problematic Hydric Soils ³ :
Hydric Soil I								· · · · · · · · · · · · · · · · · · ·
- Histosol			Dark Surfac		(0.0) (1.1)			cm Muck (A10) (MLRA 147)
	ipedon (A2)		Polyvalue B					bast Prairie Redox (A16)
Black His			Thin Dark S			47, 148)		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gley		-2)			edmont Floodplain Soils (F19)
	l Layers (A5) ck (A10) (LRR N)		Depleted Ma Redox Dark		6)			(MLRA 136, 147) ery Shallow Dark Surface (TF12)
	Below Dark Surfac	o (A11)	Depleted Da		(C)		· · · · · · · · · · · · · · · · · · ·	ther (Explain in Remarks)
	rk Surface (A12)	e (ATT)	Redox Depr				_ 0	
	lucky Mineral (S1) (I	RR N.	Iron-Mangar			RR N.		
	147, 148)		MLRA 13			,		
	leyed Matrix (S4)		Umbric Surf		MLRA 136	6, 122)	³ Indi	cators of hydrophytic vegetation and
	edox (S5)		Piedmont Fl					land hydrology must be present,
	Matrix (S6)		Red Parent		1.2		10.11	ess disturbed or problematic.
Restrictive L	ayer (if observed):							
Type:	ravel layer							,
Depth (inc							Hydric Soil I	Present? Yes No
Remarks:	/							
2								
	2							
ř								
<i>I</i> .								

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar	City/County: Mc	urtin County	Sampling Date:/1/24
Applicant/Owner: _ Sourier	_ , ,		Sampling Point: WAS-23
	Section, Township		
Landform (hillslope, terrace, etc.): Hillslope			Slope (%): 2
Subregion (LRR or MLRA): LBRN Lat: 37.767			Datum: NADB3 (ILIFIPS)
Soil Map Unit Name: _ FIFIFiveblock , Fairpoint, Kaynine 3		A	
Are climatic / hydrologic conditions on the site typical for this time of			
Are Vegetation, Soil, or Hydrology signification	-	Are "Normal Circumstance:	
Are Vegetation, Soil, or Hydrology naturall	y problematic? (If needed, explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling point	nt locations, transed	ts, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Yes No	Is the Sam within a We		No
Upiland point	associated we	wetland M	
Wetland Hydrology Indicators:		Secondary Ind	licators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	olv)		oil Cracks (B6)
	ic Plants (B14)		Vegetated Concave Surface (B8)
	Sulfide Odor (C1)		Patterns (B10)
Saturation (A3) Oxidized R	hizospheres on Living F	Roots (C3) Moss Trin	h Lines (B16)
	f Reduced Iron (C4)		on Water Table (C2)
	Reduction in Tilled So		Burrows (C8)
	Surface (C7)		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Expl Iron Deposits (B5)	lain in Remarks)		r Stressed Plants (D1) hic Position (D2)
Inundation Visible on Aerial Imagery (B7)			quitard (D3)
Water-Stained Leaves (B9)			graphic Relief (D4)
Aquatic Fauna (B13)		FAC-Neut	
Field Observations:			
Surface Water Present? Yes No Depth (inc	hes):		
Water Table Present? Yes No Depth (inc			1
Saturation Present? Yes No Depth (inc (includes capillary fringe)	hes):	Wetland Hydrology Pres	ent? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspect	ions), if available:	
Remarks:			
			~

Sampling Point: INK-23

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: 0 (A)
		-		
2				Total Number of Dominant
3				Species Across All Strata: (B)
4NR				Descent of Descinent Coursing
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
		= Total Cov		OBL species
50% of total cover:	20% of	total cover:		
Sapling/Shrub Stratum (Plot size: 15M)				FACW species x 2 =
1. Elecunus um bellata	5	./	UPL	FAC species x 3 =
0		•		FACU species x 4 =
2				
3				UPL species x 5 =
4				Column Totals: (A) (B)
5				Burlow Lib Bit
6				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				
	5	Total Cov	er	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: _ 2, \$				4 - Morphological Adaptations ¹ (Provide supporting
-	2070 01			data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5M)			-	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Solidago canadeasis	10		FACU	
2. Ambrosic anten Stolion	40		FAW	
3. Eleannics impellater	2		UPL	¹ Indicators of hydric soil and wetland hydrology must
4. Plantcas maile	10		FACU	be present, unless disturbed or problematic.
	10			Definitions of Four Vegetation Strata:
5. Andropogon virginicus	20	\checkmark	FACU	
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
	97 =	Total Cove	or	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 48.				
	2070 01		11.1	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1	<u> </u>			
2				
3 ALA				
, top				
4				Hydrophytic
.5				Vegetation
	=	Total Cove	er	Present? Yes No
50% of total cover:	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate s	heet)			

Profile Description:	(Describe to the	depth needed to docu	ment the in	ndicator	or confirm	n the absence of i	ndicators.)	
Depth	Matrix		ox Features				_	
	r (moist) %	Color (moist)	%	Type ¹	Loc ²		Rema	rks
0-4 10-1F	74/1 101	2				CL_		
0 0 								
3 -3			-		(
	ion D=Donistion	RM=Reduced Matrix, M				² Location: PL=P	ara Lining M-Ma	felu
Hydric Soil Indicator		RM=Reduced Matrix, N	15=IVIASKED	Sand Gra	airis.		s for Problematic	
Histosol (A1)	3.	Dark Surfac	o (S7)				Muck (A10) (MLR	
Histic Epipedon (/	42)	Polyvalue B		ce (S8) (M	LRA 147.		Prairie Redox (A	
Black Histic (A3)	-/	Thin Dark S				2.7. (Carried St.)	LRA 147, 148)	,
Hydrogen Sulfide	(A4)	Loamy Gley			•	Piedn	nont Floodplain S	oils (F19)
Stratified Layers (Depleted Ma					LRA 136, 147)	
2 cm Muck (A10)	2 A A A A A A A A A A A A A A A A A A A	Redox Dark					Shallow Dark Sur	
Depleted Below L	Dark Surface (A11)	Depleted Da Redox Depr				Other	(Explain in Rema	arks)
Sandy Mucky Min	2 4			· · · · · · · · · · · · · · · · · · ·	RR N.			
MLRA 147, 14		MLRA 1			,			
Sandy Gleyed Ma		Umbric Surf		MLRA 13	6, 122)	³ Indicato	ors of hydrophytic	vegetation and
Sandy Redox (S5		Piedmont Fl				2 · · · · · · · · · · · · · · · · · · ·	d hydrology must	
Stripped Matrix (S		Red Parent	Material (F2	21) (MLR/	A 127, 147	7) unless	disturbed or prob	lematic.
Restrictive Layer (if	1							1
Type: Gravel	layer							
Depth (inches):	7					Hydric Soil Pre	sent? Yes	No
Remarks:								
).e

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin County Solar City/C	County: Martin Coulty Sampling Date: 11/2/20					
Applicant/Owner: Savion	State: Ky Sampling Point: UAS-24					
Investigator(s): S. Kelley, C. Knaloel Section, Township, Range: N/A						
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope (%):						
	Long: -02.464009 Datum: AA083(10/FIP)					
Soil Man Unit Noma EFE Enthalt Grant Humania city 30						
Soil Map Unit Name: FiF: Fiveblock, Fairpoint + Kanunine soils, 30.						
Are climatic / hydrologic conditions on the site typical for this time of year? Y						
Are Vegetation, Soil, or Hydrology significantly distur						
Are Vegetation, Soil, or Hydrology naturally problema	atic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No						
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No					
Wetland Hydrology Present? Yes No	within a Wetland? Yes No					
Remarks:						
Closed ponded depression in Field Wetland N						
Wetland N						
	PT-1					
	PEM					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1) True Aquatic Plants (I						
High Water Table (A2) Hydrogen Sulfide Odd Saturation (A3) Oxidized Rhizosphere	or (C1) Drainage Patterns (B10) es on Living Roots (C3) Moss Trim Lines (B16)					
Water Marks (B1) Presence of Reduced						
Sediment Deposits (B2)						
Drift Deposits (B3) Thin Muck Surface (C						
Algal Mat or Crust (B4) Other (Explain in Ren	narks) Stunted or Stressed Plants (D1)					
Iron Deposits (B5)	Geomorphic Position (D2)					
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)					
Water-Stained Leaves (B9)	Microtopographic Relief (D4)					
Aquatic Fauna (B13) Field Observations:	FAC-Neutral Test (D5)					
Surface Water Present? Yes Ves Depth (inches): D						
Water Table Present? Yes No Depth (inches):						
Saturation Present? Yes Ver No Depth (inches):	Wetland Hydrology Present? Yes No					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre-	vious inspections), if available:					
Remarks:						

Sampling Point: was - 24

	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size:) 1)	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	2	(A)
2						N. 18
3				Total Number of Dominant Species Across All Strata:	2	(B)
4. NIA						
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)
6				Prevalence index worksheet:		
7				Total % Cover of:	K Analátan Ing Ing Ing	
		= Total Cove				
50% of total cover:	20% of	total cover:		OBL species x 1		
Sapling/Shrub Stratum (Plot size:)				FACW species x 2	2 =	-
1				FAC species x 3	3 =	_
				FACU species x 4	4 =	
2				UPL species x 5	5 =	
3						
4NA				Column Totals: (A)	·	- (B)
51				Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indicat	ors:	
7				1 - Rapid Test for Hydrophyti		
8				2 - Dominance Test is >50%	-	
9				1.000		
		= Total Cove		3 - Prevalence Index is ≤3.0 ¹		
50% of total cover:				4 - Morphological Adaptation	s ¹ (Provide sup	porting
Herb Stratum (Plot size:)	2070 01			data in Remarks or on a s	eparate sheet)	
Herb Stratum (Plot size:)	1.27		FACID	Problematic Hydrophytic Veg	etation ¹ (Explai	n)
1. Sciepus cyperins	10					
2. 12. UCAS FOUNDOSA	_25		FALW	Indicators of hudein call and water		
3. Ambrosica artemistrica	5		FALL	¹ Indicators of hydric soil and wetla be present, unless disturbed or pr		lusi
4. Setaria numila	10		FAL			
5. Caret Frankii	5		OBL	Definitions of Four Vegetation S	Strata:	
6. Arthraxon hisedis	30		FAC	Tree - Woody plants, excluding v	ines, 3 in. (7.6	cm) or
		$-\!$		more in diameter at breast height		
7. Symphiotrichum dumasum	_10_		FAC	height.		
8				Sapling/Shrub - Woody plants, e	excluding vines	1000
9				than 3 in. DBH and greater than o		
10				m) tall.		
11.					du) planta recou	dlaga
	95	Total Cove		Herb – All herbaceous (non-wood of size, and woody plants less that		diess
50% of total cover: 47.		total cover:_	19	or once, and woody plants loss inc	11 0.20 it tail.	
	2078 01	total cover	<u> </u>	Woody vine - All woody vines gr	eater than 3.28	ft in
Woody Vine Stratum (Plot size:)				height.		
1			·			
2						
3	·					
4. N/ I						
5				Hydrophytic Vegetation		
·		Total Cove		Present? Yes	No	
E0% of total aquian					0	
50% of total cover: Remarks: (Include photo numbers here or on a separate s		total cover				
M.	,					
2						

Profile Description: (Describe to the depth	needed to docum	ent the indi	cator or con	firm the abs	ence of indicators.)
Depth Matrix		Features			
(inches) Color (moist) %	Color (moist)	<u>%</u> T	vpe ¹ Loc ²		e Remarks
0=4 104R412 95	10YR 5/8	5 4	c M	CL	
· · · · · · · · · · · · · · · · · · ·					
3					·
			10		
				-	
	aduced Metrix MC		ad Casina	21	DI - Dava Liziara M-Matrix
¹ Type: C=Concentration, D=Depletion, RM=R	Reduced Matrix, MS	=iviasked Sai	nd Grains.	Locatio	n: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Hydric Soil Indicators:	D 10 7	(07)		<u>I</u> I	
Histosol (A1)	Dark Surface (-	_ 2 cm Muck (A10) (MLRA 147)
Histic Epipedon (A2)	Polyvalue Belo				Coast Prairie Redox (A16)
Black Histic (A3)	Thin Dark Surf		LRA 147, 148	8)	(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed			-	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matri				(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Si			_	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Dark)	-	_ Other (Explain in Remarks)
Thick Dark Surface (A12)	Redox Depres				
Sandy Mucky Mineral (S1) (LRR N,	Iron-Manganes		⁻ 12) (LRR N ,		
MLRA 147, 148)	MLRA 136)				
Sandy Gleyed Matrix (S4)	Umbric Surface				³ Indicators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floo				wetland hydrology must be present,
Stripped Matrix (S6)	Red Parent Ma	aterial (F21)	(MLRA 127,	147)	unless disturbed or problematic.
Restrictive Layer (if observed):					
Type: Gravel layor	-				/
Depth (inches): 4	_			Hydric	Soil Present? Yes 📈 No
Remarks:					

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: <u>Martin County Solar</u> City/Cour	ty: Martin County Sampling Date: 11/2/20
Applicant/Owner: Source	State: KY Sampling Point: WAS-25
Investigator(s): 5-Kelley, C. Knabel Section,	
	concave, convex, none): CONVEX Slope (%): 1.5
Subregion (LRR or MLRA): LRPN Lat: Lat:	Long: -82,463912 Datum: NAD83 (KYFIPS)
Soil Map Unit Name: F:F: Fiveblok, Funpoint, Kaymine soils, 30-809	
, . , , .	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	
Are Vegetation, Soil, or Hydrology significantly disturbed	
Are Vegetation, Soil, or Hydrology naturally problematic?	
SUMMARY OF FINDINGS – Attach site map showing sample	ng point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	the Complet Area
Ilyddia Sail Decemt?	the Sampled Area thin a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
Upland point associated	w Wetland N
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (
Saturation (A3) Oxidized Rhizospheres o	n Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iro	n (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in	Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remark	
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9) Aquatic Fauna (B13)	Microtopographic Relief (D4) FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No_,/
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previou	
Describe Recorded Data (stream gauge, monitoring weil, aenai priotos, previou	
Remarks:	
X .	

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				
0			C	Total Number of Dominant 3 Species Across All Strata: 3
1 ITA				
				Percent of Dominant Species 22 2
5				That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet:
7				
		= Total Cove	ər	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:_		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15m)				FACW species x 2 =
1. Eleannos umbellata	25		UPL	FAC species x 3 =
2. Platanus occidentalis	2	<u> </u>	FACID	FACU species x 4 =
3. Querus rubra				UPL species x 5 =
	_		FACU	
4			<u></u>	Column Totals: (A) (B)
5	<u> </u>			Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	0.0			3 - Prevalence Index is ≤3.0 ¹
All		Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 11.5	20% of	total cover:_	28	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5/				
1. Roca mult: Flora	10		FALU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Ambrasice artemisted in	30	/	FACU	
3. Symphistrichum dunosun		1	FAC	¹ Indicators of hydric soil and wetland hydrology must
4. Andropogon virginicus	10	<u></u>	FALU	be present, unless disturbed or problematic.
4. ANDI ODDOVI VITO ALEVS				Definitions of Four Vegetation Strata:
5. Solidago canadens:5	3		FACM	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Cirsium vulgare			FACU	more in diameter at breast height (DBH), regardless of
7. Davcus casota			UPL	height.
8				
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
				,
11	0.			Herb – All herbaceous (non-woody) plants, regardless
/10		Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 40	20% of	total cover:_	16	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
21				
3. NA				
4	·			
e				Hydrophytic
b	-			Vegetation Present? Yes No
		Total Cove		
50% of total cover:	20% of	total cover:_		
Remarks: (Include photo numbers here or on a separate s	heet.)			
	_			

Profile Desc	cription: (Describe	to the depth	needed to docu	ment the in	dicator or	confirm	the absence of i	indicators.)	
Depth	Matrix			x Features					
(inches)	Color (moist)	%	Color (moist)		Type1	Loc ²	Texture	Remarks	
0-4	104R4/2	95	1048 5/53	5	C	M			
	<u></u>								
	0.								
	-								
	-								
		1							
				-					
-									
	.9 								
	1 <u>1</u>								
¹ Type: C=C	oncentration, D=Dep	letion, RM=F	Reduced Matrix, M	S=Masked S	and Grain	s.	² Location: PL=P	ore Lining, M=Matrix.	
Hydric Soil								s for Problematic Hy	dric Soils ³ :
-			Dark Surface	(97)				-	
Histosol			Dark Surface		(00) /847			Muck (A10) (MLRA 14	+()
	pipedon (A2)							t Prairie Redox (A16)	
	stic (A3)		Thin Dark Su			, 148)		LRA 147, 148)	
	en Sulfide (A4)		Loamy Gleye		2)			nont Floodplain Soils ((+19)
	d Layers (A5)		Depleted Ma					LRA 136, 147)	
	uck (A10) (LRR N)		Redox Dark					Shallow Dark Surface	A A A
	d Below Dark Surfac	e (A11)	Depleted Da		-7)		Other	r (Explain in Remarks)	
	ark Surface (A12)		Redox Depre						
Sandy N	/lucky Mineral (S1) (I	LRR N,	Iron-Mangan	ese Masses	(F12) (LR	RN,			
MLRA	A 147, 148)		MLRA 13	6)					
Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ace (F13) (M	LRA 136,	122)	³ Indicate	ors of hydrophytic veg	etation and
Sandy F	Redox (S5)		Piedmont Flo	odplain Soi	s (F19) (M	LRA 148) wetlan	d hydrology must be p	resent,
	Matrix (S6)		Red Parent	Material (F21) (MLRA 1	27, 147)	unless	disturbed or problema	atic.
	Layer (if observed)								
Type:	ranel layor							/	,
	ches): <u>4</u>						Hydric Soil Pre	sent? Yes	No
	cnes).		-				Hydric Soli Fre		NO
Remarks:									

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin County Golar City/County: Martin County Sampling Date: 11/2/20
Applicant/Owner: State: KY Sampling Point: WAS-26
Investigator(s): 5. Kelley, C, Knabel Section, Township, Range: NA
Landform (hillslope, terrace, etc.): <u>Hillslope</u> Local relief (concave, convex, none): <u>Concave</u> Slope (%): <u>I</u>
Subregion (LRR or MLRA): LR(LM Lat: 37.768436 Long: -83.463882 Datum: NADB3 (KIF1PS)
Soil Map Unit Name: Fif: Fivedlack, for point, Kuymine 60:15,30-2030 Slope, NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Hydric Soil Present? Yes No No No Wetland Hydrology Present? Yes No No No
Remarks: Closed ponded depression in Field
Wetland O PEM
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4) Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks) Stunted or Stressed Plants (D1)
Iron Deposits (B5) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7) Shallow Aquitard (D3)
Water-Stained Leaves (B9) Microtopographic Relief (D4) Aquatic Fauna (B13) FAC-Neutral Test (D5)
Field Observations:
Surface Water Present? Yes No Depth (inches): O
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
,
*

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:(A)
2		· · · · · · · · · · · · · · · · · · ·	-	· · · · · · · · · · · · · · · · · · ·
				Total Number of Dominant
3N				Species Across All Strata: (B)
4. NJT				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
		= Total Cov		OBL species x 1 =
50% of total cover:	20% of	total cover:		
Sapling/Shrub Stratum (Plot size: 15M)				FACW species x 2 =
1. Salit nigra	20		OBL	FAC species x 3 =
2U				FACU species x 4 =
		11		UPL species x 5 =
3				
4				Column Totals: (A) (B)
5			_	Prevalence Index = B/A =
6				
7			1.	Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9			· ·	3 - Prevalence Index is ≤3.0 ¹
	20 :	Total Cov	er	
50% of total cover:/D				4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size: 5M)	Contract View Contract			data in Remarks or on a separate sheet)
1. Science cynerines	45	/	FALW	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Science Cyperinos				
	25	~	FACUS	¹ Indicators of hydric soil and wetland hydrology must
3. Arthraxon hispidis	20		FAL	be present, unless disturbed or problematic.
4. Salik nigra	8		OBL	Definitions of Four Vegetation Strata:
5. Andropogon virginicus	2		FACU	Deminions of Four vegetation Strata.
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11	1.4.			Herb – All herbaceous (non-woody) plants, regardless
~~		Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 50	20% of	total cover:	20	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1,				
2		1	-	
2				
3N/A				
41				Hydrophytic
5				Venetation
		Total Cove	er	Present? Yes No
50% of total cover:				
Remarks: (Include photo numbers here or on a separate sl	neet.)			

Sampling Point: WAS-24

5

i tome peseription. (peseripe to the dep	th needed to document the indicator or confirm	in the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
(inches) Color (moist) %	<u>Color (moist)</u> % <u>Type¹</u> Loc ²	Texture Remarks
0-4 2,543/1 95	7.54R5/0 5 C M	SICL
· · · · · · · · · · · · · · · · · · ·		
·		
	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Dark Surface (S7)	2 cm Muck (A10) (MLRA 147)
— Histic Epipedon (A2)	Polyvalue Below Surface (S8) (MLRA 147,	
Black Histic (A3)	Thin Dark Surface (S9) (MLRA 147, 148)	(MLRA 147, 148)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19)
Stratified Layers (A5)	Depleted Matrix (F3)	(MLRA 136, 147)
2 cm Muck (A10) (LRR N)	Redox Dark Surface (F6)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Dark Surface (F7)	Other (Explain in Remarks)
Sandy Mucky Mineral (S1) (LRR N,	Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148)	MLRA 136)	
Sandy Gleyed Matrix (S4)	Umbric Surface (F13) (MLRA 136, 122)	³ Indicators of hydrophytic vegetation and
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6)	Red Parent Material (F21) (MLRA 127, 147	
Restrictive Layer (if observed):		
Type: Gravel Layer		
Depth (inches): _4		Hydric Soil Present? Yes No
		Hydric Soll Present? res No
Remarks:		
		2
		ž
		ž
		×.
		×.
		×.
		2
		2
	1.	2
		ž
		ž
		2
	2.	2
	1.	2
	*	

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Project/Site: Martin County Solat City/County: Aartin	County Sampling Date: 11/2/20
Applicant/Owner: Sauton	State: KY Sampling Point: WAS-27
Investigator(s): <u>S. Kelley</u> , <u>C. Knahel</u> Section, Township, Range	
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex	
Soil Map Unit Name: FIFFireblock, Fairpoint, Kuymine sois, 30-BORD slope, Ston-	
	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "No	rmal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If need	ed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point loc	ations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Ar within a Wetland? Hydric Soil Present? Yes No within a Wetland? Wetland Hydrology Present? Yes No within a Wetland? Remarks: No No No No	
Upland point associated w/ wet	Hand O
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living Roots (C	
Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6)	Dry-Season Water Table (C2) Crayfish Burrows (C8)
Sediment Deposits (B2) Recent non Reduction in Fined Solis (CO) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): Wetlan (includes capillary fringe)	nd Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if	available:
Remarks:	
	·

	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: D (B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6		. —		Prevalence Index worksheet:
7				Contraction of the second
		= Total Cove	ər	Total % Cover of: Multiply by:
50% of total cover:	20% of	total cover:		OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15M)				FACW species x 2 =
1. Ekagnis umbellata	20		UPL	FAC species x 3 =
	0			FACU species x 4 =
				UPL species x 5 =
3				
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =
6				
7				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	20			3 - Prevalence Index is ≤3.0 ¹
13		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: <u>1</u>	20% of	total cover:_	4	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5//)				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Ambrosion arisifolia	40		FAW	Problematic Hydrophytic Vegetation (Explain)
2. Offician Vulgare	5		FAU	
3. Solidayo canadensis	20	/		¹ Indicators of hydric soil and wetland hydrology must
S. Deltound Canadolisis	15	<u> </u>	taul	be present, unless disturbed or problematic.
4. Andropagon virginicus			PALO	Definitions of Four Vegetation Strata:
5				Tree Mondy plants evaluating visco 2 is (7.6 cm) or
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7				height.
8				
9				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
10				
11				Herb - All herbaceous (non-woody) plants, regardless
110		Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 40	20% of	total cover:	16	Woody vine - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)				height.
1				
2.				
3 1/15				
, <u>, , , , , , , , , , , , , , , , , , </u>				
4			-	Hydrophytic
5				Vegetation Present? Yes No
	An Internet and Anna	Total Cove		
50% of total cover:	20% of	total cover:_	-	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Desc	ription: (Describe	to the depth	n needed to docum	nent the i	ndicator	or confirm	n the absence of	indicators.)
Depth	Matrix	o	Redo	x Features	5			
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc ²	Texture	Remarks
0-M	10 4R 4/2	92	104R 5/8	8	_C	M	SICL	
							· · · · · · · · · · · · · · · · · · ·	
	·	· · · · · ·				S S		
		s 						
					·			
		· ·-					· · · · ·	
17						• 12/21	2	
	oncentration, D=Dep	letion, RM=F	Reduced Matrix, MS	=Masked	Sand Gra	ains.		Pore Lining, M=Matrix.
Hydric Soil			Diler	(07)				rs for Problematic Hydric Soils ³ :
Histosol			Dark Surface		00 /00 /F			Muck (A10) (MLRA 147)
— Histic Ep — Black Hi	pipedon (A2)		Polyvalue Bel					st Prairie Redox (A16)
	suc (A3) n Sulfide (A4)		Thin Dark Sur			47, 148)		ILRA 147, 148) mont Floodplain Soils (F19)
	Layers (A5)		Depleted Mat		~2)			ILRA 136, 147)
	ck (A10) (LRR N)		Redox Dark S		6)			Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dark					r (Explain in Remarks)
	irk Surface (A12)	- ()	Redox Depre					
	lucky Mineral (S1) (L	.RR N,	Iron-Mangane		(c)	RR N,		
	147, 148)		MLRA 136					
	leyed Matrix (S4)		Umbric Surfac		MLRA 13	6, 122)	³ Indicat	ors of hydrophytic vegetation and
	edox (S5)		Piedmont Flo					nd hydrology must be present,
	Matrix (S6)		Red Parent M				. 2	s disturbed or problematic.
	ayer (if observed):							
Type: G	avel layer		_					
Depth (inc	:hes): <u>4</u>		_				Hydric Soil Pre	esent? Yes No
Remarks:								
			2					
			9					
		×						

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region Project/Site: Martin County Solar ____ City/County: Martin County Sampling Date: 1 Applicant/Owner: Savion State: KY Sampling Point: Investigator(s): S. Kelley, C. Knabel Section, Township, Range: MIR Landform (hillslope, terrace, etc.): Lilblope Local relief (concave, convex, none): Concave Slope (%): 1.0 Subregion (LRR or MLRA): _ LRRN _____ Lat: _37/169333 _____ Long: _-82.461387 Datum: NADB3 (KUPIPS Soil Map Unit Name: F:F: Fireblock, Fairpoint , Kaymone Soils, 30-8000 50.10, ston- NWI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are Vegetation _____, Soil ____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area No_ Hydric Soil Present? Yes ____ No _____ within a Wetland? Yes No Wetland Hydrology Present? Remarks: Closed ponded depression in openfield Wetland PEM HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) ____ True Aquatic Plants (B14) ____ Sparsely Vegetated Concave Surface (B8) High Water Table (A2) ____ Hydrogen Sulfide Odor (C1) ___ Drainage Patterns (B10) Saturation (A3) ____ Oxidized Rhizospheres on Living Roots (C3) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) Presence of Reduced Iron (C4) Water Marks (B1) Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6) Crayfish Burrows (C8) _ Drift Deposits (B3) Thin Muck Surface (C7) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Other (Explain in Remarks) Iron Deposits (B5) Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) _ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) Water-Stained Leaves (B9) Aquatic Fauna (B13) FAC-Neutral Test (D5) **Field Observations:** No Depth (inches): Depth (inches): Surface Water Present? No No Depth (inches): O Water Table Present? Wetland Hydrology Present? Yes No Depth (inches): O Saturation Present? No Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

Tree Stratum (Plot size:) % Cover. Scecies? Status 1		Absolute	Dominant	Indicator	Dominance Test worksheet:
1	Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
2	1,				
3. Species Across All Strata: (B) 4. A Percent of Dominant Species 6. That Are OBL, FACW, or FAC: (A)B) 7. Solve of total cover 20% of total cover 50% of total cover 20% of total cover Fock We species x 1 = 7. 20% of total cover Fock We species x 2 = 7. A FAC We species x 3 = 2. Column Totals: (A) (B) 7. A FAC We species x 3 = 7. A FAC We species x 4 = 7. A Column Totals: (A) (B) 9. Fock Species x 3 = FAC We species x 5 = 7. A A Column Totals: (A) (B) 9. 50% of total cover 20% of total cover 20% of total cover 20% of total cover 4. (A) (B) 1. Schrups 30 Yerwalence index is 4.5 and (Column Totals: (A) (B) 2. Onloan to a separate sheet) Prevalence index is 50.0° (Column					
4 Percent of Dominant Species 5 That Are OBL, FACW, or FAC:		•			a second a second second second second second second
5 Image: Stratum (Plot size:		1.		57	Species Across All Strata: (B)
5. 1 That Are OBL, FACW, or FAC:	4. NA		. <u> </u>	90 	Percent of Dominant Species
6.	5				
7.	6.				
Total Cover Multiply by: Solve of total cover: 20% of total cover: Total Cover 1				2	Prevalence Index worksheet:
50% of total cover: 20% of total cover: Saading/Shrub Stratum (Plot size:) 1				:	Total % Cover of: Multiply by:
Saaling/Shub Stratum (Plot size:					
FAC species x 3 = 2		20% of	total cover:		
2	Sapling/Shrub Stratum (Plot size:)				
2. A FACU species x 4 =	1				
3					FACU species x 4 =
Column Totals: (A) (B) S N A (B) S N A (B) Prevalence Index = B/A =					UPL species x 5 =
Simple Prevalence Index = B/A =					
6. Introduct index - BA			3)		
6.	5. 0 4				Prevalence index = B/A =
7	6.		«		
8.				S	
9.	102			. 	1 - Rapid Test for Hydrophytic Vegetation
50% of total cover: 20% of total cover: 30 4 - Morphological Adaptations' (Provide supporting data in Remarks or on a separate sheet) 1 30 7 FACU 2 30 7 FACU 3 5 05% 15 5 05% 15 FACU 3 5 05% 15 5 05% 15 FACU 4 5 05% 15 5 05% 15 FACU 4 5 05% 15 5 05% 15 FACU 6 7 Abrocological Adaptations' (Provide supporting data in Remarks or on a separate sheet) 7 Abrocological Adaptations' (Explain) 7 Abrocological Adaptations' (Explain) 7 Abrocological Adaptations' (Explain) 7 Abrocological Adaptations' (Explain) 8 Settans or aval (A 9 Settans or aval (A 10 7 11 9 12 5 13 10 14 7	8				2 - Dominance Test is >50%
50% of total cover: 20% of total cover: 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 1. Sciency 5 cyliptions 30 FACU 2. Cyliptions 30 FACU 3. Eleochartis Connectional 5 0BJ 4. Juncus effortus 15 FACU 5. Symphiotic/sca 15 FACU 6. Typica conditions of Four Vegetation Strats: 5 7. Alderopoyan vittinicus 2 9. Others from box 10 11. 95 9. Others from box 10 11. 95 50% of total cover: 47.5 50% of total cover: 47.5 50% of total cover: 47.5 9. Others from box 10 11. 95 2. 50% of total cover: 47.5 20% of total cover: 9. Others from box 10 11. 95 2. 50% of total cover: 4. 90 3. 10 11. 95 2. 10 3.	9				3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 20% of total cover: 20% of total cover: Herb Stratum (Plot size: 5 30 Fracul 1. Scirpus Culle rinus 30 Fracul 2. Cuperus Striansurs 2 0BL 3. Evocinaria Competition 5 0BL 4. Duncus Officiaria 5 0BL 5. Sumphio to chum dorno com 18 Fracul 6. Tripha Competition 18 Fracul 7. Andropopan 18 Fracul Tree - Woody plants, excluding vines, 3 in (7.6 cm) or more in diameter at breast height (DBH), regardless of height. 8. Settaria 20 million 9 Fracult 9. Ordens Fromussa 10 Fracult Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tail. 10. 10 10 11 11 20 50% of total cover: 17.5 20% of total cover: 1 10. 10 10 10 10 10 11. 10 10 10 10 10 10 12. 10 10			= Total Cov	er	_
Herb Stratum (Plot size:) 30 FACU 1. Science Striges (Striges) 30 FACU 2. Cuperus Striges) 30 FACU 3. Eleccharis Connection 5 OBL 4. Juncus effects 15 FACU 5. Sumphio trichum domosticality 15 FACU 6. Tophio trichum domosticality 18 FACU 7. Andropogoon virginicus 2 FACU 8. Settania orauisticality 2 FACU 9. Oidens Frankosa 10 FACU 11. 95 FACU 9. Oidens Frankosa 10 FACU 10. 10 FACU 11. 10 FACU 12. 10 FACU 13. 10 FACU 14. 10 FACU 15. 50% of total cover: 47.5 16. 50% of total cover: 47.5 17. 10 FACU 18. 18. 19. 50% of total cover: 47.5 10. 10 FACU 10	50% of total cover:	20% of	total cover:		
1. Scimpus Cullerinus 30 FAW 2. Cuperus Striggsus 2 FAW 3. Eleocharis Conocisia 5 OBI 4. Juncus effusus 15 FAW 5. Sumphiotrichum dunatum 18 FAW 6. Typha andustifelia 5 OBI 7. Androppyno virginicus 2 FAW 8. Setana punia 3 FAW 9. Oidens Frendese 16 FAW 10. 10 FAW 11. 95 Total Cover 50% of total cover: 47.5 20% of total cover: 11. 9 5 20% of total cover: 12. 10 11. 10 12. 10 FAW 10 13. 10 FAW Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. 14. 10 10 10 15. 9 00000 vine Stratum (Plot size: 10 14. 10 10 10 10 15. 10 10 10 10	Herb Stratum (Plot size: 5M)				and the country in a president and the country of the second of the second second second second second
1. 2. Ciperus Strigstus 2. Theco 3. Evolution Strigstus 15 Theco 1 4. Juncy effortus Ju		30		FACIN	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Ekocharis compressa 5 OB1 Indicators of nyche soil and wearand nycrology must be present, unless disturbed or problematic. 4. Juncus effusios 15 FACu Definitions of Four Vegetation Strata: 5. Symphioticicus 16 FACu Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. 8. Setaria guaria 2 FACu FACu 9. Others Frontation 2 FACu Sappling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tail. 10. 11. 95 = Total Cover 50% of total cover: 47.5 20% of total cover: 11 2. 50% of total cover: 47.5 20% of total cover: 11 3. N A			~		
3. ±Pectnaris		<u> </u>		THUN	¹ Indicators of hydric soil and wetland hydrology must
4. Juncus effortsiss 15 FACW 5. Symphiotrichum domonom 18 FAW 6. Typha angustifelia 5 061 7. Androppyon virginicus 2 FAW 8. Setania gunika 8 FAW 9. Didens from data 10 FAW 10. 10. FAW Saling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. 11. 95 = Total Cover 10 50% of total cover: 47.5 20% of total cover: 11 2.	3. Eleocharis compressa				be present, unless disturbed or problematic.
5. Symphiotorichim domasom 18 FAW 6. Typha angustifalia 5 061 7. Athoropogan virginicus 2 FAW 8. Setania gunita 8 FAC 9. Others Franksa 10 FAW 10. 10 FAW 11. 95 = Total Cover 50% of total cover: 47.5 20% of total cover: 11. 95 = Total Cover 50% of total cover: 47.5 20% of total cover: 11. 95 = Total Cover 12. 10 11 13. 14 11 14. 11 11 15. 10 11 16. 10 11 17. 10 10 18. 10 10 19. 10 10 10. 10 10 11. 11 10 12. 10 10 13. 14 10 14. 10 10 14. 10 10 <td>4. Juncus effusis</td> <td>15</td> <td></td> <td>FACW</td> <td></td>	4. Juncus effusis	15		FACW	
6. Typha angustiful 5 064 7. Androocygon virginicus 2 FAC 8. Schwisz 9 5 FAC 9. Gidens Frondusa 10 FAC Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. 10. 10. FAC 11. 95 = Total Cover 50% of total cover: 47.5 20% of total cover: 11 10. 95 = Total Cover 10 Woody Vine Stratum (Plot size:) 1.		18	1	FALW	Deminions of Four Vegetation Official.
7. Aheroopayon virginicus 2 FAC 8. Settania oright 3 FAC 9. Orights Fraction FAC 9. Orights Fraction Fraction 10. 10. Fraction Fraction 11. 95 = Total Cover Softward Softward 50% of total cover: 47.5 20% of total cover: 11 2. 3 NA A Hydrophytic 3. NA A Hydrophytic Yes 4. Image: Softward origin orig		5			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
8. Settan'a 9. John'a 10. John'a	0. IV pha avaust, tolla				
9. Ordens Friendesa 10	7. Moropayon Virginicus		. <u> </u>		height.
9. 0. 10. 10. 10. 11. 12. 12. 13. 12. 13. 12. 13. 12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13. 14.	8. Setaria punia	8			Sanling/Shrub - Woody plants excluding vines less
10	9. Bidens Frondasa	10		FACU	
11. 95 = Total Cover 50% of total cover: 47.5 20% of total cover: 1 50% of total cover: 1 Woody Vine Stratum (Plot size:) 1. 3. N/A . . . 4. 5. <	10				
$\frac{95}{20\% \text{ of total cover}} = \text{Total Cover}$ $\frac{95}{20\% \text{ of total cover}} = \text{Total Cover}$ $\frac{1}{1}$ $\frac{1}{2}$ $\frac{1}{2$		<u>.</u>			
50% of total cover: 47.5 20% of total cover: I Woody Vine Stratum (Plot size:))		95			
Woody Vine Stratum (Plot size:) 1			= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size:) height. 1	50% of total cover: 47.	5 20% of	total cover:		Woody vine – All woody vines greater than 3 28 ft in
4	Woody Vine Stratum (Plot size:)				
4	1			×	
4	2			9 -1-1 -1	
4	A.10				
5 = Total Cover Vegetation Present? Yes No	3. <u>IVIA</u>		() 		
5 = Total Cover Vegetation Present? Yes No	4	· <u> </u>			Hydrophytic
	5				
			= Total Cove	ər	Present? Yes No
50% of total cover: 20% of total cover:	50% of total cover:				
Remarks: (Include photo numbers here or on a separate sheet.)					

Profile Desc	cription: (Describe	to the dep	th needed to docur	nent the	indicator	or confirm	n the absence	e of indicators.)
Depth <u>Matrix</u>		Redox Features				_	_	
(inches)	Color (moist)		Color (moist)	_%	_Type'	_Loc ²	Texture	Remarks
0-4	104R 5/1	95	54B3/4	5	<u> </u>	PL	SICL	
10 -1					_		-1-	
\								
		·						
							-	
						10		
	-						-	
							1	
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	² Location: P	PL=Pore Lining, M=Matrix.
Hydric Soil								ators for Problematic Hydric Soils ³ :
Histosol	(A1)		Dark Surface	(S7)			2	2 cm Muck (A10) (MLRA 147)
Histic E	pipedon (A2)		Polyvalue Be	low Surfa	ce (S8) (M	LRA 147,		Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su			47, 148)		(MLRA 147, 148)
Hydrogen Sulfide (A4)Loamy Gleyed Matrix (F2)							F	Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Matrix (F3)					(MLRA 136, 147)
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Depleted Below Dark Surface (A11) Depleted Dark Surface (F7)								/ery Shallow Dark Surface (TF12)
	d Below Dark Surface ark Surface (A12)	e (A11)	Redox Depre				·	Other (Explain in Remarks)
	lucky Mineral (S1) (L	RR N	Iron-Mangan			RR N.		
10 million (10 mil	A 147, 148)		MLRA 13		00(112)(1			
	Bleyed Matrix (S4)		Umbric Surfa		(MLRA 13	6, 122)	³ Inc	licators of hydrophytic vegetation and
	Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14				18) we	etland hydrology must be present,	
	Matrix (S6)		Red Parent Material (F21) (MLRA 127, 147				7) un	less disturbed or problematic.
	Layer (if observed):							ä
Type:	bravel layer						/	
Depth (in	ches): <u>4</u>					Hydric Soil	Present? Yes No	
Remarks:								
1.								

WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region

Subregion (LRR or MLRA): LRRN Lat: 37.749454 Soil Map Unit Name: FiF: Fieldock, Foirpoint, & Kaymine col	State:								
Are climatic / hydrologic conditions on the site typical for this time of year? Yo									
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No									
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)									
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.									
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No	the Sampled Area thin a Wetland? Yes No								
Upland point associated	with Wetland P								
HYDROLOGY Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)								
Primary Indicators (minimum of one is required; check all that apply)									
Surface Water Present? Yes Depth (inches):	-								
Water Table Present? Yes No Depth (inches):	— Westered Hudgelergy Descent 2, Ves. No. /								
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Remarks:									