Appendix F

Wetland Delineation Report

WETLAND DELINEATION REPORT

Union Pacific Railroad Company Springfield Subdivision, SPCSL 2A (HSR) Tier 3 (MP 147 to MP 203)

LOGAN AND SANGAMON COUNTIES STATE OF ILLINOIS

PREPARED FOR:

UNION PACIFIC RAILROAD COMPANY
&
ILLINOIS DEPARTMENT OF TRANSPORTATION

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OLSSON PROJECT No. 010-1855

TABLE OF CONTENTS

		Page
I.	INTRODUCTION	1
II.	METHODS	1
III.	SUMMARY OF FINDINGS	2
IV.	REFERENCES	5
<i>Table</i> Table	e <u>s</u> e 1. Summary of Wetlands Delineated within the Tier 3 Study Area	3
Appe Appe	ndices ndix A Wetland Determination Data Forms ndix B Wetland Plant Species Lists ndix C Figures - Study Area Map - Wetland Delineation Maps	

I. INTRODUCTION

Olsson Associates (Olsson) was retained by the Union Pacific Railroad Company (UPRR) to conduct a wetland delineation for the Tier 3 project alignment located between Mile Posts (MP) 147 and MP 203 of the Springfield Subdivision. The wetland delineation included all project locations requiring siding track construction, signal/turnout pad construction, and hydraulic structure replacements where waters of the U.S. (Clean Water Act, Section 404) were believed to be present and Section 404 permitting was anticipated to be required.

As part of Tier 3, wetland delineations were conducted between 2010 to 2012 for the following locations:

- Athol Siding (MP 153.56 to MP 155.68), including all turnouts and structures within these limits
- Elkhart Siding and Track Construction (MP 161.90 to MP 170.45), including all turnouts and structures within these limits.
- Ridgely Siding (MP 180.92 to MP 183.33), including all turnouts and structures within these limits
- Auburn Siding (MP 197.88 to MP 200.10), including all turnouts and structures within these limits.
- Structures at MP 149.50, 149.90, 152.70, 158.10, 171.10, 177.40, 177.80, 179.08, 180.00, 180.75, 190.80, 192.10, 196.80, 197.72, and 201.60.
- Turnout Pads at MP 149.85, 150.92, 153.51, and 156.77.

II. METHODS

Two major components comprised the wetland delineation, including a preliminary review of readily available resources, and a site visit that included a field investigation.

Review of Existing Resources

Several resources were reviewed as part of the wetland evaluation process. These resources included:

- 1. USDA-NRCS-NCGC. 2001. Digital Raster Graphic MrSID Mosaic, Logan and Sangamon Counties, Illinois.
- 2. USDA-FSA-APFO National Aerial Imagery Program (NAIP). 2010. Logan and Sangamon Counties, Digital Orthophotos.
- 3. USFWS, Illinois DNR, and Illinois Natural History Survey. 1996. National Wetlands Inventory in Illinois, 1987, July 19, 2007 edition.
- 4. USDA-NRCS. 2010. Soil Survey Geographic (SSURGO) Database for Logan and Sangamon Counties, Illinois (Digital Soils Data).
- 5. USDA-NRCS. 2010. Soil Data Mart. Map Unit Descriptions. Logan and Sangamon Counties, Illinois.
- 6. USDA-NRCS. 2010. Hydric Soils List for Logan and Sangamon Counties, Illinois Tabular Data Version: 15.
- 7. Illinois DNR. 1994. Streams and Shorelines in Illinois. Edition 04/01/2004.

By evaluating the above resources, Olsson biologists were able to determine areas that had probable features to support wetlands, such as areas with blue lines on the topographic maps which are indicative of waterways, areas depicted as wetland polygons on the National Wetlands Inventory, and areas supporting hydric soils or hydric inclusions as defined by the SSURGO database.

Mapping of the above resources was conducted prior to the field investigation and referenced during the field investigation.

Field Investigation

The wetland delineation was conducted according to methodology outlined by the *Corps Wetland Delineation Manual (1987)* and the *Regional Supplement to the Corps Wetland Delineation Manual: Midwest Region, Version 2.0* (2010).

Olsson staff visited the site in October 2010, November 2010, December 2010, April 2011, May 2011, June 2011, April 2012, and July 2012 to conduct the on-site wetland delineation. The timeframe for completing the majority of the delineations coincided with the end/beginning of the growing season; however, sufficient wetland characteristics were present to determine the wetland boundaries. The delineation was conducted by several Olsson biologists traversing the study area and walking areas to closely inspect potential wetlands and other waters. Sample points were recorded on Wetland Determination Data Forms - Midwest Region (Appendix A), to document the presence or absence of hydrophytic vegetation, hydric soils, and wetland hydrology according to guidelines described above. Information on upland areas and non-wetland waterways were recorded on data forms or in a field logbook, but are not included in Appendix A. Photographs were taken during the site visits to document on-site conditions. Wetland boundaries and the locations of sample points, photos, and other features were recorded using handheld Global Positioning System with sub-meter accuracy.

All species observed in each wetland area were recorded to determine the floristic quality using the Floristic Quality Assessment (FQA; Taft et al. 1997). Species lists are provided in Appendix B. Please note that given the late-autumn and early-spring timeframe that the majority of wetland delineations were completed, that some of the vegetation was difficult to identify to species based on the absence of floral characteristics. Therefore, the FQA is likely biased high or low for numerous wetland areas where complete species lists could not be compiled.

The study area for each construction site varied depending on the construction type, and below is a summary.

- <u>Siding Tracks and Turnouts</u> A 100-ft buffer outward and parallel to each side of the mainline track, throughout the extent of the proposed construction.
- <u>Structures</u> A 100-ft buffer outward and parallel to each structure, and 100-ft in each direction from the structure.
- <u>Turnouts</u> A 100-ft buffer outward and parallel to each side of the mainline track, and 400-ft in each direction from the structure.

The study area was exceeded in instances when wetlands within the study area extended outside of the abovementioned parameters.

III. SUMMARY OF FINDINGS

The wetland delineation for Tier 3 identified 91 wetland areas totaling approximately 31 acres within the study area (see Figures; Appendix C). Table 1 below lists each wetland area identified within the study area, the community type according to the Cowardin classification system, size, FQA values (also see Appendix B), and figure reference (see Appendix C). Please note that wetland delineation maps (Appendix C) are provided for the siding tracks and structure study areas where wetlands were observed; however, the maps are not provided for structures where no wetlands were identified.

Table 1. Summary of Wetlands Delineated within the Tier 3 Study Area.

	Table 1. Summary of V	Size	FQA		lier 3 Study Area.
Wetlend ID	Cowardin				Figure Deference
Wetland ID	Classification ¹	(Acres)	Mean C	FQI	Figure Reference
KS-T	PEMA	0.241	0.00	0.00	Turnout Pad 150.92 (Fig 2)
KS-S	PEM/POOC	0.619	1.00	1.00	Turnout Pad 150.92 (Fig 2)
MP-3A	PEM/PSSC	0.042	2.00	3.46	Culvert 152.70 (Fig 2)
MP-3B	PEM/PSSC	0.009	2.00	3.46	Culvert 152.70 (Fig 2)
MP-3C	PEM/PSSC	0.010	2.00	3.46	Culvert 152.70 (Fig 2)
DP-U	PEMA	0.055	2.00	2.00	Athol Siding (Fig 2A)
DP-V1	PEMA	0.034	1.00	1.41	Athol Siding (Fig 2A)
DP-V2	PEMA	0.005	1.00	1.41	Athol Siding (Fig 2A)
KS-60	PEM/PSSC	0.061	2.00	2.00	Athol Siding (Fig 2A)
KS-59	PEMC/PFOA	0.775	1.00	2.00	Athol Siding (Fig 2A & 2B)
KS-58	PEM/PFOC	0.963	4.00	4.00	Athol Siding (Fig 2C)
KS-67	PEM/PFOC	0.019	0.00	0.00	Bridge 158.10 (Fig 2)
DP-D	PEMA	1.738	4.25	8.50	Elkhart Siding (Fig 2A)
DP-B2	PEMA/PEMC	0.020	4.33	7.50	Elkhart Siding (Fig 2B)
DP-B1	PEMA/PEMC	0.034	4.33	7.50	Elkhart Siding (Fig 2B)
NVM-3	PEMA	0.003	0.00	0.00	Elkhart Siding (Fig 2B)
DP-A	PEMA	0.055	0.00	0.00	Elkhart Siding (Fig 2B)
NVM-2A	PEM/PFOA	0.010	2.89	8.67	Elkhart Siding (Fig 2B)
NVM-2B	PEM/PFOA	0.165	2.89	8.67	Elkhart Siding (Fig 2B)
NVM-1	PEMC	0.129	6.00	6.00	Elkhart Siding (Fig 2C)
DP-C	PEMA	0.007	0.00	0.00	Elkhart Siding (Fig 2C)
DP-E	PEMA	0.046	0.00	0.00	Elkhart Siding (Fig 2D)
NVM-4	PEM/PFOA	0.019	3.00	4.24	Elkhart Siding (Fig 2D)
NVM-5	PEMC/PFOA	0.033	1.75	3.50	Elkhart Siding (Fig 2E)
NVM-6A	PEM/PFOA	0.020	2.00	2.00	Elkhart Siding (Fig 2E)
NVM-6B	PEM/PFOA	0.011	2.00	2.00	Elkhart Siding (Fig 2E)
NVM-6C	PEM/PFOA	0.012	2.00	2.00	Elkhart Siding (Fig 2E)
NVM-6D	PEM/PFOA	0.005	2.00	2.00	Elkhart Siding (Fig 2E)
NVM-7A	PEMA	0.013	0.00	0.00	Elkhart Siding (Fig 2E)
NVM-7B	PEMA	0.004	0.00	0.00	Elkhart Siding (Fig 2E)
NVM-8	PEMC	0.177	2.50	3.53	Elkhart Siding (Fig 2E & 2F)
DP-F	PEMC	0.001	0.00	0.00	Elkhart Siding (Fig 2F)
NVM-9	PEMA/PEMC/PSSA	0.346	2.33	4.03	Elkhart Siding (Fig 2F)
DP-G	PEMA	0.009	3.00	4.24	Elkhart Siding (Fig 2F)
NVM-10A	PEMA	0.009	0.00	0.00	Elkhart Siding (Fig 2F)
NVM-10B	PEMA	0.011	0.00	0.00	Elkhart Siding (Fig 2G)
NVM-11	PEMC	0.011	2.50	3.53	Elkhart Siding (Fig 2G)
DP-H	PEM/PSSA	2.246	4.50	9.00	Elkhart Siding (Fig 2H)
NVM-12A	PEM/PSSA	0.104	1.83	4.48	Elkhart Siding (Fig 2I)
NVM-12B	PEM/PSSA	0.025	1.83	4.48	Elkhart Siding (Fig 2I)
NVM-13	PFOA	0.188	2.20	4.92	Elkhart Siding (Fig 2I)
NVM-14	PEM/PFOA	0.800	2.71	7.17	Elkhart Siding (Fig 2I)
DP-I	PEMC	0.196	2.75	5.50	Elkhart Siding (Fig 2I)
DP-T	PEMA	0.043	2.00	3.46	Elkhart Siding (Fig 2I)
DP-S	PEMA	0.135	3.50	7.00	Elkhart Siding (Fig 2J)
DP-Q2	PEMA/PEMC	0.314	2.50	3.53	Elkhart Siding (Fig 2J)
DP-Q1	PEMA/PEMC	0.575	2.50	3.53	Elkhart Siding (Fig 2J)
DP-J	PEMA	0.101	1.75	3.50	Elkhart Siding (Fig 2J)
DP-R	PEMC	0.411	0.33	0.57	Elkhart Siding (Fig 2J)
DP-K	PEMA	0.108	6.33	10.96	Elkhart Siding (Fig 2J)
DP-L	PEMC	0.162	3.33	8.16	Elkhart Siding (Fig 2J)

	Cowardin	Size	FQA ²		
Wetland ID	Classification ¹	(Acres)	Mean C	FQI	Figure Reference
DP-M	PEMA	0.139	3.50	7.00	Elkhart Siding (Fig 2J)
DP-P	PEMA	0.011	2.00	2.00	Elkhart Siding (Fig 2J)
DP-O	PEMA	0.336	2.25	4.50	Elkhart Siding (Fig 2J & 2K)
DP-N	PEM/PFOA	0.741	2.00	2.83	Elkhart Siding (Fig 2J & 2K)
DP-EE	PEMA	6.069	4.00	4.00	Elkhart Siding (Fig 2K & 2L)
MP-19A	PEMA	2.910	3.00	5.20	Elkhart Siding (Fig 2K & 2L)
MP-19B	PEMA	0.347	3.00	5.20	Elkhart Siding (Fig 2M)
DP-FF	PEMA	2.356	7.00	7.00	Elkhart Siding (Fig 2M)
NVM-32B	PEMA	0.018	3.33	5.77	Elkhart Siding (Fig 2M)
NVM-32A	PEMA	0.016	3.33	5.77	Elkhart Siding (Fig 2M)
NVM-33	PEM/PSSA	0.009	1.00	1.41	Elkhart Siding (Fig 2M)
CT-F	PEMA	0.004	4.00	4.00	Culvert 171.10 (Fig 2)
TPA-177.80A	PEMC/PFOA	0.041	1.57	4.15	Culvert 177.40 & 177.80 (Fig 2)
TPA-177.80B	PEMC/PFOA	0.003	1.57	4.15	Culvert 177.40 & 177.80 (Fig 2)
MP-4	PEMA	0.071	2.67	4.62	Culvert 179.08 (Fig 2)
MP-6A	PEM/PFOA	0.859	1.00	1.41	Bridge 180.00 (Fig 2)
MP-6B	PEM/PFOA	1.499	1.00	1.41	Bridge 180.00 (Fig 2)
MP-5	PEM/PFOA	1.582	3.67	6.36	Bridge 180.00 (Fig 2)
TPA-JJ2	PEMA	0.221	4.00	8.00	Ridgley Siding (Fig 2A)
TPA-KK2	PEMA/PEMC	0.062	1.50	2.12	Ridgley Siding (Fig 2A)
TPA-JJ1	PEMA	0.173	4.00	8.00	Ridgley Siding (Fig 2A)
TPA-KK1	PEMA/PEMC	0.264	1.50	2.12	Ridgley Siding (Fig 2A)
KS-57B	PEMF	0.025	1.00	1.00	Ridgley Siding (Fig 2D)
KS-57A	PEMF	0.010	1.00	1.00	Ridgley Siding (Fig 2D)
KS MP_1A	PEMC	0.003	7.50	10.61	Bridge 197.72 (Fig 2)
KS MP_1B	PEMC	0.002	7.50	10.61	Bridge 197.72 (Fig 2)
KS MP_1C	PEMC	0.003	7.50	10.61	Bridge 197.72 (Fig 2)
KS MP_1D	PEMC	0.003	7.50	10.61	Bridge 197.72 (Fig 2)
KS-56	PFOA	0.211	2.00	3.46	Auburn Siding (Fig 2A)
KS-55	PFOA	0.422	2.00	3.46	Auburn Siding (Fig 2A & 2B)
KS-54	PEM/PFOC	0.367	4.00	4.00	Auburn Siding (Fig 2B)
KS-53	PEM/PFOC	0.229	4.00	8.00	Auburn Siding (Fig 2B)
KS-52	PEMF/PFOC	0.031	3.75	7.50	Auburn Siding (Fig 2C)
KS-51	PEMC/PFOA	0.121	3.50	4.95	Auburn Siding (Fig 2C)
KS-50	PEMF/PFOC	0.134	4.25	8.50	Auburn Siding (Fig 2C)
KS-48	PEMA	0.210	0.00	0.00	Auburn Siding (Fig 2D)
KS-49B	PEMA/PFOC	0.017	1.67	2.89	Auburn Siding (Fig 2D)
KS-49A	PEMA/PFOC	0.014	1.67	2.89	Auburn Siding (Fig 2D)
KS-68A	PEM/PFOC	0.428	3.40	7.60	Bridge 201.60 (Fig 2)
KS-68B	PEM/PFOC	0.191	3.40	7.60	Bridge 201.60 (Fig 2)
Total		31.314			

PEMA = Palustrine Emergent Temporarily Flooded

PEMC = Palustrine Emergent Seasonally Flooded
PEMF = Palustrine Emergent Semipermanently Flooded

PSSA = Palustrine Scrub Shrub Temporarily Flooded

PSSC = Palustrine Scrub Shrub Seasonally Flooded
PFOA = Palustrine Forested Temporarily Flooded

PFOC = Palustrine Forested Seasonally Flooded

² FQA reported values include the mean coefficient of conservatism (Mean C) and the Floristic Quality Index (FQI); see Appendix B.

IV. REFERENCES

Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss.

U. S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

Taft, J.B., G.S. Wilhelm, D.M. Ladd, and L.A. Masters. 1997. Floristic Quality Assessment for Vegetation in Illinois, a Method for Assessing Vegetation Integrity.

Wetland Determination Data Forms

			nty: Logan	Sampling Date:	10/27/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	CP DP 9
Investigator(s): DP, DM		Sec	tion, Township, Range: S6,		
	Water channel			eave, convex, none): conc	ave
· · · /	40° 2' 41.54" N	Long:	89° 27' 44.15" W	Datum: NAD 83	- # N
Soil Map Unit Name: 3107+ - Sawmill	·			NWI Classifica	
Are climatic/hydrologic conditions on th	e site typical for thi	s time of year?	Yes X No (If no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly dist	turbed? Are "Normal C	ircumstances" present?	Yes X No
Are Vegetation, Soil,	or Hydrology	naturally problem	natic? (If neede	d, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach sit	e map showing sa	ampling point loca	tions, transects, importan	t features, etc.	
Hydrophytic Vegetation Present?	Yes X No	<u> </u>			
Hydric Soil Present?	Yes X No	l:	s the Sampled Area within a	a Wetland? Yes	X No
Wetland Hydrology Present?	Yes X No	_			
Remarks: Wetland DP-F. PEMC. F	ringe wetland alon				
remarks. Wettand Dr -1 . 1 Elvio. 1	Tilige Welland alon	g chamici.			
VEGETATION - Use scientific names	of plants.				
	Absolute	Dominant Inc	dicator Dominance Test		
Tree Stratum (Plot size:) % Cover	Species? S	Status Number of Domin	•	
1.			That Are OBL, FA	ACW, or FAC:	(A)
2					
3			Total Number of I Species Across A		(p)
5.			—— Species Across A	···· Strata.	(B)
J		= Total Cover			
Sapling/Shrub Stratum (Plot size:		10101 00101	Percent of Domin That Are OBL, FA	•	(A/B)
1			That Are Obl., 17		(А/В)
2.			Prevalence Inde	x Worksheet:	
3.			OBL species	x 1	= 0
4.			FACW species	x 2	= 0
5.			FAC species	x 3	= 0
	0 =	= Total Cover	FACU species	x 4	= 0
Herb Stratum (Plot size: r = 5')		UPL species	x 5	= 0
Phalaris arundinacea	100	yes FA	ACW+ Column Totals:	0 (A)) <u> </u>
2			Preva	alence Index = B/A =	
3					
4				getation Indicators:	4-4:
5				Test for Hydrophytic Vege ance Test is >50%	tation
6				ence Index is <3.01	
8.				ological Adaptations ¹ (Prov	vide supporting
9.				Remarks or on a separate sheet)	ide supporting
0.				atic Hydrophytic Vegetation	n¹ (Explain)
·	100 =	= Total Cover		, , , ,	
Woody Vine Stratum (Plot size:			¹Indicators of h	nydric soil and wetland hyd	irology
1.				nt, unless disturbed or pro	
2.					
-·- <u>-</u>	0	= Total Cover	Hydrophytic \	Vegetation Present? Y	es X No
			, , ,	•	

Depth Matrix	Neuc	x Features					
(inches) Color (moist) % Color	(moist)	% Type ¹	Loc ²	Texture	Remarks		
							
Type: C=Concentration, D=Depletion, RM=Redu	ced Matrix, CS	Covered or Co	ated Sand Grai	ns. ² Location	n: PL=Pore Lining, M=Matrix		
ydric Soil Indicators				Indi	cators for Problematic Hydric Soils ³		
Histosol (A1)		Sandy Gleyed	Matrix (S4)		Coast Prairie Redox (A16)		
Histic Epipedon (A2)		Sandy Redox (Dark Surface (S7)		
Black Histic (A3)		Stripped Matrix			Iron-Manganese Masses (F12)		
Hydrogen Sulfide (A4)	-	Loamy Mucky I	` '		Very Shallow Dark Surface (TF12)		
Stratified Layers (A5)	-	Loamy Gleyed		X	Other (Explain in Remarks)		
2 cm Muck (A10)		Depleted Matrix			_		
Depleted Below Dark Surface (A11)		Redox Dark Su	, ,				
Thick Dark Surface (A12)		Depleted Dark	Surface (F7)	3.			
					ndicators of hydrophytic vegetation wetland hydrology must be present		
Sandy Mucky Mineral (S1)		Redox Depress	SIUIIS (FO)		and wetland hydrology must be presen unless disturbed or problematic.		
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3)		Redox Depress	SIONS (FO)	anu			
5 cm Mucky Peat or Peat (S3)		Redox Depress	SIONS (FO)	anu			
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed)		Redox Depress	SIONS (FO)	anu			
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type:		Redox Depress	SIUTIS (FO)		unless disturbed or problematic.		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches):				Hydric :	unless disturbed or problematic. Soil Present? Yes X No		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches):	ussumed hydric			Hydric :	unless disturbed or problematic. Soil Present? Yes X No		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches):	nssumed hydric			Hydric :	unless disturbed or problematic. Soil Present? Yes X No		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No pit dug due to inundation. Soils a	ussumed hydric			Hydric :	unless disturbed or problematic. Soil Present? Yes X No		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No pit dug due to inundation. Soils a	ussumed hydric			Hydric :	unless disturbed or problematic. Soil Present? Yes X No		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No pit dug due to inundation. Soils a		per Step 12b o	f the 1987 Corp	Hydric : s Delineation I	unless disturbed or problematic. Soil Present? Yes X No		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No pit dug due to inundation. Soils a	neck all that app	per Step 12b o	f the 1987 Corp	Hydric : s Delineation I	unless disturbed or problematic. Soil Present? Yes X No		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No pit dug due to inundation. Soils a HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; ch	neck all that app	per Step 12b o	f the 1987 Corp	Hydric : s Delineation I	unless disturbed or problematic. Soil Present? Yes X Notes Note Manual. tors (minimum of two required)		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No pit dug due to inundation. Soils a HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; ch X Surface Water (A1)	neck all that app Wate Aqua	per Step 12b o	f the 1987 Corp Sees (B9)	Hydric : s Delineation I	unless disturbed or problematic. Soil Present? Yes X Note that the second seco		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No pit dug due to inundation. Soils a RYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; check of the control o	neck all that app Wate Aqua	per Step 12b o	f the 1987 Corp Ser es (B9) (B14)	Hydric : s Delineation I	unless disturbed or problematic. Soil Present? Yes X Note that No		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No pit dug due to inundation. Soils a RYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; ch X Surface Water (A1) High Water Table (A2) X Saturation (A3)	neck all that app Wate Aqua True Hydri	per Step 12b o	f the 1987 Corp Ser es (B9) (B14)	Hydric : s Delineation I condary Indica	unless disturbed or problematic. Soil Present? Yes X Note that No		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No pit dug due to inundation. Soils a HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; ch X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	neck all that app Wate Aqua True Hydri	per Step 12b o	f the 1987 Corp See (B9) (B14) dor (C1) res on Living Ro	Hydric : s Delineation I condary Indica	unless disturbed or problematic. Soil Present? Yes X Note Manual. tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)		
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Project/Site: SPCSL 2A (Tier 3)		City/County	: Logan	Sampling Date:	11/3/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	CT 17
Investigator(s): CT		Section	n, Township, Range: S27,	T18N, R04W	
	Drainage			ve, convex, none) : conc	ave
· · · /	39° 58' 35.51" N	Long:	89° 31' 37.49" W	Datum: NAD 83	
Soil Map Unit Name: 3107A - Sawmi	Il silty clay loam, 0-	2% slopes, frequentl	ly flooded	NWI Classifica	ition: None
Are climatic/hydrologic conditions on t	the site typical for this	s time of year?	Yes X No (If	no, explain in Remarks)	
Are Vegetation, Soil	, or Hydrology	significantly disturb	oed? Are "Normal Circ	cumstances" present?	Yes X No
Are Vegetation , Soil	, or Hydrology	naturally problemation	c? (If needed,	, explain any answers in l	Remarks.)
SUMMARY OF FINDINGS - Attach s	ite map showing sa	mpling point locatio	ns, transects, important	features, etc.	
Hydrophytic Vegetation Present?	Yes X No				
Hydric Soil Present?	Yes X No	_ Is th	he Sampled Area within a \	Wetland? Yes X	K No
Wetland Hydrology Present?	Yes X No	_			
					
Remarks: Wetland CT-F. PEMA. sedimentation area.	One culvert is blocke	ed due to sedimentation	on deposits. Wetland within	n banks of drainage and	
VEGETATION - Use scientific name	s of plants.				
Tree Stratum (Plot size: r = 30'	Absolute) % Cover	Dominant Indica Species? Statu			
1.	_		That Are OBL, FAC	CW, or FAC:	1 (A)
2.			_		
3			Total Number of Do		
4			Species Across All	Strata:	1 (B)
5					
		= Total Cover	Percent of Domina	•	
Sapling/Shrub Stratum (Plot size:	<u>r = 15'</u>)		That Are OBL, FAC	CW, or FAC:	100% (A/B)
1			_		
2			Prevalence Index		_ 0
3			OBL species FACW species	x 1 = x 2 =	
5.			FAC species	x2-	
·		Total Cover	FACU species	x4=	
Herb Stratum (Plot size: r = 5')		UPL species	x 5 =	
Phalaris arundinacea	 ′ 95	yes FACV		0 (A)	
2. Spartina pectinata	5	FACV	W+ Prevale	ence Index = B/A =	, , ,
3.					
4.			Hydrophytic Vege	tation Indicators:	
5.			1. Rapid To	est for Hydrophytic Veget	tation
6.			X 2. Dominar	nce Test is >50%	
7			3. Prevaler	nce Index is ≤3.01	
8			4. Morphol	logical Adaptations¹ (Provi	de supporting
9				marks or on a separate sheet)	4
10			Problemati	ic Hydrophytic Vegetatior	ו' (Explain)
	100 =	= Total Cover			
Woody Vine Stratum (Plot size:	r = 15')		-	dric soil and wetland hyd	
1			must be present	t, unless disturbed or prob	olematic.
2	0	= Total Cover	Hydrophytic Ve	egetation Present? Ye	es X No
Remarks: (Include photo numbers he	ere or on a separate	sheet.)	<u> </u>		
PH HSR_CT_NOV12010_058 - 065.					

Depth	Matrix		R	edox Fe	atures			
(inches)	Color (moist)	% C	olor (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-14	10 YR 2/2	100 7	7.5 YR 5/6	3	D	М	Silty	
¹ Type: C=C	concentration, D=Dep	oletion, RM=Re	educed Matrix,	CS=Cov	ered or Co	ated Sand Gra	ains. ² Locatio	on: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators						Ind	icators for Problematic Hydric Soils ³ :
Histoso	ol (A1)			San	dy Gleyed	Matrix (S4)		Coast Prairie Redox (A16)
Histic I	Epipedon (A2)			San	dy Redox (S5)		Dark Surface (S7)
Black I	Histic (A3)			— Strip	ped Matrix	(S6)		Iron-Manganese Masses (F12)
Hydrog	gen Sulfide (A4)		_	 Loai	my Mucky I	Mineral (F1)		Very Shallow Dark Surface (TF12)
	ed Layers (A5)		_		-	Matrix (F2)		Other (Explain in Remarks)
2 cm N	/luck (A10)			X Dep	leted Matrix	(F3)		_
Deplet	ed Below Dark Surfa	ice (A11)	_	Red	ox Dark Su	rface (F6)		
Thick [Dark Surface (A12)		_	— Dep	leted Dark	Surface (F7)	3.	
Sandy	Mucky Mineral (S1)		_	Red	ox Depress	sions (F8)		ndicators of hydrophytic vegetation d wetland hydrology must be present,
	5 cm Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3)							unless disturbed or problematic.
5 cm N	Mucky Peat or Peat (S	S3)						unless disturbed of problematic.
		S3) 					Ī	unless disturbed of problematic.
Restrictive	Mucky Peat or Peat (S Layer: (if observed)	S3) ————						unless disturbed of problematic.
	Layer: (if observed)	S3) 					Hydric	<u> </u>
Restrictive Type: Depth (inc	Layer: (if observed) ches):				the hele		Hydric	Soil Present? Yes X No
Restrictive Type:	Layer: (if observed)		e to saturation/\	vater in	the hole.		Hydric	<u> </u>
Restrictive Type: Depth (inc	Layer: (if observed) ches):		e to saturation/\	water in	the hole.		Hydric	<u> </u>
Restrictive Type: Depth (inc	Ches): Soil pit collapsed at		e to saturation/\	water in	the hole.		Hydric	<u> </u>
Restrictive Type: Depth (inc	Ches): Soil pit collapsed at	t 14 inches due	e to saturation/\	vater in	the hole.		Hydric	<u> </u>
Restrictive Type: Depth (inc Remarks: HYDROLOG Wetland Hy	Layer: (if observed) ches): Soil pit collapsed at	it 14 inches due			the hole.	Se		<u> </u>
Restrictive Type: Depth (inc.) Remarks: HYDROLOG Wetland Hy Primary Indi	Layer: (if observed) ches): Soil pit collapsed at	it 14 inches due	l; check all that	apply)	the hole.			Soil Present? Yes X No
Restrictive Type: Depth (inc Remarks: HYDROLOG Wetland Hy Primary Indi Surface	Ches): Soil pit collapsed at a coll	it 14 inches due	<i>l;</i> check all that W	apply) 'ater-Sta		es (B9)	econdary Indica	Soil Present? Yes X No
Restrictive Type: Depth (inc Remarks: HYDROLOG Wetland Hy Primary Indi Surfac High W	Ches): Soil pit collapsed at description of cators (minimum of cators (Manimum of cators):	it 14 inches due	l; check all that A	<i>apply)</i> /ater-Sta quatic F	ained Leave	es (B9)	econdary Indica	Soil Present? Yes X No
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Restrictive Type: Depth (inc Remarks: HYDROLOG Wetland Hy Primary Indi Surfac High W Satura X Water Sedimo Algal M Iron De	Ches): Soil pit collapsed at a coll	t 14 inches due	l; check all that W An Ti H; O R Ti R	apply) Iater-Sta quatic F rue Aqua ydrogen xidized resence ecent Iro	ained Leave auna (B13) atic Plants I Sulfide Oc Rhizospher of Reduce on Reduction	es (B9) (B14) lor (C1) res on Living R d Iron (C4) on in Tilled Soi C7)	econdary Indica	Soil Present? Yes X No ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
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Restrictive Type: Depth (inc Remarks: HYDROLOG Wetland Hy Primary Indi Surface High W Satura X Water Sedime Drift De Algal M Iron De X Inunda Sparse	Ches): Soil pit collapsed at a coll	t 14 inches due	I; check all that A Ti H O Pi R Ti G	apply) ater-State quatic F rue Aqua ydrogen xidized resence ecent Iro nin Mucl	ained Leave auna (B13) atic Plants Sulfide Oc Rhizospher of Reduce on Reduction k Surface (G	es (B9) (B14) Ior (C1) res on Living R d Iron (C4) on in Tilled Soi C7) (D9)	econdary Indica	Soil Present? Yes X No ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
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Restrictive Type: Depth (incention of the content o	Ches): Soil pit collapsed at a cators (minimum of cators (minimum of cators): Water Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Aerial cators (B4) ely Vegetated Concavervations: ter Present?	t 14 inches due	/; check all that	apply) fater-Sta quatic F rue Aqua ydrogen xidized resence ecent Iro nin Mucl auge or ther (Ex	ained Leave auna (B13) atic Plants i Sulfide Oc Rhizospher of Reduction k Surface (i Well Data splain in Re-	es (B9) (B14) lor (C1) res on Living R d Iron (C4) on in Tilled Soi C7) (D9) marks) Depth (inche	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology
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1/12/2011
DP 1
None
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narks.)
No
(A)
(B)
% (A/B)
0
0
0
0
0 0 (B)
0 (B)
on
**
upporting
., -
xplain)
gy
natic.
X No

Profile Des	cription: (Describe to	the depth neede	d to docun	ent the	indicator c	or confirm the a	absence of indic	ators.)
Depth	(in all and		F	edox F	eatures			
(inches)	Color (moist)	% Color	(moist)	%	Туре	1 Loc ²	Texture	Remarks
,								
¹ Type: C=C	oncentration, D=Deple	etion, RM=Reduc	ed Matrix,	CS=Co	vered or C	oated Sand G	rains. ² Location	on: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators						Ind	licators for Problematic Hydric Soils ³ :
Histoso				Sar	ndv Gleved	l Matrix (S4)		Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redox			Dark Surface (S7)
	Histic (A3)		_		pped Matri			Iron-Manganese Masses (F12)
	gen Sulfide (A4)		_			Mineral (F1)		Very Shallow Dark Surface (TF12)
	ed Layers (A5)		_			d Matrix (F2)	x	Other (Explain in Remarks)
	luck (A10)		_		pleted Mati			
Deplet	ed Below Dark Surfac	e (A11)	_	Re	dox Dark S	surface (F6)		
Thick [Dark Surface (A12)			De _l	pleted Dark	Surface (F7)	3	Indicators of hydrophytic vegetation
Sandy	Mucky Mineral (S1)			Re	dox Depres	ssions (F8)		d wetland hydrology must be present,
5 cm N	lucky Peat or Peat (S	3)	_					unless disturbed or problematic.
Restrictive	Layer: (if observed)							
Type:	Layer: (iii oboci vea)							
Depth (in	ches) ·						Hydric	Soil Present? Yes X No
				4-4	04 405	- f.H 4007 O-		
Remarks:	No pit dug due to inu	indation. Soils a	ssumed ny	arıc per	Step 12b	of the 1987 Co	orps Delineation	Manual.
HYDROLOG	SY							
Wetland Hy	drology Indicators:							
Primary Indi	cators (minimum of or	ne is required; ch	eck all that	apply)		9	Secondary Indic	ators (minimum of two required)
X Surfac	e Water (A1)		V	Vater-St	ained Leav	ves (B9)		Surface Soil Cracks (B6)
High W	/ater Table (A2)			quatic f	auna (B13	3)		Drainage Patterns (B10)
X Satura	tion (A3)		T	rue Aqu	uatic Plants	s (B14)		Dry-Season Water Table (C2)
Water	Marks (B1)		+	lydroge	n Sulfide C	dor (C1)		Crayfish Burrows (C8)
Sedime	ent Deposits (B2)			xidized	Rhizosphe	eres on Living	Roots	Saturation Visible on Aerial
Drift De	eposits (B3)		F	resence	e of Reduc	ed Iron (C4)		Imagery (C9)
Algal N	Mat or Crust (B4)		F	ecent l	ron Reduct	tion in Tilled So	oils (C6)	Stunted or Stressed Plants (D1)
Iron De	eposits (B5)		T	hin Mud	ck Surface	(C7)		Geomorphic Position (D2)
Inunda	tion Visible on Aerial I	magery (B7)		auge o	r Well Data	a (D9)		FAC-Neutral Test (D5)
Sparse	ely Vegetated Concave	e Surface (B8)		ther (E	xplain in R	emarks)		
Field Obser	vations:							
Surface Wat	er Present?		Yes	Χ	No	Depth (inch	es) 2	Wetland Hydrology
Water Table	Present?		Yes		No X	Depth (inch	es)	Present?
Saturation P	resent? (includes cap	illary fringe)	Yes _	X	No	Depth (inch	es) 0	Yes X No
Describe Re	corded Data (stream	gauge, monitorin	g well, aeri	al photo	s, previou	s inspections) ,	, if available.	
Remarks:								

Project/Site: SPCSL 2A (Tier 3)	Cit	ty/County: Log	jan	Sampling Date:	10/26/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	DP 2
Investigator(s): DP, DM		Section, Tow	vnship, Range: S28, T	19N, R04W	
· · · · · · · · · · · · · · · · · · ·	dside ditch			e, convex, none) : conc	ave
' ' '	1' 33.41" N Long	g: 89)° 26' 8.27" W	Datum: NAD 83	
Soil Map Unit Name: 712A- Spaulding silt	y clay loam, 0-2% slopes			NWI Classifica	ition: None
Are climatic/hydrologic conditions on the sit	e typical for this time of year	? Yes	SX No (If n	o, explain in Remarks)	
Are Vegetation, Soil, or F	łydrology significan	tly disturbed?	Are "Normal Circu	umstances" present?	Yes X No
Are Vegetation, Soil, or F	Hydrology naturally pr	roblematic?	(If needed, e	explain any answers in l	Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing sampling poin	ıt l <u>ocations, tr</u>	ansects, important fe	eatures, etc.	
Hydrophytic Vegetation Present? Yes	X No				
Hydric Soil Present? Yes	X No	Is the Sai	mpled Area within a W	/etland? Yes >	K No
Wetland Hydrology Present? Yes	X No		•		
Remarks: Wetland DP-A. PEMA.					
Remarks: Welland DP-A. FEIVIA.					
VEGETATION - Use scientific names of p					
72021711011 000 0010111110 11111110 111	Absolute Dominant	Indicator	Dominance Test W	orksheet:	
Tree Stratum (Plot size:)	% Cover Species?	Status	Number of Dominan		
1	· <u> </u>		That Are OBL, FACV	N, or FAC:	(A)
2.	· 				
3			Total Number of Dor		
4			Species Across All S	Strata:	(B)
5	· — — —				
	0 = Total Cover	,	Percent of Dominant	•	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FACV	N, or FAC:	(A/B)
1. 			Division Index V		
2			Prevalence Index V	Vorksneet: x 1 :	= 0
3			OBL species FACW species	x 1 -	
5.	· 		FAC species	x 3 :	
J	0 = Total Cover	. —	FACU species	x 4 :	
Herb Stratum (Plot size: r = 5')	<u> </u>		UPL species	x5=	
1. Phalaris arundinacea	100 yes	FACW+	Column Totals:	0 (A)	
2.			Prevaler	nce Index = B/A =	
3.					
4.	· 		Hydrophytic Vegeta	ation Indicators:	
5.				st for Hydrophytic Vege	tation
6				ce Test is >50%	
7				ce Index is <3.01	
8				gical Adaptations¹ (Provi	de supporting
9			<u> </u>	narks or on a separate sheet)	-1 /Flaim\
10	400 - Total Cover		Problematic	Hydrophytic Vegetation	1' (Explain)
	100 = Total Cover				
Woody Vine Stratum (Plot size:)		-	ric soil and wetland hyd	
1. 			must be present,	unless disturbed or prol	olematic.
2	0 = Total Cov	ver	Hydrophytic Veg	getation Present? Ye	es X No
Remarks: (Include photo numbers here or PH 6-W; 7-E	on a separate sheet.)				

Profile Description: (Describe to the depth neede	d to document	the indicator o	r confirm the ab	sence of indica	tors.)
Depth Matrix	Redox	k Features			
(inches) Color (moist) % Color	(moist)	% Type	Loc ²	Texture	Remarks
				_	
				_	
				_	
				_	
¹ Type: C=Concentration, D=Depletion, RM=Reduc	ed Matrix, CS=	Covered or C	oated Sand Gra	ins. ² Location	n: PL=Pore Lining, M=Matrix
Hydric Soil Indicators				Indic	cators for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gleyed	l Matrix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)		Sandy Redox			Dark Surface (S7)
Black Histic (A3)		Stripped Matri			ron-Manganese Masses (F12)
Hydrogen Sulfide (A4)		Loamy Mucky			Very Shallow Dark Surface (TF12)
Stratified Layers (A5)		Loamy Gleyed	` '	X	Other (Explain in Remarks)
2 cm Muck (A10)		Depleted Mati			
Depleted Below Dark Surface (A11)		Redox Dark S			
Thick Dark Surface (A12)			Surface (F7)	3.	
Sandy Mucky Mineral (S1)		Redox Depres			dicators of hydrophytic vegetation wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		•	,		unless disturbed or problematic.
Restrictive Layer: (if observed)					
Type:					
Depth (inches):				Hydric 9	Soil Present? Yes X No
				_	
Remarks: No pit dug due to inundation. Soils a	ssumed hydric	per Step 12b	of the 1987 Corp	os Delineation N	Aanual.
HYDROLOGY					
Wetland Hydrology Indicators:					
Primary Indicators (minimum of one is required; ch	eck all that app	ly)	Se	condary Indicat	tors (minimum of two required)
X Surface Water (A1)	Water	-Stained Leav	/es (B9)		Surface Soil Cracks (B6)
High Water Table (A2)	Aquat	ic Fauna (B13	3)		Drainage Patterns (B10)
X Saturation (A3)		Aquatic Plants			Dry-Season Water Table (C2)
Water Marks (B1)	Hydro	gen Sulfide C	dor (C1)		Crayfish Burrows (C8)
Sediment Deposits (B2)		_	eres on Living R	oots	Saturation Visible on Aerial
Drift Deposits (B3)		nce of Reduc	_		Imagery (C9)
Algal Mat or Crust (B4)			ion in Tilled Soil	s (C6)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)		Muck Surface		` ′	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)		e or Well Data	` '		FAC-Neutral Test (D5)
Sparsely Vegetated Concave Surface (B8)		(Explain in R	, ,		
					1
Field Observations:	V V	Na	Donth (inches	a) 0.0"	
Surface Water Present?	Yes X	No	Depth (inches		Wetland Hydrology Present?
Water Table Present?	Yes	No X	Depth (inches	· —	4
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches	s) <u>0</u>	Yes X No
Describe Recorded Data (stream gauge, monitoring	g well, aerial ph	otos, previous	s inspections) , it	f available.	
Demarks: Flouring water within graced waterway					
Remarks: Flowing water within grassed waterway.					

Project/Site: SPCSL 2A (Tier 3)		City/County:	Logan	Sampling Date:	4/12/2011
Applicant/Owner: UPRR			State: IL	Sampling Point:	DP 4
Investigator(s): DP, KR		Section,	Township, Range: S21, 1		
·	ckside ditch		•	re, convex, none) : conc	ave
	0' 38.22" N	Long:	89° 19' 46.38" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava silt loar	ո, 0-2% slopes			NWI Classifica	ition: None
Are climatic/hydrologic conditions on the si	te typical for this time	of year?	Yes X No (If I	no, explain in Remarks)	
Are Vegetation, Soil, or	Hydrology siç	nificantly disturbe	ed? Are "Normal Circ	umstances" present?	Yes X No
Are Vegetation , Soil , or	Hydrology natu	rally problematic?	? (If needed,	explain any answers in l	Remarks.)
SUMMARY OF FINDINGS - Attach site m	nap showing samplir	ng point locations	s, transects, important f	eatures, etc.	
Hydrophytic Vegetation Present? Yes	X No				
Hydric Soil Present? Yes	X No	Is the	e Sampled Area within a V	Vetland? Yes	(No
Wetland Hydrology Present? Yes					
Remarks: Wetland DP-V1and DP-V2.	PEMA. Sample point	represents both w	vetlands.		
VEGETATION - Use scientific names of	•		ls :		
Tree Stratum (Plot size:)		minant Indicato ecies? Status			
1	70 GOVEI OPC	olos: Olatas	That Are OBL, FAC	•	2 (A)
2.			<u> </u>		
3.			Total Number of Do	minant	
4.			Species Across All		2 (B)
5.			_ `		
	0 = Tota	Cover	Percent of Dominan	nt Species	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FAC	•	100% (A/B)
1.					
2.			Prevalence Index \	Worksheet:	
3.			OBL species	x 1 :	= 0
4.			FACW species	x 2	= 0
5			FAC species	x 3	= 0
	0 = Total	l Cover	FACU species	x 4 :	
Herb Stratum (Plot size: r = 5')			UPL species	x 5 =	
1. Setaria glauca		/es FAC	Column Totals:	0 (A)	(B)
2. Phalaris arundinacea		/es FACW		nce Index = B/A =	
3. Rumex altissimus	_ <u>5</u>	FACW		tation Indicators:	
4. Ambrosia trifida		FAC+	<u> </u>	est for Hydrophytic Vege	tation
5. 6.			_	ice Test is >50%	lation
7			_	ce Index is <3.01	
8.				ogical Adaptations¹ (Provi	de supporting
9.			_ `	narks or on a separate sheet)	ac capporang
10.			_	Hydrophytic Vegetation	ា¹ (Explain)
	100 = Total	l Cover	_		
Woody Vine Stratum (Plot size:)		¹ Indicators of hyd	dric soil and wetland hyd	rology
1.	 ′		-	unless disturbed or prol	
2.			_	· ·	
	0 = To	otal Cover	Hydrophytic Ve	getation Present? Ye	es X No
Pomarka: (Include photo numbers have					
Remarks: (Include photo numbers here o)			
PH 5 - NE. Standing water within wetland	(approx. 2-6 inches).				

Profile Des	cription: (Describe	to the depth neede				r confirm the ab	sence of indica	ators.)
Depth	Matrix			edox Fe		2		
(inches)	Color (moist)	% Color	(moist)	%	Type ¹	Loc ²	Texture	Remarks
								-
1							. 2	
'Type: C=C	oncentration, D=De	pletion, RM=Redu	ced Matrix,	CS=Co\	vered or Co	oated Sand Gra	ains. ² Locatio	n: PL=Pore Lining, M=Matrix
Hydric Soil							Ind	icators for Problematic Hydric Soils ³ :
Histos	` '		_	_		Matrix (S4)		Coast Prairie Redox (A16)
	Epipedon (A2)		_		dy Redox		_	Dark Surface (S7)
	Histic (A3)		_		oped Matri		_	Iron-Manganese Masses (F12)
	gen Sulfide (A4)				-	Mineral (F1)		Very Shallow Dark Surface (TF12)
	ed Layers (A5)		_		-	Matrix (F2)	<u> X</u>	Other (Explain in Remarks)
	luck (A10)		_		leted Matr	, ,		
	ed Below Dark Surfa	ace (A11)	_			urface (F6)		
	Dark Surface (A12)		_			Surface (F7)	³ I	ndicators of hydrophytic vegetation
	Mucky Mineral (S1)			Red	lox Depres	sions (F8)	and	d wetland hydrology must be present,
5 CM N	lucky Peat or Peat ((53)						unless disturbed or problematic.
Restrictive	Layer: (if observed)							
Type:								
Depth (in	ches):						Hydric	Soil Present? Yes X No
Remarks:	No pit dug due to i	nundation. Soils a	ssumed hyd	dric per	Step 12b o	of the 1987 Cor	ps Delineation	Manual.
LIVEROL OF								
HYDROLOG	drology Indicators							
•	cators (minimum of		eck all that	annly)		Se	econdary Indica	ators (minimum of two required)
	e Water (A1)	one to required, on			ained Leav		Soondary maior	Surface Soil Cracks (B6)
	/ater Table (A2)				auna (B13	` ,		Drainage Patterns (B10)
X Satura	` ,			•	atic Plants	•		Dry-Season Water Table (C2)
	Marks (B1)				Sulfide O			Crayfish Burrows (C8)
	ent Deposits (B2)			, ,		res on Living R	loots	Saturation Visible on Aerial
	eposits (B3)				•	ed Iron (C4)		Imagery (C9)
	fat or Crust (B4)					on in Tilled Soi	ls (C6)	Stunted or Stressed Plants (D1)
	eposits (B5)				k Surface		` ′	Geomorphic Position (D2)
	tion Visible on Aeria	al Imagery (B7)			Well Data			FAC-Neutral Test (D5)
Sparse	ely Vegetated Conca	ave Surface (B8)	o	ther (Ex	oplain in Re	emarks)		_
Field Obser	vations:							
Surface Wat			Yes	X	No	Depth (inche	s) 2 - 8"	Wetland Hydrology
Water Table			Yes		No X	Depth (inche	· —	Present?
	resent? (includes ca	apillary fringe)	Yes	X	No	Depth (inche	s) 0	Yes X No
Describe Re	corded Data (strear	n gauge, monitorin	g well, aeria	al photo	s, previous	inspections) , i	f available.	
Remarks:								

Project/Site: SPCSL 2A (Tier 3)		City/County:	Logan	Sampling Date:	10/22/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	DP 5
Investigator(s): DP, DM		Section,	Township, Range: S21, T		
	adside ditch		•	e, convex, none) : conc	ave
,	° 5' 1.46" N	Long:	89° 25' 47.48" W	Datum: NAD 83	
Soil Map Unit Name: 68A - Sable silty cla				NWI Classifica	ation: None
Are climatic/hydrologic conditions on the s	ite typical for this time	e of year?	Yes X No (If n	no, explain in Remarks)	
Are Vegetation, Soil, or	Hydrology si	ignificantly disturbe	ed? Are "Normal Circu	umstances" present?	Yes X No
Are Vegetation, Soil, or	Hydrologynat	turally problematic?	? (If needed, e	explain any answers in l	Remarks.)
SUMMARY OF FINDINGS - Attach site n	nap showing sampli	ng point location	s, transects, important fe	atures, etc.	
Hydrophytic Vegetation Present? Yes	s X No				
Hydric Soil Present? Yes	X No	Is the	e Sampled Area within a W	/etland? Yes >	X No
Wetland Hydrology Present? Yes	X No				
Remarks: Wetland DP-D. PEMA. Loc	eated hetween railroad	d and highway			
remarks. Wedand DF-D. FLIMA. LOC	ated between railload	and mgriway.			
VEGETATION - Use scientific names of	plants.				
	•	ominant Indicato	or Dominance Test W	orksheet:	
Tree Stratum (Plot size:)	% Cover Sp	pecies? Status	Number of Dominan	t Species	
1			That Are OBL, FAC	N, or FAC:	1 (A)
2			_		
3.			Total Number of Dor		
4			Species Across All S	Strata:	1 (B)
5		-1.05::25	—		
5 " (C) 1 O) 1 (D) 4 -1	= Tota	al Cover	Percent of Dominant	•	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FAC\	N, or FAC:	100% (A/B)
1			Prevalence Index V	Norkshoot:	
2.			OBL species	vorksneet: x 1	= 0
<u> </u>			FACW species	x 2	
5.			FAC species	x3	
~~ <u>-</u>	0 = Tota	al Cover	FACU species	x 4	
Herb Stratum (Plot size: r = 5')			UPL species	x 5 =	= 0
Spartina pectinata	75	yes FACW	/+ Column Totals:	0 (A)	0 (B)
2. Juncus torreyi	10	FACW	V Prevaler	nce Index = B/A =	
3. Juncus dudleyi	20	FACW			
4. Sorghastrum nutans	2	FACU-	_		
5			_ '	st for Hydrophytic Vege	tation
6.			X 2. Dominano		
7			_	ce Index is <3.01	
8			_ `	gical Adaptations¹ (Provi	ide supporting
9				narks or on a separate sheet) : Hydrophytic Vegetatior	o ¹ (Evolain)
0	107 = Tota	al Cover		Tiyuropriyao vogotaao.	I (Explain)
Woody Vine Stratum (Plot size:	107 - 100	al Covei	1Indicators of hyd	ric coil and watland hyd	Irology
Woody Vine Stratum (Plot size:				ric soil and wetland hyd unless disturbed or pro	
1.			— Illust be present,	unless disturbed or pro-	DIEITIAUC.
2	0 = T	Total Cover	Hvdrophytic Vec	getation Present? Ye	es X No
			11,41.00.1.3		
Remarks: (Include photo numbers here of	or on a separate shee	t.)			
PH 14 - NE					

Profile Des	cription: (Describe	to the depth neede	d to docume	ent the inc	dicator o	confirm the a	absence of indicat	tors.)			
Depth	Matrix		Re	edox Feat	ures						
(inches)	Color (moist)	% Color	(moist)	%	Type ¹	Loc ²	Texture	Remarks			
0-5	10 YR 2/1	100					Silty Clay				
5-12	10 YR 5/2	80 10 Y	′R 5/8	20	D	М	Clay				
1218	10 YR 6/1	60 10 Y	′R 5/8	40	D	М	Clay				
¹ Type: C=0	Concentration, D=De	pletion, RM=Reduc	ced Matrix, (CS=Cover	red or Co	ated Sand G	rains. ² Location	n: PL=Pore Lining, M=Matrix			
Hydric Soil	Indicators						Indic	ators for Problematic Hydric Soils ³ :			
Histos	ol (A1)		_	Sandy	Gleyed	Matrix (S4)	<u> </u>	Coast Prairie Redox (A16)			
Histic	Epipedon (A2)			Sandy	Redox ((S5)		Dark Surface (S7)			
Black	Histic (A3)		_	Stripp	ed Matrix	(S6)		Iron-Manganese Masses (F12)			
Hydro	gen Sulfide (A4)			Loamy	y Mucky	Mineral (F1)		Very Shallow Dark Surface (TF12)			
Stratif	ed Layers (A5)			Loamy	y Gleyed	Matrix (F2)		Other (Explain in Remarks)			
2 cm l	Muck (A10)			Deple	ted Matri	x (F3)					
Deple	ted Below Dark Surf	ace (A11)		Redox	Dark Su	ırface (F6)					
Thick	Dark Surface (A12)			X Deple	ted Dark	Surface (F7)	³ In	dicators of hydrophytic vegetation			
Sandy	Mucky Mineral (S1))	_	Redox	Depres	sions (F8)		wetland hydrology must be present,			
5 cm l	Mucky Peat or Peat ((S3)					ı	unless disturbed or problematic.			
Restrictive	Layer: (if observed))									
Type:											
Depth (in	ches):						Hydric S	oil Present? Yes X No			
Remarks:	Soils were wet.										
	000 11.01.0 11.01.										
HYDROLO	GY										
-	drology Indicators										
Primary Ind	icators (minimum of	one is required; ch				_	Secondary Indicat	ors (minimum of two required)			
	ce Water (A1)			ater-Stain				Surface Soil Cracks (B6)			
	Vater Table (A2)			quatic Fau			X	X Drainage Patterns (B10)			
	ation (A3)			ue Aquati				Dry-Season Water Table (C2)			
	Marks (B1)			/drogen S				Crayfish Burrows (C8)			
	ent Deposits (B2)					res on Living	Roots	Saturation Visible on Aerial			
	eposits (B3)					d Iron (C4)		Imagery (C9)			
~	Mat or Crust (B4)					on in Tilled So	` '	Stunted or Stressed Plants (D1)			
	eposits (B5)			nin Muck S				Geomorphic Position (D2)			
_	ation Visible on Aeria			auge or W			X	FAC-Neutral Test (D5)			
Spars	ely Vegetated Conca	ave Surface (B8)		her (Expl	aın ın Re	marks)					
Field Obse	rvations:										
Surface Wa	ter Present?		Yes	N	o <u>X</u>	Depth (inch	es)	Wetland Hydrology			
Water Table	e Present?		Yes	N	οХ	Depth (inch	es)	Present?			
Saturation F	Present? (includes ca	apillary fringe)	Yes	N	o <u>X</u>	Depth (inch	es)	Yes X No			
Describe Re	ecorded Data (strear	m gauge, monitorin	g well, aeria	l photos,	previous	inspections)	, if available.				
Remarks: 1	Narrow ditch is 8-10	inches wide at botte	om of ditch.								

	Project/Site: SPCSL 2A (Tier 3)			City/	County: Lo	gan	Sampling Date:	10/22/2010
Landform (#illslope, terrace, efc) Trackside ditch Local Relaif (conceive, convex, convex) Conceive	''							DP 6
Slope (%) 0.2 Lat					Section, To			
Soil Map Unit Name: 68A - Sable sitty clay loam, 0-2% slopes Are climatichydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks) Are United Statum (Plot size:							· · · · · · · · · · · · · · · · · · ·	ave
Are climatichydrologic conditions on the site typical for this time of year? Yes X No (if no, explain in Remarks) Are Vegetation Soll or Hydrology significantly disturbed? Are 'Normal Circumstances' present? Yes X No Are 'Normal Circumstances' present? Yes X No Hydrology on auturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrochylic Vegetation Present? Yes X No Is the Sampled Area within a Welland? Yes X No Welland Hydrology Present? Yes X No Is the Sampled Area within a Welland? Yes X No Welland Hydrology Present? Yes X No Is the Sampled Area within a Welland? Yes X No Welland Hydrology Present? Yes X No Is the Sampled Area within a Welland? Yes X No Welland Hydrology Present? Yes X No Welland DP-81 and DP-82. PEMA/PEMC. Both wellands represented by sample point DP 6. WEGETATION - Use scientific names of plants. Tree Stratum (Plot size:) % Cover Species? Status Stratum (Plot size:) % Cover Species? Status Stratum (Plot size:) % Cover Species? Status Species Across All Strata: 3 (a) (b) Species Across All Strata: 3 (b) Species Across All Strata: 3 (c) (c) Species Across All Strata: 3 (d) Species Ac	'				8	9° 26' 5.18" W		
Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation Soil or Hydrology naturally problematic? (**Ineeded, explain any answers in Remarks.**) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No Wetland Hydrology Present? Yes X No Octobrology Present Present? Yes X No Octobrology Presents Indicators Presents Indicators Presents Indicators Present Present Present Present Present Present? Yes X No Octobrology Presents Indicators Present Present Present Present Present Present Present? Yes X No Octobrology Presents Indicators Present				-				ition: None
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)	Are climatic/hydrologic conditions on	the site	typical for th	is time of year?	Ye	es X No (If i	no, explain in Remarks)	
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transacts, important features, etc. Hydrochylic Vegetation Present? Yes X No Wetland Present? Yes X No Wetland Hydrology Present? Yes X No Wetland DP-B1 and DP-B2. PEMAPEMC. Both wetlands represented by sample point DP 6. WEGETATION - Use scientific names of plants. Tree Stratum (Plot size:) % Cover Species? Status Tree Stratum (Plot size:) % Cover Species? Status Tree Stratum (Plot size:) % Cover Species? Status Total Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) 2	Are Vegetation, Soil	_ , or Hy	drology	significantly	/ disturbed?	Are "Normal Circ	umstances" present?	Yes X No
Hydricy Vegetation Present? Yes X No	Are Vegetation, Soil	, or Hy	drology	naturally pro	blematic?	(If needed,	explain any answers in	Remarks.)
Hydroc Soil Present? Yes X No	SUMMARY OF FINDINGS - Attach	site mar	showing s	ampling point	locations, t	ransects, important f	eatures, etc.	
Wetland Hydrology Present? Yes X No No	Hydrophytic Vegetation Present?	Yes	X No					
Wetland Hydrology Present? Yes X No No	Hydric Soil Present?	Yes	X No		Is the Sa	ampled Area within a V	Vetland? Yes	X No
Wetland DP-B1 and DP-B2. PEMA/PEMC. Both wetlands represented by sample point DP 6. VEGETATION - Use scientific names of plants.	, and the second	Yes	X No			•		
Absolute		_		_				
Absolute	Remarks: Wetland DP-B1 and DI	P-B2. PE	EMA/PEMC.	Both wetlands	represented	d by sample point DP 6		
Absolute								
Absolute	VECETATION Line coientific name	oo of ni	nnto					
Number of Dominant Species	VEGETATION - Use scientific flam	es or pre		Deminent	Indicator	Dominance Test M	lorkshoot:	
1.	Tree Stratum (Plot size:)						
Total Number of Dominant Species Across All Strata: 3 (B)	1.	<u> </u>		•			·	3 (A)
Species Across All Strata: 3 (B)	2.							
Sapling/Shrub Stratum Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)	3.					Total Number of Do	minant	
D	4.					Species Across All	Strata:	3 (B)
That Are OBL, FACW, or FAC: 100% (A/B)	5.							
Prevalence Index Worksheet: OBL species			0	= Total Cover		Percent of Dominar	nt Species	
OBL species	Sapling/Shrub Stratum (Plot size:)			That Are OBL, FAC	W, or FAC:	100% (A/B)
OBL species	1. <u> </u>							
### FACW species X 2 = 0 FACW species X 3 = 0 FACW species X 3 = 0 FACW species X 4 = 0 FACW species X 5 = 0 FACW species X 4 = 0 FACW species X 4 = 0 FACW species X 4 = 0 FACW species X 5 = 0 FACW species X	2						Worksheet:	
FAC species	3					*		
Herb Stratum (Plot size: r = 5') 30 yes OBL UPL species x 5 =	4					*		
Herb Stratum (Plot size: r = 5')	5					*		
1. Eleocharis erythropoda 30 yes OBL Column Totals: 0 (A) 0 (B) 2. Spartina pectinata 30 yes FACW+ FACW+ Prevalence Index = B/A = ————————————————————————————————————	Harb Stratum (Diatoire)			= Total Cover		-		
2. Spartina pectinata 3. Phalaris arundinacea 3. Spantina pectinata 3. Phalaris arundinacea 4. Solidago missouriensis 5. UPL 4. Solidago missouriensis 5. UPL 5. 1. Rapid Test for Hydrophytic Vegetation 7. 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Woody Vine Stratum (Plot size:) 1. Upl Hydrophytic Vegetation Indicators: 1. Rapid Test for Hydrophytic Vegetation X. 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 1. Upl Hydrophytic Vegetation Indicators: 1. Rapid Test for Hydrophytic Vegetation X. 2. Dominance Test is >50% 3. Prevalence Index = B/A =			20	V00	OPI	·		
3. Phalaris arundinacea 3. Super Section 4. Solidago missouriensis 5. UPL 4. Solidago missouriensis 5. UPL 5. 1. Rapid Test for Hydrophytic Vegetation 6. 2. 1. Rapid Test for Hydrophytic Vegetation 6. 3. Prevalence Index is <3.0¹ 4. Morphological Adaptations¹ (Provide supporting 6. 3. Prevalence Index is <3.0¹ 6. 4. Morphological Adaptations¹ (Provide supporting 6. 5. 1. Problematic Hydrophytic Vegetation¹ (Explain) 6. 7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.								,(В)
4. Solidago missouriensis 5			1			Trevale	ince index = b/A =	
1. Rapid Test for Hydrophytic Vegetation X 2. Dominance Test is >50% X 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 100 = Total Cover Woody Vine Stratum (Plot size:) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)						Hydrophytic Veget	tation Indicators:	
X 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 100 = Total Cover Woody Vine Stratum (Plot size:) 1 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Problematic Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)	5.							tation
8	6.							
9	7.					3. Prevalen	ce Index is ≤3.01	
O	8.					4. Morpholo	ogical Adaptations¹ (Prov	ide supporting
Woody Vine Stratum (Plot size:)	9.					data in Ren	narks or on a separate sheet)	
Woody Vine Stratum (Plot size:) 1	10.					Problemation	Hydrophytic Vegetation	า¹ (Explain)
must be present, unless disturbed or problematic. 2			100	= Total Cover				
2	Woody Vine Stratum (Plot size:)			¹ Indicators of hyd	dric soil and wetland hyd	irology
0 = Total Cover Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)	1					must be present,	unless disturbed or pro	blematic.
Remarks: (Include photo numbers here or on a separate sheet.)	2.							
			0	= Total Cove	er	Hydrophytic Ve	getation Present? Y	es X No
	Remarks: (Include photo numbers i	here or o	n a separate	sheet.)				
- ·					culatum and	d Eleocharis sp.		
		-				•		

Profile Description: (Describe to the depth needs	d to documer	nt the indi	cator or o	confirm the al	sence of indic	ators.)		
Depth Matrix	Red	lox Featu	res					
(inches) Color (moist) % Color	(moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-6 2.5 Y 3/1 100					Silt Loam	coal ash observed, gritty		
6-16+ 10 YR 3/1 65					Silt Loam	gravel, coal ash, gritty		
10 YR 4/6 35								
¹ Type: C=Concentration, D=Depletion, RM=Reduc	ced Matrix, C	S=Covere	ed or Coa	ited Sand Gra	ains. ² Locatio	on: PL=Pore Lining, M=Matrix		
Hydric Soil Indicators					Ind	icators for Problematic Hydric Soils ³ :		
Histosol (A1)		Sandy	Gleyed M	latrix (S4)		Coast Prairie Redox (A16)		
Histic Epipedon (A2)		– Sandy I	Redox (S	55)		Dark Surface (S7)		
Black Histic (A3)		Strippe	d Matrix	(S6)		Iron-Manganese Masses (F12)		
Hydrogen Sulfide (A4)		_ Loamy	Mucky M	lineral (F1)		Very Shallow Dark Surface (TF12)		
Stratified Layers (A5)		Loamy	Gleyed N	/latrix (F2)	X	Other (Explain in Remarks)		
2 cm Muck (A10)		Deplete	ed Matrix	(F3)		_		
Depleted Below Dark Surface (A11)		Redox	Dark Sur	face (F6)				
Thick Dark Surface (A12)		Deplete	ed Dark S	Surface (F7)	3	ndicators of hydrophytic vegetation		
Sandy Mucky Mineral (S1)		Redox	Depressi	ons (F8)		and wetland hydrology must be present,		
5 cm Mucky Peat or Peat (S3)						unless disturbed or problematic.		
Restrictive Layer: (if observed)								
Type:								
Depth (inches):					Hydric	Soil Present? Yes X No		
Remarks: Lots of coal ash observed in the soil	nrofile from 0.	6 inches	Soil ass	sumed hydric	ner Sten 12h d	of the 1987 Corps Delineation		
Manual.	profile from 0	o inches.	Joil as	sumed mydne	per Step 120 C	if the 1907 Corps Delineation		
HYDROLOGY								
Wetland Hydrology Indicators:								
Primary Indicators (minimum of one is required; ch	eck all that a	oply)		Se	econdary Indica	ators (minimum of two required)		
Surface Water (A1)	Wa	ter-Staine	d Leave	s (B9)		Surface Soil Cracks (B6)		
High Water Table (A2)	Aqu	ıatic Faur	na (B13)			Drainage Patterns (B10)		
Saturation (A3)	Tru	e Aquatic	Plants (I	B14)		Dry-Season Water Table (C2)		
Water Marks (B1)	Hyd	Irogen Su	ılfide Odd	or (C1)		Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxi	dized Rhi	zosphere	es on Living R	Roots	Saturation Visible on Aerial		
Drift Deposits (B3)	Pre	sence of	Reduced	Iron (C4)		Imagery (C9)		
Algal Mat or Crust (B4)	Red	ent Iron F	Reduction	n in Tilled Soi	ls (C6)	Stunted or Stressed Plants (D1)		
Iron Deposits (B5)	Thir	n Muck Si	urface (C	57)	X	Geomorphic Position (D2)		
Inundation Visible on Aerial Imagery (B7)	Gau	ige or We	ell Data (D9)	X	FAC-Neutral Test (D5)		
Sparsely Vegetated Concave Surface (B8)	Oth	er (Expla	in in Ren	narks)				
Field Observations:								
Surface Water Present?	Yes	No	X	Depth (inche	s)	Wetland Hydrology		
Water Table Present?	Yes	No	X	Depth (inche	s)	Present?		
Saturation Present? (includes capillary fringe)	Yes	No	Х	Depth (inche	s)	Yes <u>X</u> No		
Describe Recorded Data (stream gauge, monitoring	g well, aerial	photos, p	revious i	nspections) , i	if available.			
Domontos								
Remarks:								

Project/Site: SPCSL 2A (Tier 3)		City/County:	Logan	Sampling Date:	10/26/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	DP 7
Investigator(s): DP, DM		Section,	Township, Range: S32, T	19N, R04W	
	kside ditch			e, convex, none) : con	cave
' ` ' 	3' 46.54" N	Long:	89° 26' 49.41" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava silt Ioam	, 0-2% slopes			NWI Classific	ation: None
Are climatic/hydrologic conditions on the sit	e typical for this tin	ne of year?	Yes X No (If r	o, explain in Remarks)
Are Vegetation, Soil, or F	lydrology	significantly disturbe	ed? Are "Normal Circu	ımstances" present?	Yes X No
Are Vegetation , Soil , or H	lydrology n	aturally problematic?	(If needed, e	explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing samp	ling point locations	s, transects, important fe	eatures, etc.	
	X No		•	•	
Hydric Soil Present? Yes		Is the	Sampled Area within a W	/etland? Yes	X No
Wetland Hydrology Present? Yes	X No	10 1110	Campioa / ii ca Willim a / i		
Remarks: Wetland DP-C. PEMA. This	area is used for sto	oring sand and grave	el for roadwork. Disturbed	area.	
VEOETATION II : (15)					
VEGETATION - Use scientific names of p			D T	(and a decorate	
Tree Stratum (Plot size:)		Dominant Indicate Species? Status			
1.	,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	opeoloo. Ciatao	That Are OBL, FAC		(A)
2.			_		
3.			Total Number of Do	minant	
4.			Species Across All S		(B)
5.			_		
	0 = To	tal Cover	Percent of Dominan	t Species	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FAC	•	(A/B)
1.					
2.			Prevalence Index V	Vorksheet:	
3.			OBL species	x 1	= 0
4			FACW species	x 2	2 = 0
5			FAC species	x 3	
	0 = To	tal Cover	FACU species	x 4	
Herb Stratum (Plot size: r = 5')			UPL species	x 5	
Echinochloa crus-galli	100	yes FACW		<u> </u>	A) 0 (B)
2			Prevaler	nce Index = B/A =	
3. 4.			Hydrophytic Veget	ation Indicators:	
4 5.				st for Hydrophytic Veg	etation
6.			_	ce Test is >50%	Station
7.			_	ce Index is <3.01	
8.			— ——	gical Adaptations¹ (Pro	vide supporting
9.		 -	— I —— ·	arks or on a separate sheet)	
0.			Problematic	Hydrophytic Vegetation	on¹ (Explain)
	100 = To	tal Cover	_		
Woody Vine Stratum (Plot size:)		¹ Indicators of hyd	ric soil and wetland hy	drology
1.	,·		-	unless disturbed or pro	
2.			_	·	
	0 =	Total Cover	Hydrophytic Veg	getation Present?	res X No

Profile Desc	ription: (Describe t	to the depth needed	to docui	nent th	e indicator	or con	firm the ab	sence of indic	eators.)
Depth	Matrix		1	Redox	Features				
(inches)	Color (moist)	% Color (moist)	%	Тур	e ¹	Loc ²	Texture	Remarks
0-6	10 YR 2/1							Silty clay	Gravel and sand in pit.
¹ Type: C=Co	oncentration, D=Dep	oletion, RM=Reduce	ed Matrix	, CS=C	Covered or 0	Coated	Sand Gra	ins. ² Location	on: PL=Pore Lining, M=Matrix
Hydric Soil I	ndicators							Inc	dicators for Problematic Hydric Soils ³ :
Histoso	I (A1)			S	andy Gleye	ed Matri	ix (S4)		Coast Prairie Redox (A16)
Histic E	pipedon (A2)		-		andy Redo				Dark Surface (S7)
Black H	listic (A3)		-		tripped Mat)		Iron-Manganese Masses (F12)
Hydrog	en Sulfide (A4)		-		oamy Muck				Very Shallow Dark Surface (TF12)
	d Layers (A5)		-		oamy Gleye			>	C Other (Explain in Remarks)
	uck (A10)		-		epleted Ma				
	ed Below Dark Surfa	ace (A11)	-	R	edox Dark	Surface	e (F6)		
Thick D	ark Surface (A12)		_		epleted Da	rk Surfa	ace (F7)	3	hara a sa
Sandy I	Mucky Mineral (S1)		-	R	edox Depre	essions	s (F8)		Indicators of hydrophytic vegetation d wetland hydrology must be present,
5 cm M	ucky Peat or Peat (S3)	-					u	unless disturbed or problematic.
Restrictive L	_ayer: (if observed)								
Type:									
Depth (inc	hes):							Hydric	Soil Present? Yes X No
Remarks:	No further investig	ation due to inundat	ion Soil	s assiii	med hydric	ner Ste	en 12h of t	he 1987 Corn	s Delineation Manual.
	pit at 6 inches.	ation due to manda	1011. 0011	3 43341	inca nyano	per ou	CP 120 01 t	nc 1507 001p	3 Definication Manual.
HYDROLOG	Υ								
Wetland Hyd	drology Indicators	1							
Primary Indic	ators (minimum of	one is required; che	ck all tha	t apply	')	_	Se	condary Indic	ators (minimum of two required)
X Surface	: Water (A1)			Water-	Stained Lea	aves (B	39)		Surface Soil Cracks (B6)
High W	ater Table (A2)			Aquatio	Fauna (B1	13)			Drainage Patterns (B10)
X Saturat	ion (A3)			True A	quatic Plan	ts (B14	.)		Dry-Season Water Table (C2)
Water N	Marks (B1)			Hydrog	en Sulfide	Odor (0	C1)		Crayfish Burrows (C8)
Sedime	nt Deposits (B2)			Oxidize	ed Rhizosph	heres o	n Living R	oots	Saturation Visible on Aerial
Drift De	posits (B3)			Presen	ce of Redu	iced Iro	n (C4)		Imagery (C9)
Algal M	at or Crust (B4)			Recent	Iron Reduc	ction in	Tilled Soil	s (C6)	Stunted or Stressed Plants (D1)
Iron De	posits (B5)			Thin M	uck Surface	e (C7)			Geomorphic Position (D2)
Inundat	ion Visible on Aeria	l Imagery (B7)		Gauge	or Well Da	ta (D9)			FAC-Neutral Test (D5)
Sparsel	y Vegetated Conca	ve Surface (B8)		Other (Explain in F	Remark	rs)		
Field Observ	vations:								
Surface Water	er Present?		Yes	Χ	No	De	pth (inches	s) 1	Wetland Hydrology
Water Table	Present?		Yes	Х	No	_ De	pth (inches	s) 6	Present?
Saturation Pr	resent? (includes ca	apillary fringe)	Yes	Χ	No	De	pth (inches	s) 0	Yes X No
Describe Red	corded Data (strean	n gauge, monitoring	well, aei	ial pho	tos, previou	us insp	ections) , it	available.	
Remarks:									

Project/Site: SPCSL 2A (Tier 3)		City/C	county: Log	an	Sampling Date:	10/26/2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	DP 9
Investigator(s): DP, DM			Section, Tow	nship, Range: S32, T1		
· · · · · · · · · · · · · · · · · · ·	ckside ditch				convex, none) : conca	ve
,	3' 33.04" N	Long:	89	° 27' 0.37" W	Datum: NAD 83	
Soil Map Unit Name: 86B - Osco silt loar	n, 2-5% slopes				NWI Classificati	on: None
Are climatic/hydrologic conditions on the s	ite typical for this	time of year?	Yes	X No (If no	, explain in Remarks)	
Are Vegetation $_$, Soil $_$, or	Hydrology	significantly	disturbed?	Are "Normal Circur	nstances" present?	Yes X No
Are Vegetation, Soil, or	Hydrology	naturally probl	ematic?	(If needed, ex	xplain any answers in R	emarks.)
SUMMARY OF FINDINGS - Attach site n	nap showing sai	mpling point lo	ocations, tra	ansects, important fea	atures, etc.	
Hydrophytic Vegetation Present? Yes	X No					
Hydric Soil Present? Yes	X No	_	Is the Sar	mpled Area within a We	etland? Yes X	No
Wetland Hydrology Present? Yes	X No	-				- —
	t trackside ditable	t Culvert 164.1	O Alona flo	wing shannal		
Remarks: Wetland DP-E. PEMA. Eas	t trackside ditch a	at Culvert 164.1	U. Along ilo	wing channel.		
VEGETATION - Use scientific names of	nlante					
VEGETATION - Use scientific flames of	Absolute	Dominant	Indicator	Dominance Test Wo	rksheet	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant		
1.				That Are OBL, FACW	/, or FAC:	(A)
2.						
3.	_			Total Number of Dom	inant	
4				Species Across All St	rata:	(B)
5						
	0 =	Total Cover		Percent of Dominant	•	
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACW	/, or FAC:	(A/B)
1	_			D		
2	_			Prevalence Index W OBL species	orksneet: x 1 =	0
4.	-			FACW species	x 2 =	0
5.	_			FAC species	x 3 =	
	0 =	Total Cover		FACU species	x 4 =	0
Herb Stratum (Plot size: r = 5')	-			UPL species	x 5 =	0
1. Phalaris arundinacea	100	yes	FACW+	Column Totals:	0 (A)	0 (B)
2.				Prevalenc	ce Index = B/A =	
3.	_					
4				Hydrophytic Vegeta		
5	_				t for Hydrophytic Vegeta	ition
6.				l ——	e Test is >50%	
7. 8.	_				e Index is <3.01 ical Adaptations¹ (Provid	a aumortina
9.	-			1 	rks or on a separate sheet)	s supporting
10.	_				Hydrophytic Vegetation ¹	(Explain)
	100 =	Total Cover			, , , ,	, , ,
Woody Vine Stratum (Plot size:				¹ Indicators of hydri	c soil and wetland hydro	ology
1.					nless disturbed or probl	
2.				, ,,,,		
	0	= Total Cover		Hydrophytic Vege	etation Present? Yes	s X No
Remarks: (Include photo numbers here of	r on a senarate s	theet)				
PH 21 - W (upstream); 22 - E (from old RF	•	,	d RR line bri	idae): 24 - F (downstre	am at drainage ditch).	
		(p = 0 oui ii at oii			at a an anago anon),	
25 - E; 26 - NW						

Profile Desc	cription: (Describe	to the depth neede				r confirm the al	bsence of indica	ators.)
Depth (inches)	Matrix				eatures	<u> </u>		
(inches)	Color (moist)	% Color	(moist)	%	Туре	Loc ²	Texture	Remarks
¹ Type: C=C	oncentration, D=De	pletion, RM=Reduc	ced Matrix,	CS=Co	vered or C	oated Sand Gra	ains. ² Locatio	on: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators						Ind	icators for Problematic Hydric Soils ³ :
Histoso	ol (A1)			Sar	ndy Gleyed	Matrix (S4)		Coast Prairie Redox (A16)
Histic E	Epipedon (A2)		_	Sar	ndy Redox	(S5)		Dark Surface (S7)
Black H	Histic (A3)			Stri	pped Matri	x (S6)		Iron-Manganese Masses (F12)
Hydrog	en Sulfide (A4)			Loa	amy Mucky	Mineral (F1)		Very Shallow Dark Surface (TF12)
Stratifie	ed Layers (A5)		_	Loa	amy Gleyed	l Matrix (F2)	X	Other (Explain in Remarks)
2 cm M	luck (A10)		_	Dep	pleted Matr	ix (F3)		
Deplete	ed Below Dark Surfa	ace (A11)	_	Red	dox Dark S	urface (F6)		
	Dark Surface (A12)		_			Surface (F7)	³ I	ndicators of hydrophytic vegetation
	Mucky Mineral (S1)		_	Red	dox Depres	sions (F8)	d wetland hydrology must be present,	
5 cm M	lucky Peat or Peat ((S3)						unless disturbed or problematic.
Restrictive	Layer: (if observed))						
Type:								
Depth (inc	ches):						Hydric	Soil Present? Yes X No
Remarks:	No pit dug due to i	inundation. Soils a	ssumed hy	dric per	Step 12b	of the 1987 Cor	ps Delineation	Manual.
	, ,		,		•		•	
HYDROLOG								
	drology Indicators		aak all that	ann/u)		e.	o o o o do o v	otors (minimum of two required)
•	e Water (A1)	one is required, cri			ained Leav		econdary indica	ators (minimum of two required) Surface Soil Cracks (B6)
	/ater Table (A2)				amed Leav Fauna (B13	` '		Drainage Patterns (B10)
X Saturat	` '			•	atic Plants	,		Dry-Season Water Table (C2)
	Marks (B1)				n Sulfide O			Crayfish Burrows (C8)
	ent Deposits (B2)			, ,		eres on Living F		Saturation Visible on Aerial
	eposits (B3)				•	ed Iron (C4)		Imagery (C9)
	fat or Crust (B4)					ion in Tilled Soi	ils (C6)	Stunted or Stressed Plants (D1)
	eposits (B5)				ck Surface			Geomorphic Position (D2)
	tion Visible on Aeria	al Imagery (B7)			r Well Data			FAC-Neutral Test (D5)
	ly Vegetated Conca			•	xplain in Re	. ,		
				•				1
Field Obser Surface Wat			Yes	X	No	Depth (inche	es) 9	Wotland Hudralague
Water Table			Yes		No X	Depth (inche	· —	Wetland Hydrology Present?
	resent? (includes ca	apillary fringe)		X	No X	Depth (inche	· —	Yes X No
							<u> </u>	
Describe Re	corded Data (strear	ıı gauge, monilonn	y wen, aern	αι μποιο	is, previous	mopections),	ıı avallable.	
Remarks:								

Project/Site: SPCSL 2A (Tier 3)		City/County: _I	Logan	Sampling Date:	10/27/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	DP 12
Investigator(s): DP, DM		Section, 7	Township, Range: S16, 1		
	kside ditch			re, convex, none): conc	ave
	2'36.83"N	Long:	89°27'47.34"W	Datum: NAD 83	
Soil Map Unit Name: 86B - Osco silt loam	· · · · · · · · · · · · · · · · · · ·			NWI Classifica	ition: None
Are climatic/hydrologic conditions on the sit	e typical for this time of	f year?	Yes X No (If r	no, explain in Remarks)	
Are Vegetation, Soil, or F	lydrology sign	nificantly disturbed	d? Are "Normal Circ	umstances" present?	Yes X No
Are Vegetation, Soil, or F	lydrologynatura	ally problematic?	(If needed,	explain any answers in l	Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing sampling	point locations	, transects, important f	eatures, etc.	
Hydrophytic Vegetation Present? Yes	X No				
Hydric Soil Present? Yes	X No	Is the	Sampled Area within a V	Vetland? Yes	K No
Wetland Hydrology Present? Yes	X No				
Remarks: Wetland DP-G. PEMA. Appr	ovimately four feet wid	le in ditch			
Netharks. Wetland Dr-G. FLIVIA. Appr	Oximately lour leet with	e in ditori.			
VEGETATION - Use scientific names of p	olants.				
·	Absolute Domii	inant Indicator	Dominance Test W	Vorksheet:	
Tree Stratum (Plot size:)	% Cover Speci	cies? Status	Number of Dominar	nt Species	
1	<u> </u>		That Are OBL, FAC	W, or FAC:	2 (A)
2			_		
3			Total Number of Do		- (-)
4			Species Across All S	Strata:	2 (B)
5			_ [
5 " (2) 0 (Dist =	= Total 0	Jover	Percent of Dominan	•	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FAC	W, or FAC:	100% (A/B)
1	· —— —		Prevalence Index \	Markobooti	
2.	· — —		OBL species	vvorksneet: x 1 :	= 0
Δ	· 		FACW species	x 2	
5.			FAC species	x 3	
·	0 = Total 0	Cover	FACU species	x 4 :	
Herb Stratum (Plot size: r = 5')			UPL species	x 5 =	
1. Urtica dioica	60 ye	es FAC+	Column Totals:	0 (A)	0 (B)
2. Conium maculatum	40 ye	es FACW	Prevaler	nce Index = B/A =	
3. Polygonum scandens	5	FAC	_		
4. Aster ericoides	5	FACU-	_ ' ' ' ' '		
5.			_	est for Hydrophytic Vege	tation
6.	. <u> </u>			nce Test is >50%	
7			_	ice Index is <3.01	
8.	. —— —		_	ogical Adaptations¹ (Provi	de supporting
9.			_	marks or on a separate sheet) c Hydrophytic Vegetatior	a ¹ /Evolain)
0	110 = Total 0	Cover		J Hydrophytic vegetation	Γ (Εχμιαιτή
Manda Vino Stratum (Diot aizo:		Jovei	11ndiantors of bys	dain and watland bud	
Woody Vine Stratum (Plot size:				dric soil and wetland hyd , unless disturbed or prol	
1	· — —		- Illust be present,	unless disturbed of pro-	Jiemanc.
	0 = Tota	al Cover	Hydrophytic Ve	getation Present? You	es X No
Remarks: (Include photo numbers here or	on a separate sheet)				
PH 32 - S (from sample point)	on a soparate sneet.)				
l					

Depth		In	lots of coal ash; saturated ion: PL=Pore Lining, M=Matrix dicators for Problematic Hydric Soils ³ :
0-14	ed Matrix, CS=Covered or Coated S Sandy Gleyed Matrix Sandy Redox (S5) Stripped Matrix (S6)	Silty clay loam Silty clay loam clay and Grains. ² Locat	lots of coal ash; saturated ion: PL=Pore Lining, M=Matrix dicators for Problematic Hydric Soils ³ :
14-19	Sandy Gleyed Matrix Sandy Redox (S5) Stripped Matrix (S6)	clay and Grains. ² Locat	lots of coal ash; saturated ion: PL=Pore Lining, M=Matrix dicators for Problematic Hydric Soils ³ :
coal ash 50 19-24 10 YR 4/6 100 Type: C=Concentration, D=Depletion, RM=Reduce Hydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Sandy Gleyed Matrix Sandy Redox (S5) Stripped Matrix (S6)	clay and Grains. ² Locat	ion: PL=Pore Lining, M=Matrix dicators for Problematic Hydric Soils ³ :
Type: C=Concentration, D=Depletion, RM=Reduce Hydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Sandy Gleyed Matrix Sandy Redox (S5) Stripped Matrix (S6)	and Grains. ² Locat	dicators for Problematic Hydric Soils ³ :
Type: C=Concentration, D=Depletion, RM=Reduce Hydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Sandy Gleyed Matrix Sandy Redox (S5) Stripped Matrix (S6)	and Grains. ² Locat	dicators for Problematic Hydric Soils ³ :
Hydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Sandy Gleyed Matrix Sandy Redox (S5) Stripped Matrix (S6)	In	dicators for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Sandy Gleyed Matrix Sandy Redox (S5) Stripped Matrix (S6)	In	dicators for Problematic Hydric Soils ³ :
lydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Sandy Gleyed Matrix Sandy Redox (S5) Stripped Matrix (S6)	In	dicators for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Sandy Redox (S5) Stripped Matrix (S6)		·
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4)	Sandy Redox (S5) Stripped Matrix (S6)	— —	
Black Histic (A3) Hydrogen Sulfide (A4)	Stripped Matrix (S6)	_	Coast Prairie Redox (A16) Dark Surface (S7)
Hydrogen Sulfide (A4)			Iron-Manganese Masses (F12)
	Loanny iviucky iviinera		
Stratified Layers (AS)		· · ·	Very Shallow Dark Surface (TF12)
O ama Marak (AAO)	Loamy Gleyed Matrix	(FZ) <u> </u>	X Other (Explain in Remarks)
2 cm Muck (A10)	Depleted Matrix (F3)	50)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (
Thick Dark Surface (A12)	Depleted Dark Surface		³ Indicators of hydrophytic vegetation
Sandy Mucky Mineral (S1)	Redox Depressions (I	-8) ar	nd wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)			unless disturbed or problematic.
Restrictive Layer: (if observed)			
Type:			
Depth (inches):		Hydri	ic Soil Present? Yes X No
Remarks: Gravel and coal ash observed in pit the Soils assumed hydric per Step 12b of the 1987 Cor	-	J Saturated at 14 inci	ies.
IVEROLOGY			
HYDROLOGY			
Vetland Hydrology Indicators:			
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; che			cators (minimum of two required)
Vetland Hydrology Indicators: rimary Indicators (minimum of one is required; che Surface Water (A1)	Water-Stained Leaves (B9)		cators <i>(minimum of two required)</i> Surface Soil Cracks (B6)
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)		cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)		cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1		cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Vetland Hydrology Indicators: rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres on) Living Roots	cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial
Vetland Hydrology Indicators: Irimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Living Roots	cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres on) Living Roots	cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres on Presence of Reduced Iron) Living Roots (C4) illed Soils (C6)	cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres on Presence of Reduced Iron Recent Iron Reduction in T	Living Roots (C4) illed Soils (C6)	cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Vetland Hydrology Indicators: rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres on Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7)) Living Roots (C4) Illed Soils (C6)	cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres on Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7) Gauge or Well Data (D9)) Living Roots (C4) Illed Soils (C6)	cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres on Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks)) Living Roots (C4) Illed Soils (C6)	cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1 Oxidized Rhizospheres on Presence of Reduced Iron Recent Iron Reduction in T Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Yes No X Depti) Living Roots (C4) illed Soils (C6)	cators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2) X FAC-Neutral Test (D5)

Project/Site: SPCSL 2A (Tier 3)			City/0	County: L	.ogan	Sampling Date:	10/27/2010
Applicant/Owner: UPRR					State: IL	Sampling Point:	DP 20
Investigator(s): DP, DM				Section, T	Township, Range: S7, T1		
Landform (hillslope, terrace, etc.):		kside ditch				e, convex, none) : conc	ave
Slope (%): 0-2 Lat:		' 40.93" N	Long:	8	89° 28' 35.21" W	Datum: NAD 83	
Soil Map Unit Name: 68A - Sable s			-			NWI Classifica	ation: None
Are climatic/hydrologic conditions or	1 the site	e typical for this	s time of year?	Y	res X No (If no	o, explain in Remarks)	
Are Vegetation, Soil	, or H	ydrology	significantly	disturbed	l? Are "Normal Circu	imstances" present?	Yes X No
Are Vegetation, Soil	, or H	ydrology	naturally prob	olematic?	(If needed, e	explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach	site ma	ap showing sa	mpling point I	ocations,	, transects, important fe	atures, etc.	
Hydrophytic Vegetation Present?	Yes	X No	_	_	_	_	_
Hydric Soil Present?	Yes	X No	_	Is the	Sampled Area within a W	etland? Yes	X No
Wetland Hydrology Present?	Yes	X No	_				
Remarks: Wetland DP-H. PEMA	VPSSA.	East trackside	e ditch.				
VEGETATION - Use scientific nam	nes of p	lants.					
T Objective (Diet einer	`	Absolute	Dominant	Indicator			
Tree Stratum (Plot size:	,	% Cover	Species?	Status	Number of Dominant That Are OBL, FACV		(4)
1					- Illat Ale ODL, FACY	V, 01 FAC.	(A)
3.					 Total Number of Don 	ninant	
4.					Species Across All S		(B)
5.					- []		` `
·· <u> </u>		0 =	= Total Cover		 Percent of Dominant 	· Snaciae	
Sapling/Shrub Stratum (Plot size:	r =	= 15')			That Are OBL, FACV	•	(A/B)
Salix interior		45	yes	OBL	,		V 7 - /
2.					Prevalence Index W	Vorksheet:	
3.					OBL species	x 1	= 0
4.					FACW species	x 2	= 0
5.					FAC species	x 3	= 0
		45 =	Total Cover		FACU species	x 4	= 0
Herb Stratum (Plot size: r = 5	')				UPL species	x 5	
Phalaris arundinacea		95	yes	FACW+		0 (A)	0 (B)
2					- Prevalen	ice Index = B/A =	
3.					_		
4					Hydrophytic Vegeta		
5.					_	st for Hydrophytic Vege	tation
6.					-	ce Test is >50%	
7.					-	ce Index is <3.01	1.1anting
9.					- I ' '	gical Adaptations ¹ (Prov arks or on a separate sheet)	ide supporting
0.					_	Hydrophytic Vegetation	n¹ (Explain)
		95 =	= Total Cover		-	119010011,000 1 202	I (Expia)
Woody Vine Stratum (Plot size:	r = 1		10101 00.0.		1Indicators of hydr	ric soil and wetland hyd	Irology
1. Vitis riparia	1 - 1	5)	yes	FACW-		unless disturbed or pro	
2.			<u> </u>	TACT		anicoo dictarbes s. p. s	Dicinatio.
<u> </u>		5	= Total Cover	r	- Hydrophytic Veg	jetation Present? Y	es X No
Remarks: (Include photo numbers	here or	on a separate	sheet.)		<u> </u>		
Other vegetation included: Scirpus							

Profile Des	scription: (Describe to	the depth need	led to docum	ent the	indicator o	or confirm	the abse	ence of indica	tors.)		
Depth	Matrix		Re	edox Fe	eatures						
(inches)	Color (moist)	% Cold	or (moist)	(moist) % Type ¹ Loc ²					Remarks		
¹ Type: C=0	Concentration, D=Deple	etion, RM=Red	uced Matrix,	CS=Co	vered or C	Coated Sar	nd Grains	s. ² Locatio	n: PL=Pore Lining, M=Matrix		
	I Indicators	,	•						cators for Problematic Hydric Soils ³ :		
_	sol (A1)			Sar	ndv Gleved	d Matrix (S	(4)	man	Coast Prairie Redox (A16)		
	Epipedon (A2)		_		ndy Redox		.,		Dark Surface (S7)		
	Histic (A3)		_		pped Matr				Iron-Manganese Masses (F12)		
	gen Sulfide (A4)		_	_		/ Mineral (I	F1)		Very Shallow Dark Surface (TF12)		
	ied Layers (A5)		_			d Matrix (F			Other (Explain in Remarks)		
	Muck (A10)		_		pleted Mat		_,		_ Cirier (Explain in Remarks)		
	ted Below Dark Surfac	e (A11)	_			Surface (F6	3)				
	Dark Surface (A12)	• (,)	_			k Surface	,	2			
	/ Mucky Mineral (S1)		_			ssions (F8			ndicators of hydrophytic vegetation		
	Mucky Peat or Peat (S	3)	_						wetland hydrology must be present, unless disturbed or problematic.		
									<u> </u>		
_	Layer: (if observed)										
Type:											
Depth (ir	icnes):							Hydric	Soil Present? Yes X No		
Remarks:	No pit dug due to inu	ındation. Soils	assumed hyd	dric per	Step 12b	of the 198	7 Corps	Delineation I	Manual.		
HYDROLO	GV										
	ydrology Indicators:										
	icators (minimum of or	ne is required: d	check all that	annlv)			Seco	ondary Indica	tors (minimum of two required)		
	ce Water (A1)				ained Lea	ves (B9)		orradity marca	Surface Soil Cracks (B6)		
	Water Table (A2)				Fauna (B1	` ,			Drainage Patterns (B10)		
	ation (A3)			•	uatic Plants	•			Dry-Season Water Table (C2)		
	Marks (B1)				n Sulfide C	. ,			Crayfish Burrows (C8)		
	nent Deposits (B2)			_		eres on Liv	Saturation Visible on Aerial				
	Deposits (B3)					ced Iron (C	-		Imagery (C9)		
	Mat or Crust (B4)					tion in Tille		(C6)	Stunted or Stressed Plants (D1)		
	eposits (B5)				ck Surface				Geomorphic Position (D2)		
	ation Visible on Aerial I	magery (B7)			r Well Data	FAC-Neutral Test (D5)					
	ely Vegetated Concave	,		-	xplain in R	, ,					
Field Obse											
	iter Present?		Yes	X	No	Depth ((inches)	3	Wetland Hydrology		
Water Table			Yes		No X				Present?		
	Present? <i>(includes cap</i>	illary fringe)	_					0	0 Yes X No		
			_					-			
Describe R	ecorded Data (stream g	gauge, monitori	ing well, aeria	ıı pnoto	s, previou	s inspectio	ons) , it a	ivaliable.			
Remarks:	PH 42; 43; 44 - S (at ac	ccess road): 45	- N; 46 at cu	vert							
	, -, - (2.10.1	/, 10	,	-							

Project/Site: SPCSL 2A (Tier 3)		City/County: L	.ogan	Sampling Date:	10/27/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	DP 21
Investigator(s): DP, DM		Section, T	ownship, Range: S13,		
	kside ditch			re, convex, none) : conc	ave
· · · · — — — — — — — — — — — — — — — —	1' 5.80" N	Long:	89° 29' 8.79" W	Datum: NAD 83	
Soil Map Unit Name: 68A - Sable silty clay	/ loam, 0-2% slopes			NWI Classifica	ation: None
Are climatic/hydrologic conditions on the site	e typical for this time of	f year? Y	es X No (If i	no, explain in Remarks)	
Are Vegetation, Soil, or H	ydrology sign	ificantly disturbed	? Are "Normal Circ	umstances" present?	Yes X No
Are Vegetation , Soil , or H	ydrology natura	ally problematic?	(If needed,	explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling	point locations,	transects, important f	eatures, etc.	
Hydrophytic Vegetation Present? Yes	X No				
Hydric Soil Present? Yes	X No	Is the	Sampled Area within a V	Vetland? Yes	K No
Wetland Hydrology Present? Yes	X No				
<u> </u>					
Remarks: Wetland DP-I. PEMC. East tr	ackside ditch at Culve	rt 167.50 and 167	7.40.		
	<u> </u>				
VEGETATION - Use scientific names of p					
Tree Stratum (Plot size:)	Absolute Domii % Cover Speci		Dominance Test W Number of Dominar		
1	70 GOVCI GPECI	ies: Giaius	That Are OBL, FAC	•	2 (A)
2			-		(A)
3.			 Total Number of Do 	ominant	
4.			Species Across All		2 (B)
5.			- '		` ' /
	0 = Total 0	Cover	 Percent of Dominar 	at Species	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FAC	•	100% (A/B)
1.			, , , , , , , , , , , , , , , , , , , ,		(,,,,,
2.			Prevalence Index	Worksheet:	
3.			OBL species	x 1	= 0
4.			FACW species	x 2	= 0
5.			FAC species	x 3	= 0
	0 = Total 0	Cover	FACU species	x 4	= 0
Herb Stratum (Plot size: r = 5')			UPL species	x 5	= 0
1. Typha latifolia	10	OBL	Column Totals:	0 (A)	0 (B)
2. Ranunculus sp.	10	FACU-OBI	Prevale	nce Index = B/A =	
3. Echinochloa crus-galli	35ye	s FACW	_		
4. Polygonum sp.	5	FACU-OBI	_ ' ' ' ' '		
5. Lemna minor	30 ye		- I 	est for Hydrophytic Vege	tation
6. Scirpus validus	5	OBL_	-	nce Test is >50%	
7			-	ice Index is <3.01	
8			- '	ogical Adaptations¹ (Prov	ide supporting
9			-	marks or on a separate sheet) C Hydrophytic Vegetatio	a ¹ (Evolain)
10	95 = Total 0			c riyuropriyiic vegetatio	i (Explaili)
Manda Vina Otatana (Diataina		Jovei	the disease of him	dela a all anadona Alanad Israe	landa an c
Woody Vine Stratum (Plot size:)		•	dric soil and wetland hyd	
1			must be present,	unless disturbed or pro	biematic.
2	0 = Tota	al Cover	- Hydrophytic Vo	actation Bracont?	oo V No
	= 1018	ai Covei	nyarophytic ve	getation Present? Y	es X No
Remarks: (Include photo numbers here or	on a separate sheet.)				
PH 50 - N; Wetland ends at Culvert 167.40					

Depth Matrix	Po	dox Featur	-0c			
(inch on)	Color (moist)	%	Type ¹	Loc²	Texture	Remarks
			.,,,,		- CACCAT C	
						-
Type: C=Concentration, D=Depletion, RM=R	educed Matrix, C	S=Covered	d or Coate	ed Sand Gra	ins. ² Locatio	n: PL=Pore Lining, M=Matrix
dric Soil Indicators					Indi	cators for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy G	Gleyed Ma	trix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)		Sandy F	Redox (S5)		Dark Surface (S7)
Black Histic (A3)		Stripped	d Matrix (S	66)		Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)		Loamy N	Mucky Min	neral (F1)		Very Shallow Dark Surface (TF12)
Stratified Layers (A5)		Loamy (Gleyed Ma	atrix (F2)	X	Other (Explain in Remarks)
2 cm Muck (A10)		Depleted	d Matrix (F	- 3)		_
Depleted Below Dark Surface (A11)		Redox D	Dark Surfa	ice (F6)		
Thick Dark Surface (A12)		Depleted	d Dark Su	rface (F7)	3,	ndicators of hydrophytic vegetation
Sandy Mucky Mineral (S1)		Redox Depressions (F8)				wetland hydrology must be present,
						· -· · · · · · · · · · · · · · · · · ·
5 cm Mucky Peat or Peat (S3)						unless disturbed or problematic.
5 cm Mucky Peat or Peat (S3)						unless disturbed or problematic.
						unless disturbed or problematic.
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches):						Soil Present? Yes X No
5 cm Mucky Peat or Peat (S3) estrictive Layer: (if observed) Type: Depth (inches):	bils assumed hyd	ric per Step	o 12b of th	ne 1987 Corp		Soil Present? Yes X No
5 cm Mucky Peat or Peat (S3) estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So	oils assumed hyd	ric per Step	o 12b of th	ne 1987 Corp		Soil Present? Yes X No
5 cm Mucky Peat or Peat (S3) estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So	oils assumed hyd	ric per Step	o 12b of th	ne 1987 Corp		Soil Present? Yes X No
5 cm Mucky Peat or Peat (S3) estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY //etland Hydrology Indicators:			o 12b of th		os Delineation I	Soil Present? Yes X No
5 cm Mucky Peat or Peat (S3) estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one is require	d; check all that a	apply)		Se	os Delineation I	Soil Present? Yes X No Manual.
5 cm Mucky Peat or Peat (S3) estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one is require	d; check all that a		d Leaves (Se	os Delineation I	Soil Present? Yes X No Manual. tors (minimum of two required)
5 cm Mucky Peat or Peat (S3) estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY fetland Hydrology Indicators: rimary Indicators (minimum of one is required X Surface Water (A1) High Water Table (A2)	d; check all that a	<i>apply)</i> ater-Stained	d Leaves (<u>Se</u> (B9)	os Delineation I	Soil Present? Yes X No Manual. tors (minimum of two required) Surface Soil Cracks (B6)
5 cm Mucky Peat or Peat (S3) estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY fetland Hydrology Indicators: rimary Indicators (minimum of one is required X Surface Water (A1) High Water Table (A2)	d; check all that a	<i>ipply)</i> ater-Stained uatic Fauna	d Leaves (a (B13) Plants (B1	Se (B9)	os Delineation I	Soil Present? Yes X No Manual. tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
5 cm Mucky Peat or Peat (S3) estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is require) X Surface Water (A1) High Water Table (A2) X Saturation (A3)	d; check all that a Wa Aq Tru Hy	apply) ater-Stained uatic Fauna ue Aquatic drogen Sul	d Leaves (a (B13) Plants (B1 lfide Odor	Se (B9)	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
strictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is require) X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	d; check all that a Wa Aq Tru Hy	apply) ater-Stained uatic Fauna ue Aquatic drogen Sul	d Leaves (a (B13) Plants (B1 lfide Odor zospheres	Se (B9) 14) (C1) on Living Re	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one is require) X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	d; check all that a Wa Aq Tru Hy Ox	apply) ater-Stained uatic Faund ue Aquatic drogen Sul idized Rhiz esence of F	d Leaves (a (B13) Plants (B1 lfide Odor zospheres Reduced II	Se (B9) 14) (C1) on Living Re	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
strictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY Yetland Hydrology Indicators: rimary Indicators (minimum of one is require) X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	d; check all that a Wa Aq Tru Hy Ox Pru	apply) ater-Stained uatic Faund ue Aquatic drogen Sul idized Rhiz esence of F	d Leaves (a (B13) Plants (B1 Ifide Odor zospheres Reduced II	Se (B9) (C1) on Living Re ron (C4) in Tilled Soil	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is require) X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	d; check all that a — Wa — Aq — Tri — Hy — Ox — Pri — Re — Th	apply) ater-Stained uatic Fauna ue Aquatic drogen Sul idized Rhiz esence of F	d Leaves (a (B13) Plants (B1 lifide Odor cospheres Reduced II Reduction i	Se (B9) 14) (C1) on Living Re ron (C4) in Tilled Soil)	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
5 cm Mucky Peat or Peat (S3) estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY fetland Hydrology Indicators: rimary Indicators (minimum of one is require) X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	d; check all that a Aq Aq Tri Hy Ox Pri Re Th Ga	ater-Stained uatic Fauna ue Aquatic drogen Sul idized Rhiz esence of F cent Iron R in Muck Su	d Leaves (a (B13) Plants (B1) Ifide Odor cospheres Reduced II Reduction in	Se (B9) 14) (C1) on Living Re ron (C4) in Tilled Soil)	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
strictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY fetland Hydrology Indicators: rimary Indicators (minimum of one is required X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Sparsely Vegetated Concave Surface (B	d; check all that a Aq Aq Tri Hy Ox Pri Re Th Ga	apply) ater-Stained uatic Faund ue Aquatic drogen Sul idized Rhiz esence of F cent Iron R in Muck Su	d Leaves (a (B13) Plants (B1) Ifide Odor cospheres Reduced II Reduction in	Se (B9) 14) (C1) on Living Re ron (C4) in Tilled Soil)	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is require) X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Sparsely Vegetated Concave Surface (B	d; check all that a Aq Aq Tri Hy Ox Pri Re Th Ga	apply) ater-Stained uatic Fauna ue Aquatic drogen Sul idized Rhiz esence of F cent Iron R in Muck Su uuge or We	d Leaves (a (B13) Plants (B1) Iffide Odor cospheres Reduced II Reduction in Ifface (C7) II Data (D8) In In Rema	Se (B9) 14) (C1) on Living Re ron (C4) in Tilled Soil)	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
estrictive Layer: (if observed) Type: Depth (inches): emarks: No pit dug due to inundation. So YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one is require) X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7 Sparsely Vegetated Concave Surface (B) ield Observations: urface Water Present?	d; check all that a	ater-Stained uatic Fauna ue Aquatic drogen Sul idized Rhiz esence of F cent Iron R in Muck Su uuge or Wei ner (Explain	d Leaves (a (B13) Plants (B1) Ifide Odor zospheres Reduced In Reduction in Inface (C7) Il Data (D9) In in Rema	Se (B9) (C1) on Living Re ron (C4) in Tilled Soil) (B) (B) (C1)	condary Indication of the condary Indication	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No pit dug due to inundation. So RYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required) X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	d; check all that a	ater-Stained uatic Fauna ue Aquatic drogen Sul idized Rhiz esence of F cent Iron R in Muck Su uuge or Wel ner (Explain	d Leaves (a (B13) Plants (B1) Iffide Odor zospheres Reduced II Reduction i Irface (C7) Il Data (D8) In in Rema	Se (B9) (C1) on Living Re ron (C4) in Tilled Soil) 9) arks)	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology

Investigator(s): DP, DM Section, Township, Range: S13, T18N, R04W Landform (hillslope, terrace, etc.): Trackside ditch Local Relief (concave, convex, none): concave Slope (%): 0-2 Lat: 40° 0' 46.19" N Long: 89° 29' 28.18" W Datum: NAD 83 Soil Map Unit Name: 712A - Spaulding silty clay loam, 0-2% slopes NWI Classification: None Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X No Is the Sampled Area within a Wetland? Yes X No	Project/Site: SPCSL 2A (Tier 3)		City/County	/: Logan	Sampling Date:	10/27/2010
Landform (fillslope, terrace, etc.) Trackside ditch Local Relief (concave, correx, none) concave	· · · · · · · · · · · · · · · · · · ·				· · · —	DP 23
Slope (%) 0.2 Lat			Section			
Soil Map Unit Name: 712A - Spaulding silty clay loam, 0-2% slopes Are climaticity/drologic conditions on the site typical for this time of year? Yes X No (if no, explain in Remarks) Are Vegetation Soil or Hydrology significantly disturbed? Are "Nomal Circumstances" preserve? Yes X No Are Vegetation Soil or Hydrology inaturally 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 X No Is the Sampled Area within a Wetland? Yes X No Wetland DP-J. PEMA. VEGETATION - Use scientific names of plants. Tree Stratum (Plot size:) Machine Dominant Species That Are OBL, FACW, or FAC: 1 (A) Salphological Adaptations (Plot size:) Total Cover Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/II) Species X Salphological Adaptation (Plot size:) Prevalence Index Worksheet: OBL species X 3 = 0 (A/II) Salphological Adaptation (Plot size:) FACW species X 3 = 0 (A/II) Salphological Adaptations (Provide supporting data in Remarks).	, , ,				· -	ave
Are climatichydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks) Are Vegetation Soil or Hydrology significantly disturbed? Are Nomal Circumstances' present? Yes X No Are Vegetation Soil or Hydrology inaturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transacts, important features, etc. Hydrology Present? Yes X No Is the Sampled Area within a Wetland? Yes X No Wetland Hydrology Present? Yes X No Is the Sampled Area within a Wetland? Yes X No Wetland DP-J. PEMA. WEGETATION - Use scientific names of plants. Tree Stratum (Plot size:) % Gover Seedes? Status No Status No Seedes? Status No Seedes Area within a Wetland? Yes X No No Seedes? Status No Seedes No Seed	· · · /			89° 29' 28.18" W		
Are Vegetation, Soil, or Hydrology significantly disturbed?						ition: None
Are Vegetation Soil Or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)	Are climatic/hydrologic conditions or	n the site typical for the	is time of year?	Yes X No (If	no, explain in Remarks)	
Summary OF FinDings - Attach site map showing sampling point locations, transects, important features, etc.	Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal Circ	cumstances" present?	Yes X No
Hydric Vegetation Present? Yes X No	Are Vegetation, Soil	, or Hydrology	naturally problemati	ic? (If needed,	explain any answers in	Remarks.)
Prevalence Pre	SUMMARY OF FINDINGS - Attach	site map showing s	ampling point location	ons, transects, important t	features, etc.	
Vegetand Hydrology Present? Yes X No No	Hydrophytic Vegetation Present?	Yes X No				
VEGETATION - Use scientific names of plants. Dominant Indicator Spaces Status Number of Dominant Species That Are OBL, FACW, or FAC:	Hydric Soil Present?	Yes X No	Is t	the Sampled Area within a \	Netland? Yes _ 2	K No
VEGETATION - Use scientific names of plants. Tree Stratum (Plot size:)	Wetland Hydrology Present?	Yes X No	_			
VEGETATION - Use scientific names of plants. Tree Stratum (Plot size:)	Remarks: Wetland DP-J PEMA		<u>–</u>			
Absolute	Tronging Dr. o. 1 Ellist	•				
Absolute						
Number of Dominant Species	VEGETATION - Use scientific nam	nes of plants.				
1.		Absolute	Dominant Indica			
2	Tree Stratum (Plot size:) % Cover	Species? Stat		•	
Species Across All Strata:	1			That Are OBL, FAC	CW, or FAC:	(A)
Species Across All Strata:	2					
Sapling/Shrub Stratum (Plot size:)	3					4 (p)
Percent of Dominant Species	4			Species Across Air		(B)
Prevalence Index Worksheet:	S		= Total Cover			
Prevalence Index Worksheet: OBL species	Sanling/Shrub Stratum (Plot size:		- Total Gover		•	1000/ (A/D)
OBL species	Sapinig/Siliub Stratum (Flot Size.			mat Ale Obl, FAC		100% (A/B)
OBL species	2			Prevalence Index	Worksheet:	
FACW species X 2 = 0	3.					= 0
FAC species	4.			<u> </u>		
Herb Stratum (Plot size: r = 5') 90 yes FACU-OBL	5.					
1. Carex sp. 90 yes FACU-OBL Column Totals: 0 (A) 0 (B) 2. Physalis virginiana 2 FACW UPL 3. Asclepias syriaca 8 UPL 4.			= Total Cover		x 4	= 0
2	Herb Stratum (Plot size: r = 5	·') ———		UPL species	x 5 :	= 0
3. Asclepias syriaca 4. Hydrophytic Vegetation Indicators: 5. 1. Rapid Test for Hydrophytic Vegetation 6. X 2. Dominance Test is >50% 7. 3. Prevalence Index is <3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 9.	1. Carex sp.	90	yes FACU-			0 (B)
Hydrophytic Vegetation Indicators: 1. Rapid Test for Hydrophytic Vegetation X 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 100 = Total Cover Woody Vine Stratum (Plot size:) 1	2. Physalis virginiana	2	FAC	Prevale	ence Index = B/A =	
1. Rapid Test for Hydrophytic Vegetation X 2. Dominance Test is >50% X 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 100 = Total Cover Woody Vine Stratum (Plot size:) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)	3. Asclepias syriaca	8	UP			
X 2. Dominance Test is >50%	4					
3. Prevalence Index is <3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 100	5			'		tation
8	6					
9.	7.				-	
Problematic Hydrophytic Vegetation¹ (Explain)				`	-	ide supporting
Woody Vine Stratum (Plot size:)					' '	o¹ (Evolain)
Woody Vine Stratum (Plot size:) 1			- Total Cover	— Troblemati	c riyaropriyac vegetadol	i (Explaili)
1 must be present, unless disturbed or problematic. 2	NA a div Min a Chrahuma (Diah aina)		- Total Cover	11m diaptono of love	duin and	land a no.
2	woody vine Stratum (Plot size:)		-		
Remarks: (Include photo numbers here or on a separate sheet.)	1			must be present	, unless disturbed or pro	biematic.
	2	0	= Total Cover	Hydrophytic Ve	egetation Present? Y	es X No
	Remarks: (Include photo numbers	here or on a separate	sheet.)			
				sp. Assumed to be FACW	or wetter.	
	,			·		

Profile Des	scription: (Describe to t	the depth neede	d to docum	nent the	e indicator	or co	nfirm the at	bsence of indi	cators.)			
Depth Matrix			F	Redox F	eatures							
(inches)	Color (moist)	% Color	(moist)	%	Тур	e ¹	Loc ²	Texture		Remarks		
0-18	2.5 Y 2.5/1	100						Silt loam				
18-26	2.5 Y 2.5/1	100				_		Silty clay loam				
26-28	10 YR 3/4	100				_		Clay				
									<u> </u>			
								_				
									_			
¹ Type: C=C	Concentration, D=Deple	etion, RM=Reduc	ed Matrix,	CS=C	overed or (Coate	d Sand Gra	ains. ² Locati	ion: PL=Pore	E Lining, M=Ma	ıtrix	
Hydric Soil	I Indicators							In	dicators for Pr	oblematic Hydr	ic Soils ³ :	
Histos	sol (A1)			Sa	andy Gleye	ed Mar	trix (S4)		Coast Prairie Redox (A16)			
Histic	Epipedon (A2)		_	Sa	andy Redo	x (S5))	_	Dark Surface (S7)			
Black	Histic (A3)		_	Str	ripped Mat	trix (S	6)	_	Iron-Mang	Iron-Manganese Masses (F12)		
Hydro	gen Sulfide (A4)		_	Lo	amy Muck	ty Min	eral (F1)	_	Very Shall	Very Shallow Dark Surface (TF12)		
Stratifi	ied Layers (A5)		_	Lo	amy Gleye	ed Ma	ıtrix (F2)	<u> </u>	X Other (Exp	olain in Remarks)	
2 cm N	Muck (A10)		_	De	epleted Ma	ıtrix (F	- 3)					
Deplet	ted Below Dark Surface	e (A11)	_	Re	edox Dark	Surfa	ce (F6)					
Thick	Dark Surface (A12)		_	De	epleted Da	rk Sur	rface (F7)		³ Indicators of	hydrophytic veg	etation	
Sandy	/ Mucky Mineral (S1)		_	Re	edox Depre	ession	ıs (F8)		and wetland hydrology must be present,			
5 cm N	Mucky Peat or Peat (S3	5)							unless distu	rbed or problem	natic.	
Restrictive	Layer: (if observed)											
Type:												
Depth (in	nches):							Hydri	c Soil Present	Yes X	No	
Remarks:	Saturated at 26 inche	es. Soils assume	ed hvdric p	er Ster	o 12b of th	e 198	7 Corps De	lineation				
Manual.		70. 22 2 2				•						
HYDROLO	GY											
_	ydrology Indicators:											
	licators (minimum of one	e is required; che				_	_	econdary Indic	•	um of two requ		
	ce Water (A1)				Stained Lea		₍ B9)	_		Soil Cracks (B6	,	
— ·	Nater Table (A2)				Fauna (B1			_	<u> </u>	Patterns (B10)	•	
—	ation (A3)				uatic Plant			_	Dry-Season Water Table (C2)			
	Marks (B1)			, ,	en Sulfide		` ,	_	<u> </u>	Crayfish Burrows (C8)		
	nent Deposits (B2)			Oxidized Rhizospheres on Living Roots						Saturation Visible on Aerial Imagery (C9)		
	Deposits (B3)				ce of Redu					, , ,	· 4\	
— ·	Mat or Crust (B4)			Recent Iron Reduction in Tilled Soils (C6)						Stunted or Stressed Plants (D1)		
	eposits (B5)	(5.7)								Geomorphic Position (D2)		
	ation Visible on Aerial Ir			Gauge or Well Data (D9) Other (Explain in Remarks)						tral Test (D5)		
Sparse	ely Vegetated Concave	Surface (B8)		Jtner (⊏	=xpiain in r	≺emai	rks)					
Field Obser						_			_			
	ater Present?		Yes _		No X	_	epth (inche	· —	_	Wetland Hydr		
Water Table			Yes _		No X	_	epth (inche	· —	_	Present'	?	
Saturation F	Present? (includes capi	llary fringe)	Yes _	X	No	D	epth (inche	s) 26		Yes X	No	
Describe Re	ecorded Data (stream g	auge, monitoring	ן well, aer	ial phot	os, previou	us ins	pections) , i	if available.				
Remarks:												

Project/Site: SPCSL 2A (Tier 3)		City/	County: L	∟ogan	Sampling Date:	10/27/2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	DP 24
Investigator(s): DP, DM			Section, T	Township, Range: S13, T		
· · · · · · · · · · · · · · · · · · ·	ckside ditch			Local Relief (concave	, convex, none) : cor	ıcave
· · · /	0' 41.67" N	Long:		89° 29' 32.84" W	Datum: NAD 83	
Soil Map Unit Name: 712A - Spaulding s		-				cation: None
Are climatic/hydrologic conditions on the si	te typical for this	time of year?)	Yes X No (If no	o, explain in Remarks	;)
Are Vegetation, Soil, or	Hydrology	significantly	/ disturbed	d? Are "Normal Circu	mstances" present?	Yes X No
Are Vegetation, Soil, or	Hydrology	_naturally prob	blematic?	(If needed, e	explain any answers in	n Remarks.)
SUMMARY OF FINDINGS - Attach site n	nap showing sa	mpling point	locations	, transects, important fe	atures, etc.	
Hydrophytic Vegetation Present? Yes	X No					
Hydric Soil Present? Yes	X No	_	Is the	Sampled Area within a W	etland? Yes	X No
Wetland Hydrology Present? Yes	X No	_			_	
Remarks: Wetland DP-K. PEMA. Eas	t trackeido ditch	at Culvert 169	05			
Remarks. Wettand DF-R. FEMA. Eas	. Irackside ditori a	at Cuivert 100.	05.			
VEGETATION - Use scientific names of	plants.					
	Absolute	Dominant	Indicator	Dominance Test Wo	orksheet:	
Tree Stratum (Plot size: r = 30')	% Cover	Species?	Status	Number of Dominant	Species	
Celtis occidentalis	5	yes	FAC-	That Are OBL, FACV	V, or FAC:	3 (A)
2	_			_		
3	_			Total Number of Don		
4				Species Across All S	trata:	3 (B)
5		T-1-1 0		_		
		Total Cover		Percent of Dominant	•	
	= 15)		540	That Are OBL, FACV	V, or FAC:	100% (A/B)
1. Asimina triloba	1	yes	FAC	Prevalence Index W	/owkahaati	
2				OBL species		1 = 0
1				FACW species		2 = 0
5.				FAC species		3 = 0
·	1 =	Total Cover		FACU species		4 = 0
Herb Stratum (Plot size: r = 5')				UPL species	x 5	
1. Phalaris arundinacea	30	yes	FACW+			A) 0 (B)
2. Conium maculatum	5		FACW	- Prevalen	ce Index = B/A =	
3. Solidago missouriensis	5		UPL	_		
4. Carex sp.	70	yes	FACU-OB	Hydrophytic Vegeta	ation Indicators:	
5.				1. Rapid Tes	st for Hydrophytic Veg	jetation
6.				X 2. Dominano		
7	_			_	e Index is <3.01	
8				_ ` `	gical Adaptations ¹ (Pro	
9				_	arks or on a separate sheet	•
10				- Problematic	Hydrophytic Vegetation	on' (Explain)
	110=	Total Cover				
Woody Vine Stratum (Plot size:)			-	ric soil and wetland hy	= -
1.				must be present, i	unless disturbed or pr	oblematic.
2		- Total Cause		_	atatian Duagant?	Vaa V Na
	0	= Total Cove	r	Hydropnytic Veg	etation Present?	Yes X No
Remarks: (Include photo numbers here o	r on a separate s	sheet.)				
Tree stratum bordering wetland. Carex sp	. Assumed to be	FACW or wet	ter.			

			_						
Depth (inches)	Matrix			edox Fea					
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks	
0-5	2.5 Y 2.5/1	100					Silt loam		
5-10	2.5 Y 2.5/1	95	7.5 YR 4/6	5	C	M	Silty clay loam		
10-26	2.5 Y 2.5/1	100	_				Silty clay loam		
			_						
¹ Type: C=Cor	centration, D=De	epletion, RM=F	Reduced Matrix,	CS=Cove	ered or Coa	ted Sand Gra	ains. ² Location	n: PL=Pore Lining, M=Matrix	
Hydric Soil In	dicators						Indi	cators for Problematic Hydric Soils ³ :	
Histosol	(A1)		_		y Gleyed M	` '		Coast Prairie Redox (A16)	
Histic Ep	ipedon (A2)	_	Sand	y Redox (S	5)		Dark Surface (S7)		
Black His	stic (A3)		Stripp	oed Matrix (S6)		Iron-Manganese Masses (F12)		
Hydrogei	_	Loam	ny Mucky M	ineral (F1)		Very Shallow Dark Surface (TF12)			
Stratified	Layers (A5)	_	Loam	y Gleyed M	latrix (F2)		Other (Explain in Remarks)		
2 cm Mu	ck (A10)	_	Deple	eted Matrix	(F3)				
Depleted	Below Dark Surf	face (A11)	_	X Redo	x Dark Surf	ace (F6)			
Thick Da	rk Surface (A12)		_	Deple	eted Dark S	urface (F7)	³ lr	adicators of hydrophytic vegetation	
Sandy M		Redo	x Depression	ons (F8)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present,			
	cky Peat or Peat						unless disturbed or problematic.		
5 cm Mu	cky i cat of i cat	` '							
	yer: (if observed								
Restrictive La	yer: (if observed						Hydric S	Soil Present? Yes X No	
Restrictive La Type: Depth (inch	yer: (if observed						Hydric S	Soil Present? Yes X No	
Restrictive La	yer: (if observed						Hydric !	Soil Present? Yes X No	
Restrictive La Type: Depth (inch	yer: (if observed						Hydric !	Soil Present? Yes X No	
Restrictive La Type: Depth (inch	es):						Hydric 9	Soil Present? Yes X No	
Restrictive La Type: Depth (inch Remarks:	es):)					Hydric S	Soil Present? Yes X No	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY	es):	s:	ed; check all that	apply)		S		Soil Present? Yes X No tors (minimum of two required)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Wetland Hydr Primary Indica	es):	s:			ned Leaves	_			
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Wetland Hydr Primary Indica Surface \	es): rology Indicators tors (minimum of	s:	v	/ater-Stai	ned Leaves una (B13)	_	econdary Indica	tors (minimum of two required)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Vetland Hydr Primary Indica Surface \	es): rology Indicators tors (minimum of Nater (A1) ter Table (A2)	s:	V	/ater-Stai quatic Fa		s (B9)	econdary Indica	tors (minimum of two required) Surface Soil Cracks (B6)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Vetland Hydr Primary Indica Surface V X High Wat	es): cology Indicators tors (minimum of Water (A1) ter Table (A2) n (A3)	s:	W A T	/ater-Stai quatic Fa rue Aqua	una (B13)	(B9) (B14)	econdary Indica	tors <i>(minimum of two required)</i> Surface Soil Cracks (B6) Drainage Patterns (B10)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Wetland Hydr Primary Indica Surface V X High Wat X Saturatio Water Ma	es): cology Indicators tors (minimum of Water (A1) ter Table (A2) n (A3)	s:	W A H	/ater-Stai quatic Fa rue Aqua ydrogen S	una (B13) tic Plants (E Sulfide Odo	(B9) (B14)	econdary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Wetland Hydr Primary Indica Surface V X High Wat X Saturatio Water Ma Sedimen	es): rology Indicators tors (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1)	s:	W T H C	/ater-Stai quatic Fa rue Aqua ydrogen S xidized R	una (B13) tic Plants (E Sulfide Odo	s (B9) 314) or (C1) s on Living F	econdary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Wetland Hydr Primary Indica Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep	rology Indicators tors (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2)	s:	W T H C	/ater-Stai quatic Fa rue Aqua ydrogen s xidized R	una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced	s (B9) 314) or (C1) s on Living F	econdary Indica X Roots	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Vetland Hydr Primary Indica Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma	cology Indicators tors (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3)	s:	W A T H C P R	/ater-Stai quatic Fa rue Aquai ydrogen S xidized R resence c ecent Iron	una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced	s (B9) B14) or (C1) s on Living F Iron (C4) or in Tilled So	econdary Indica X Roots	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Wetland Hydr Primary Indica Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depr	rology Indicators tors (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)	s: f one is require	W T H C P R	/ater-Stai quatic Fa rue Aquai ydrogen S xidized R resence c ecent Iron hin Muck	una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced n Reductior Surface (C	s (B9) 314) or (C1) s on Living F Iron (C4) n in Tilled So 7)	econdary Indica X Roots ils (C6)	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Vetland Hydr Primary Indica Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep	rology Indicators tors (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	s: f one is require	— W — A — T — H — C — P — R — T — T	Vater-Stai quatic Fa rue Aquar ydrogen S xidized R resence o ecent Iron hin Muck auge or V	una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced n Reduction	s (B9) 314) or (C1) s on Living F Iron (C4) o in Tilled So 7)	econdary Indica X Roots ils (C6)	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Wetland Hydr Primary Indica Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dept Inundatic Sparsely	es): cology Indicators tors (minimum of Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Conca	s: f one is require	— W — A — T — H — C — P — R — T — T	Vater-Stai quatic Fa rue Aquar ydrogen S xidized R resence o ecent Iron hin Muck auge or V	una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced n Reductior Surface (C Well Data (E	s (B9) 314) or (C1) s on Living F Iron (C4) o in Tilled So 7)	econdary Indica X Roots ils (C6)	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Wetland Hydr Primary Indica Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depr Inundatio Sparsely	rology Indicators tors (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concations:	s: f one is require	— W — A — T — H — C — P — R — T — T	Vater-Stai quatic Fa rue Aquat ydrogen S xidized R resence c ecent Iron hin Muck auge or V	una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced in Reductior Surface (C Well Data (E Idain in Rem	s (B9) 314) or (C1) s on Living F Iron (C4) o in Tilled So 7)	econdary Indica X Roots ils (C6)	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Wetland Hydr Primary Indica Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep	rology Indicators tors (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concations: Present?	s: f one is require	— W — A — T — H — C — P — R — T 7) — G 38) — C	Vater-Stai quatic Fa rue Aquat ydrogen S xidized R resence c ecent Iron hin Muck auge or V	una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced in Reductior Surface (C Well Data (E Idain in Rem	s (B9) 314) s on Living F Iron (C4) n in Tilled So 7) D9) earks)	econdary Indica X Roots ils (C6) x	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)	
Restrictive La Type: Depth (inch Remarks: HYDROLOGY Wetland Hydr Primary Indica Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Inundatic Sparsely Field Observa Surface Water Water Table P	rology Indicators tors (minimum of Nater (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concations: Present?	al Imagery (B7	YesYesYesYesYesYesYesYesYesYesYesYesYesYesYesYes	Vater-Stai quatic Fa rue Aquai ydrogen S xidized R resence c ecent Iron hin Muck auge or V ther (Exp	una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced in Reductior Surface (C Well Data (E olain in Rem	(B9) 314) Ir (C1) Is on Living F Iron (C4) In in Tilled So (7) (99) (parks) Depth (inches)	econdary Indica X Roots ills (C6) x es) es) 26	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology	

Project/Site: SPCSL 2A (Tier 3)		City	/County: Log	gan	Sampling Date:	10/27/2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	DP 25
Investigator(s): DP, DM			Section, Tov	vnship, Range: S13, T 1		
· · · · · · · · · · · · · · · · · · ·	rackside ditch				, convex, none) : conc	ave
' ' '	0° 0' 39.57" N	Long	: 89 °	° 29' 34.00" W	Datum: NAD 83	
Soil Map Unit Name: 712A - Spaulding	silty clay loam,	0-2% slopes			NWI Classifica	tion: None
Are climatic/hydrologic conditions on the	site typical for th	is time of year?	Yes	S X No (If no	o, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	significantl	y disturbed?	Are "Normal Circui	mstances" present?	Yes X No
Are Vegetation , Soil , o	or Hydrology	naturally pro	blematic?	(If needed, e	xplain any answers in l	Remarks.)
SUMMARY OF FINDINGS - Attach site	map showing s	 ampling point	locations, tr	ansects, important fe	atures, etc.	
Hydrophytic Vegetation Present? Yes	es X No					
	es X No	_	Is the Sa	mpled Area within a We	etland? Yes	(No
	es X No					_
Remarks: Wetland DP-L. PEMC. Ea	ast side of old rail	line.				
VECETATION Line acientific names	of plants					
VEGETATION - Use scientific names	•	D	L. P. d.	Dominance Test Wo	arkahaat:	
Tree Stratum (Plot size:	Absolute) % Cover	Dominant Species?	Indicator Status	Number of Dominant		
1.	_'			That Are OBL, FACW		3 (A)
2.					<u></u>	
3.				Total Number of Dom	ninant	
4.				Species Across All S	trata:	3 (B)
5.						<u> </u>
	0	= Total Cover		Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACW	V, or FAC:	100% (A/B)
1.						
2				Prevalence Index W	orksheet:	
3				OBL species	x 1 :	
4		-		FACW species	x 2 :	
5		T-t-LO		FAC species	x 3 :	
Harb Stratum (Diet size:	1	= Total Cover		FACU species	x 4 :	
Herb Stratum (Plot size: r = 5' 1. Conium maculatum	_) 3		EACW.	UPL species Column Totals:	0 x 5 =	
Scirpus validus			OBL		$\frac{0}{\text{ce Index} = B/A =} $ (A)	(B)
3. Echinochloa crus-galli	40	yes	FACW	1 Tevalent	CC IIIGCX - BIA -	
Solidago missouriensis	3		UPL	Hydrophytic Vegeta	tion Indicators:	
5. Leersia oryzoides			OBL		t for Hydrophytic Vege	tation
6. Typha glauca	35	yes	OBL	X 2. Dominanc		
7. Carex sp.	10		FACU-OBL	3. Prevalence	e Index is ≤3.0¹	
8. Equisetum hyemale	5		FACW	4. Morpholog	ical Adaptations¹ (Provi	de supporting
9.				data in Rema	arks or on a separate sheet)	
10.				Problematic	Hydrophytic Vegetatior	1 ¹ (Explain)
	100	= Total Cover				
Woody Vine Stratum (Plot size:)			¹ Indicators of hydr	ic soil and wetland hyd	rology
1. Vitis riparia	2	yes	FACW-	must be present, u	ınless disturbed or prol	olematic.
2.						
	2	= Total Cove	er	Hydrophytic Veg	etation Present? Ye	es X No
Remarks: (Include photo numbers here	e or on a separate	sheet.)		1		
PH 64 - N; 65 - S	•	•				

d to document to	he indicator o	r confirm the a	bsence of indicat	fors.)			
Redox	Features						
(moist) 9	6 Type ¹	Loc ²	Texture	Remarks			
			Silt loam				
R 4/6	5 C	M	Silty clay loam				
			Silty clay loam				
ed Matrix, CS=0	Covered or Co	oated Sand Gr	ains. ² Location	: PL=Pore Lining, M=Matrix			
			Indic	ators for Problematic Hydric Soils ³ :			
8	Sandy Gleyed	Matrix (S4)		Coast Prairie Redox (A16)			
<u> </u>	Sandy Redox	(S5)		Dark Surface (S7)			
<u> </u>	Stripped Matri	x (S6)		Iron-Manganese Masses (F12)			
—	.oamy Mucky	Mineral (F1)		Very Shallow Dark Surface (TF12)			
—	oamy Gleyed	l Matrix (F2)	X	Other (Explain in Remarks)			
	epleted Matr	ix (F3)		_			
F	Redox Dark S	urface (F6)					
	epleted Dark	Surface (F7)	³ In	dicators of hydrophytic vegetation			
F	Redox Depres	ssions (F8)	Indicators of hydrophytic vegetation and wetland hydrology must be present,				
			ı	unless disturbed or problematic.			
			Hydric S	oil Present? Yes X No			
seumod bydrie r	or Stop 12h	of the 1097 Cou	res Delineation N	Manual			
ssumed mydne p	rei Otep 12b t	51 tile 1907 COI	ips Delineation N	iailuai.			
eck all that apply							
	v)	s	econdary Indicat	ors (minimum of two required)			
Water-	<i>y)</i> -Stained Leav		econdary Indicat	ors (minimum of two required) Surface Soil Cracks (B6)			
		res (B9)		· , , , , , , , , , , , , , , , , , , ,			
Aquati	-Stained Leav	ves (B9)		Surface Soil Cracks (B6)			
Aquati True A	-Stained Leav c Fauna (B13	ves (B9) 3) 5 (B14)		Surface Soil Cracks (B6) Drainage Patterns (B10)			
Aquati True A Hydro	-Stained Leav c Fauna (B13 Aquatic Plants gen Sulfide O	ves (B9) 3) 5 (B14)	<u> </u>	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)			
Aquati True A Hydro Oxidiz	-Stained Leav c Fauna (B13 Aquatic Plants gen Sulfide O	ves (B9) 3) (B14) dor (C1) eres on Living F	<u> </u>	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)			
Aquati True A Hydrog Oxidiz Preser	-Stained Leav c Fauna (B13 Aquatic Plants gen Sulfide O ed Rhizosphe nce of Reduce	ves (B9) 3) (B14) dor (C1) eres on Living F	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial			
Aquati True A Hydro Oxidiz Preser Recen	-Stained Leav c Fauna (B13 Aquatic Plants gen Sulfide O ed Rhizosphe nce of Reduce	ves (B9) 3) 4 (B14) 4 (C1) 6 eres on Living F 6 ed Iron (C4) 6 ion in Tilled So	Roots Ils (C6)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)			
Aquati True A Hydrog Oxidize Preser Recen Thin M	Stained Leav c Fauna (B13 equatic Plants gen Sulfide O ed Rhizosphe nce of Reducti t Iron Reducti	ves (B9) (B14) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So (C7)	Roots Ils (C6)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)			
Aquati True A Hydrog Oxidize Preser Recen Thin M Gauge	-Stained Leav c Fauna (B13 Aquatic Plants gen Sulfide O ed Rhizosphe nce of Reduce it Iron Reducti fuck Surface	ves (B9) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So (C7) i (D9)	Roots Ils (C6)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)			
Aquati True A Hydrog Oxidize Preser Recen Thin M Gauge	Stained Leaver Fauna (B13 Aquatic Plants gen Sulfide Oed Rhizosphence of Reduce It Iron Reductifuck Surface of Well Data	ves (B9) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So (C7) i (D9)	Roots Ils (C6)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)			
Aquati True A Hydrog Oxidize Preser Recen Thin M Gauge	Stained Leaver Fauna (B13 Aquatic Plants gen Sulfide Oed Rhizosphence of Reduce It Iron Reductifuck Surface of Well Data	ves (B9) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So (C7) i (D9)	Roots X	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)			
Aquati True A Hydrog Oxidiz Preser Recen Thin M Gauge Other	Stained Leaver Fauna (B13 Aquatic Plants gen Sulfide O ed Rhizosphence of Reduction Re	ves (B9) (B14) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So (C7) (D9) emarks)	X	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)			
Aquati True A Hydrog Oxidize Preser Recen Thin M Gauge Other	-Stained Leav c Fauna (B13 Aquatic Plants gen Sulfide O ed Rhizosphe nce of Reduce it Iron Reducti fuck Surface o e or Well Data (Explain in Re	ves (B9) 3) 4 (B14) 4 (dor (C1) 4 eres on Living F 6 ed Iron (C4) 5 ion in Tilled So 6 (C7) 6 (D9) 6 emarks) Depth (inches	Roots ils (C6) x es) 1	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)			
Aquati True A Hydrog Oxidiz Preser Recen Thin M Gauge Other Yes X Yes	Stained Leaver Fauna (B13 Aquatic Plants gen Sulfide Ore Reduce to Iron Reductifuck Surface for Well Data (Explain in Results No X No X	ves (B9) 3) 4 (B14) 4 (dor (C1) 4 eres on Living F 6 ed Iron (C4) 5 ion in Tilled So 6 (C7) 6 (D9) 6 emarks) Depth (inche 6 Depth (inche	X	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?			
Aquati True A Hydrog Oxidizi Preser Recen Thin M Gauge Other Yes X Yes Yes X	Stained Leaver Fauna (B13 Aquatic Plants gen Sulfide Ore Reduce to Iron Reductifuck Surface for Well Data (Explain in Results No X No X	ves (B9) 3) 4 (B14) 4 (dor (C1) 4 eres on Living F 6 ed Iron (C4) 5 ion in Tilled So 6 (C7) 6 (D9) 6 emarks) Depth (inche 6 Depth (inche	X	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?			
	Redox (moist) 7 R 4/6 S ed Matrix, CS=0 L L F F F	Redox Features (moist) % Type (R 4/6 5 C ed Matrix, CS=Covered or Company Gleyed Sandy Redox Stripped Matri Loamy Mucky Loamy Gleyed Depleted Matri Redox Dark S Depleted Dark Redox Depres	Redox Features (moist) % Type¹ Loc² (R 4/6	(moist) % Type¹ Loc² Texture Silt loam (R 4/6 5 C M Silty clay loam Silty clay loam ed Matrix, CS=Covered or Coated Sand Grains. ²Location Indic Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Loamy Mucky Mineral (F1) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) and			

Project/Site: SPCSL 2A (Tier 3)		City/Coun	ity: Logan	Sampling Date:	10/27/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	DP 27
Investigator(s): DP, DM		Secti	ion, Township, Range: S13,		
·	rackside ditch			ve, convex, none) : conc	ave
· · · /	10° 0' 39.06" N	Long:	89° 29' 35.44" W	Datum: NAD 83	
Soil Map Unit Name: 712A - Spaulding	រ្វ silty clay loam, 0	-2% slopes		NWI Classifica	ition: None
Are climatic/hydrologic conditions on the	e site typical for this	time of year?	Yes X No (If	no, explain in Remarks)	
Are Vegetation, Soil,	or Hydrology	significantly distu	urbed? Are "Normal Cire	cumstances" present?	Yes X No
Are Vegetation , Soil ,	or Hydrology	naturally problema	atic? (If needed,	, explain any answers in I	Remarks.)
SUMMARY OF FINDINGS - Attach sit	e map showing sa	mpling point locati	ions, transects, important	features, etc.	
Hydrophytic Vegetation Present? Y	res X No				
Hydric Soil Present?	es X No	- Is	the Sampled Area within a	Wetland? Yes X	(No
•	res X No	-			
		<u>-</u>			
Remarks: Wetland DP-M. PEMA. E	East trackside ditch	south of Culvert 168	8.05 between current and old	d rail lines.	
VEGETATION - Use scientific names	•		T		
Tree Stratum (Plot size:	Absolute) % Cover		icator Dominance Test \ atus Number of Domina		
1	_ /	opecies: ou	That Are OBL, FAC	•	1 (A)
2			—— Illat Ale Obl., I Ac		(A)
3			Total Number of De	ominant	
4.			Species Across All		1 (B)
5.					. (-/
··	0 =	Total Cover	Dercent of Demine	ent Chapian	
Sapling/Shrub Stratum (Plot size:			Percent of Domina That Are OBL, FAC	•	100% (A/B)
1			1110(7110 052, 1710		(A) b)
2.			Prevalence Index	Worksheet:	
3.			OBL species	x 1 =	= 0
4.			FACW species	x 2 =	= 0
5.			FAC species	x 3 =	= 0
	1 =	Total Cover	FACU species	x 4 =	= 0
Herb Stratum (Plot size: r = 5')		UPL species	x 5 =	= 0
1. Phalaris arundinacea	50	yes FA	CW+ Column Totals:	0 (A)	0 (B)
2. Carex sp.	50	yes FACI	U-OBL Prevale	ence Index = B/A =	
3. Ambrosia trifida	5	FA	AC+		
4				etation Indicators:	
5				est for Hydrophytic Veget	tation
6.				nce Test is >50%	
7.				nce Index is <3.01	
8.				logical Adaptations¹ (Provi	de supporting
9.				emarks or on a separate sheet)	al (Evalaia)
10		Total Cause	FIODIEITIAL	ic Hydrophytic Vegetatior	i (Explaili)
	=	Total Cover	41 11 4 51		
Woody Vine Stratum (Plot size:)		-	dric soil and wetland hyd	
1.			must be present	t, unless disturbed or prob	olematic.
2		Tatal Carra			V N-
	0	= Total Cover	Hydropnytic Ve	egetation Present? Ye	es X No
Remarks: (Include photo numbers her	e or on a separate :	sheet.)	·		
PH 66 - S (from sample point). Carex	sp. Assumed to be	FACW or wetter.			

Donth						ommin the a	bsence of indica	,	
Depth (inches)	Matrix Color (moist)	% (edox Fea	Type ¹	Loc ²	Toyturo	Domarka	
0-16	Color (moist)		Color (moist)	%	Туре	LOC	Texture	Remarks	
	2.5 Y 2.5/1 10 YR 4/4	100					Silt loam	climy	
16-20	2.5 Y 2.5/1	85 10					Clay	slimy	
	10 YR 5/8	5					Silty clay loam		
20-24	10 YR 5/6 10 YR 5/8	90					Clay loam		
20-24	2.5 Y 2.5/1	8	7.5 YR 5/8	2			Clay loam		
	2.0 1 2.0/1		7.5 TR 5/6						
¹Type: C=C	Concentration, D=De	epletion, RM=F	Reduced Matrix,	CS=Cove	ered or Coa	ed Sand Gr	ains. ² Locatio	n: PL=Pore Lining, M=Matrix	
Hydric Soil	Indicators						Ind	icators for Problematic Hydric Soils ³ :	
Histose	ol (A1)		_	Sand	y Gleyed M	atrix (S4)		Coast Prairie Redox (A16)	
Histic I	Epipedon (A2)		_	Sand	y Redox (S	5)		Dark Surface (S7)	
Black I	Black Histic (A3)				oed Matrix (S6)		Iron-Manganese Masses (F12)	
Hydrogen Sulfide (A4)				Loan	ny Mucky M	neral (F1)	<u> </u>	Very Shallow Dark Surface (TF12)	
Stratified Layers (A5)				Loan	ny Gleyed M	atrix (F2)	X	Other (Explain in Remarks)	
2 cm Muck (A10)				Depl	eted Matrix	(F3)		_	
Depleted Below Dark Surface (A11)				Redo	x Dark Surf	ace (F6)			
Thick [Dark Surface (A12)	_	Depl	eted Dark S	urface (F7)	³ Indicators of hydrophytic vegetation			
Sandy	Mucky Mineral (S1)	_	Redo	x Depression	ons (F8)	and wetland hydrology must be present,			
5 cm N	Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3)						unless disturbed or problematic.		
Restrictive	Layer: (if observed,	<u>'</u>)							
Type:									
Depth (in		ov 10 inches	with water table :	et annrox	18 inches	Soile assur	•	Soil Present? Yes X No _ Step 12h of the 1987 Corps Delinear	
Depth (in	Saturated at appro	ox. 10 inches v	with water table a	at approx	. 18 inches.	Soils assur	•	Soil Present? Yes X No_ Step 12b of the 1987 Corps Delinear	
Depth (in:	Saturated at appro		with water table a	at approx	. 18 inches.	Soils assur	•		
Depth (in: Remarks: HYDROLOG Wetland Hy	Saturated at appro	s:			. 18 inches.		med hydric per	Step 12b of the 1987 Corps Delineat	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi	Saturated at appro	s:	ed; check all that	apply)		<u>s</u>	med hydric per	Step 12b of the 1987 Corps Delinea	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac	Saturated at approach and a second and a sec	s:	ed; check all that	<i>apply)</i> /ater-Stal	ned Leaves	<u>s</u>	med hydric per	Step 12b of the 1987 Corps Delinea ators (minimum of two required) Surface Soil Cracks (B6)	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W	Saturated at approach and a second se	s:	ed; check all that N A	<i>apply)</i> /ater-Stal quatic Fa	ned Leaves una (B13)	<u>S</u> (B9)	med hydric per	Step 12b of the 1987 Corps Delinea ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura	Saturated at approach and a second se	s:	ed; check all that ——————————————————————————————————	<i>apply)</i> /ater-Stai quatic Fa rue Aqua	ned Leaves una (B13) tic Plants (E	S (B9)	med hydric per	Step 12b of the 1987 Corps Delinea ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water	Saturated at approach and a second se	s:	ed; check all that W A T	apply) /ater-Stal quatic Fa rue Aqua ydrogen	ned Leaves una (B13) tic Plants (E Sulfide Odo	S (B9) (B14) (C1)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water Sedime	Saturated at approduction (A3) Marks (B1) ent Deposits (B2)	s:	ed; check all that W A T H	apply) /ater-Stai quatic Fa rue Aqua ydrogen xidized F	ned Leaves una (B13) tic Plants (E Sulfide Odo	_ <u>S</u> (B9) 314) r (C1) s on Living F	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water Sedime Drift De	Saturated at approach of the Water (A1) Vater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	s:	ed; check all that A T H O	apply) /ater-Stal quatic Farue Aqua ydrogen xidized F	ned Leaves una (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced	_ <u>S</u> (B9) :14) r (C1) s on Living F Iron (C4)	econdary Indica	Step 12b of the 1987 Corps Delineal ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water Sedime Drift De	Saturated at appropriate Saturated at appropriate Variations (Minimum of the Water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4)	s:	ed; check all that A T H C P R	apply) //ater-Star quatic Farue Aqua ydrogen xidized Fresence	ned Leaves una (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced n Reduction	S(B9) s14) r (C1) s on Living F lron (C4) in Tilled So	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water Sedim: Drift De Algal M Iron De	Saturated at approductions (minimum of the Water (A1) Water Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	s: f one is require	ed; check all that	apply) /ater-Stai quatic Farue Aqua ydrogen xidized Fresence ecent Iro	ned Leaves una (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C	(B9) 114) r (C1) s on Living F lron (C4) in Tilled So 7)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water Sedim: Drift Definition Definition	Saturated at approach of the Water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Aeria	s: f one is require	ed; check all that A T H O R T R T G T	apply) /ater-Stal quatic Farue Aqua ydrogen xidized Faresence ecent Iro hin Muck auge or V	ned Leaves una (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced n Reduction Surface (C Well Data (E	S (B9) 114) r (C1) s on Living F lron (C4) in Tilled So 7)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water Sedim: Drift Definition Definition	Saturated at approductions (minimum of the Water (A1) Water Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5)	s: f one is require	ed; check all that A T H O R T R T G T	apply) /ater-Stal quatic Farue Aqua ydrogen xidized Faresence ecent Iro hin Muck auge or V	ned Leaves una (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C	S (B9) 114) r (C1) s on Living F lron (C4) in Tilled So 7)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water Sedime Drift De Algal M Iron De Inunda Sparse	Saturated at appropriate Saturated at appropriate Various Indicators (minimum of the Water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Aeria	s: f one is require	ed; check all that A T H O R T R T G T	apply) /ater-Stal quatic Farue Aqua ydrogen xidized Faresence ecent Iro hin Muck auge or V	ned Leaves una (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduced in Reduction Surface (C' Well Data (E	(B9) s14) r (C1) s on Living F lron (C4) in Tilled So 7) 99) arks)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water Sedime Drift De Algal M Iron De Inunda Sparse	Saturated at approductions (minimum of e Water (A1) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Aeria	s: f one is require	ed; check all that A T H C P R T G S88) Yes	apply) //ater-Star quatic Farue Aqua ydrogen xidized F resence ecent Iro nin Muck auge or ther (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduction Reduction Surface (C' Well Data (E olain in Rem	S(B9) 14) r (C1) s on Living F lron (C4) in Tilled So 7) 09) arks)	econdary Indicates Roots ils (C6) x	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology	
Depth (inc.) Remarks: HYDROLOG Wetland Hy Primary Indi Surfact X High W X Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Surface Water Surface Water Water Table	Saturated at approductions (minimum of e Water (A1) Water Table (A2) tition (A3) Marks (B1) ent Deposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Aeria ely Vegetated Concarvations: ter Present?	s: f one is require al Imagery (B7 ave Surface (B	ed; check all that WATHCRT	apply) /ater-Stai quatic Fa rue Aqua ydrogen xidized F resence ecent Iro hin Muck auge or V ther (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduction Reduction Surface (C' Well Data (E olain in Rem	(B9) s14) r (C1) s on Living F lron (C4) in Tilled So 7) 99) arks)	econdary Indicates Roots ils (C6) x	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)	
Depth (inc.) Remarks: HYDROLOG Wetland Hy Primary Indi Surfact X High W X Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Surface Water Surface Water Water Table	Saturated at approductions (minimum of the Water (A1)) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Aeria ely Vegetated Concarvations: ter Present?	s: f one is require al Imagery (B7 ave Surface (B	ed; check all that WATHCRT	apply) /ater-Stal quatic Farue Aqua ydrogen xidized F resence ecent Iro hin Muck auge or t ther (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo thizosphere of Reduced n Reduction Surface (C' Well Data (E blain in Rem	S(B9) 14) r (C1) s on Living F lron (C4) in Tilled So 7) 09) arks)	econdary Indicates Roots ills (C6) x es) es) 18	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Field Obser Surface Wat Water Table Saturation F	Saturated at approductions (minimum of e Water (A1) Water Table (A2) tition (A3) Marks (B1) ent Deposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Aeria ely Vegetated Concarvations: ter Present?	s: f one is require al Imagery (B7 ave Surface (E	ed; check all that A T H C P R 38) Yes Yes Yes Yes Yes	apply) //ater-Star quatic Farue Aqua ydrogen xidized F resence ecent Iro nin Muck auge or V ther (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduction Surface (C' Well Data (E Islain in Rem	S(B9) 144) r (C1) s on Living F lron (C4) in Tilled So 7) 09) arks) Depth (inche	econdary Indicates Roots ils (C6) x es) es) 18 10	Step 12b of the 1987 Corps Delinear ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?	
Depth (in: Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High W X Satura Water Sedime Drift De Algal M Iron De Inunda Sparse Field Obser Surface Wat Water Table Saturation F	Saturated at approductions (minimum of the Water (A1)) Vater Table (A2) Ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) Mat or Crust (B4) eposits (B5) ation Visible on Aeria ely Vegetated Concar rvations: ter Present? Present? Present? (includes c	s: f one is require al Imagery (B7 ave Surface (E	ed; check all that A T H C P R 38) Yes Yes Yes Yes Yes	apply) //ater-Star quatic Farue Aqua ydrogen xidized F resence ecent Iro nin Muck auge or V ther (Exp	ned Leaves una (B13) tic Plants (E Sulfide Odo Rhizosphere of Reduction Surface (C' Well Data (E Islain in Rem	S(B9) 144) r (C1) s on Living F lron (C4) in Tilled So 7) 09) arks) Depth (inche	econdary Indicates Roots ils (C6) x es) es) 18 10	Step 12b of the 1987 Corps Delinear ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?	

Project/Site: SPCSL 2A (Tier 3)		City/County:	Logan	Sampling Date: 10/27/2010
Applicant/Owner: UPRR			State: IL	Sampling Point: DP 28
Investigator(s): DP, DM		Section,	Township, Range: S13, T	
	kside ditch		•	e, convex, none) : concave
· ` ` /	0' 33.76" N	Long:	89° 29' 40.43" W	Datum: NAD 83
Soil Map Unit Name: 43A - Ipava silt Ioam	·			NWI Classification: None
Are climatic/hydrologic conditions on the site	e typical for this time	e of year?	 `	o, explain in Remarks)
Are Vegetation, Soil, or H	ydrology s	ignificantly disturb	ed? Are "Normal Circu	mstances" present? Yes X No
Are Vegetation, Soil, or H	lydrologyna	turally problematic	? (If needed, e	explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sampl	ing point location	s, transects, important fe	eatures, etc.
Hydrophytic Vegetation Present? Yes	X No			
Hydric Soil Present? Yes	X No	Is the	e Sampled Area within a W	etland? Yes X No
Wetland Hydrology Present? Yes	X No			
Remarks: Wetland DP-N. PEMA/PFOA.	East side of old ra	ail line. Fringe alon	ig drainage ditch east of Cu	ulvert 168.20.
		_		
VEGETATION - Use scientific names of p	lants.			
Tree Stratum (Plot size: r = 30')		ominant Indicat pecies? Status		
1. Acer saccharinum	35	yes FACV	V That Are OBL, FACV	V, or FAC: 3 (A)
2. Salix nigra	25	yes OBL	<u> </u>	
3			Total Number of Dor	ninant
4			Species Across All S	Strata: 3 (B)
5			_	
	60 = Tota	al Cover	Percent of Dominant	Species
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FACV	V, or FAC: 100% (A/B)
1				
2			Prevalence Index W	
3			OBL species	x1= 0
4			FACW species	x = 0 $x = 0$ $x = 0$
5	0 = Tota	al Cover	FAC species FACU species	x 4 = 0
Herb Stratum (Plot size: r = 5')		ai oovei	UPL species	$\frac{1}{x} = \frac{1}{x} = \frac{1}$
1. Phalaris arundinacea	100	yes FACW	·	0 (A) 0 (B)
2.				ice Index = B/A =
3.			-	
4.			Hydrophytic Vegeta	ation Indicators:
5.			1. Rapid Tes	st for Hydrophytic Vegetation
6.			X 2. Dominano	ce Test is >50%
7			3. Prevalence	ce Index is <3.01
8			4. Morpholog	gical Adaptations¹ (Provide supporting
9			— ——	arks or on a separate sheet)
10			Problematic	Hydrophytic Vegetation¹ (Explain)
	100 = Tota	al Cover		
Woody Vine Stratum (Plot size:)		-	ric soil and wetland hydrology
1.			must be present,	unless disturbed or problematic.
2		Fotal Cover		notation Duncout? Voc. V No.
	0 = 1	Total Cover	Hydrophytic Veg	etation Present? Yes X No
Remarks: (Include photo numbers here or	on a separate shee	et.)		
PH 72 - N at trees in ditch. Wetland ends a	t road crossing at se	outh end.		

Profile Des	cription: (Describe to the depth	needed to docun	nent the	indicator c	or confirm the	absence of indica	itors.)
Depth	Matrix	F	edox F	eatures			
(inches)	Color (moist) %	Color (moist)	%	Туре	1 Loc ²	Texture	Remarks
¹ Type: C=C	Concentration, D=Depletion, RM	=Reduced Matrix,	CS=Cc	overed or C	oated Sand G	Grains. ² Location	n: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators					Indi	cators for Problematic Hydric Soils ³ :
Histos	ol (A1)		Sa	ndy Gleyed	Matrix (S4)		Coast Prairie Redox (A16)
Histic I	Epipedon (A2)	_	Sa	ndy Redox	(S5)		Dark Surface (S7)
Black I	Histic (A3)	_	Str	ripped Matri	ix (S6)		Iron-Manganese Masses (F12)
Hydro	gen Sulfide (A4)	_	Loa	amy Mucky	Mineral (F1)		Very Shallow Dark Surface (TF12)
Stratifi	_	Loa	amy Gleyed	d Matrix (F2)	X	Other (Explain in Remarks)	
2 cm N	Muck (A10)	_	De	pleted Matr	rix (F3)		
Deplet	ted Below Dark Surface (A11)	_	Re	dox Dark S	surface (F6)		
Thick I	Dark Surface (A12)	_	De	pleted Dark	Surface (F7)) 3 _{Ir}	ndicators of hydrophytic vegetation
Sandy	Mucky Mineral (S1)	_	Re	dox Depres	ssions (F8)		wetland hydrology must be present,
5 cm N	Mucky Peat or Peat (S3)						unless disturbed or problematic.
Restrictive	Layer: (if observed)						
Type:							
Depth (in	ches):					Hydric :	Soil Present? Yes X No
Remarks:	No pit dug to to inundation. S	oils assumed hyd	ic per S	Step 12b of	the 1987 Cor	ns Delineation Ma	anual
rtomarko.	THO PIL day to to mandation. C	ono accarrica riyar	io pei c	310p 125 01	110 1007 001	po Deimedion Mi	aridai.
HYDROLOG							
	drology Indicators:						
Primary Indi	icators (minimum of one is requ				-	Secondary Indica	tors (minimum of two required)
	ce Water (A1)			tained Leav			Surface Soil Cracks (B6)
	Vater Table (A2)			Fauna (B13			Drainage Patterns (B10)
X Satura	, ,			uatic Plants			Dry-Season Water Table (C2)
	Marks (B1)		-	en Sulfide O			Crayfish Burrows (C8)
	ent Deposits (B2)				eres on Living	Roots	Saturation Visible on Aerial
	eposits (B3)	F	resenc	e of Reduc	ed Iron (C4)		Imagery (C9)
	Mat or Crust (B4)				ion in Tilled S	` ′	Stunted or Stressed Plants (D1)
	eposits (B5)			ck Surface	` '	X	Geomorphic Position (D2)
	ation Visible on Aerial Imagery (I		-	or Well Data			FAC-Neutral Test (D5)
Sparse	ely Vegetated Concave Surface	(B8)C	ther (E	Explain in R	emarks)		
Field Obser	rvations:						
Surface Wa	ter Present?	Yes _	X	No	Depth (inch	hes) 5	Wetland Hydrology
Water Table	Present?	Yes _		No X	Depth (inch	hes)	Present?
Saturation F	Present? (includes capillary fring	ge) Yes _	Х	No	Depth (inch	hes) 0	Yes X No
Describe Re	ecorded Data (stream gauge, me	onitoring well, aeri	al photo	os, previous	s inspections)	, if available.	
Remarks:							

Project/Site: SPCSL 2A (Tier 3)		City/0	County: Log	gan	Sampling Dat	e: 10/2 8	8/2010
Applicant/Owner: UPRR				State: IL	Sampling Poir	nt: DF	P 31
Investigator(s): DP, DM			Section, Tov	vnship, Range: S13, 1	Γ18N, R04W		
· · · · · · · · · · · · · · · · · · ·	kside ditch			Local Relief (concav	e, convex, none):	concave	
	0' 21.65" N	Long:	899	° 29' 53.82" W	Datum: NAD 83		
Soil Map Unit Name: 68A - Sable silty cla	y loam, 0-2% slo	ppes			NWI Clas	ssification: N	one
Are climatic/hydrologic conditions on the si	te typical for this t	ime of year?	Yes	S X No (If r	no, explain in Rema	arks)	
Are Vegetation, Soil, or l	Hydrology	significantly	disturbed?	Are "Normal Circ	umstances" present?	? Yes	X No _
Are Vegetation, Soil, or	-lydrology	naturally prob	olematic?	(If needed,	explain any answe	rs in Remark	s.)
SUMMARY OF FINDINGS - Attach site m	ap showing sam	npling point I	ocations, tr	ansects, important f	eatures, etc.		
Hydrophytic Vegetation Present? Yes	X No						
Hydric Soil Present? Yes	X No		Is the Sa	mpled Area within a V	Vetland? Ye	es X No	ļ
Wetland Hydrology Present? Yes	X No						
	atod in wort track	nida ditah hat	woon road a	nd railroad tracks sout	th of Wotland DD F)	
Remarks: Wetland DP-O. PEMA. Loca	ited in west tracks	side ditch bet	ween road a	nu raiiroau tracks soui	in or welland DP-F	.	
VEGETATION - Use scientific names of							
	Absolute	Dominant	Indicator	Dominance Test W	/orksheet:		
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominar			
1				That Are OBL, FAC	W, or FAC:	1	(A)
2.							
3	<u> </u>			Total Number of Do			
4				Species Across All S	Strata:	1	(B)
5		<u> </u>					
	0 = 7	Total Cover		Percent of Dominan	•		
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FAC	W, or FAC:	100%	(A/B)
1				Prevalence Index \	Markabaat.		
2				OBL species	worksneet:	x 1 =	0
٠. ٨				FACW species			0
5.				FAC species			0
	0 = 1	Total Cover		FACU species			0
Herb Stratum (Plot size: r = 5')				UPL species			0
1. Spartina pectinata	80	yes	FACW+	Column Totals:	0		0 (B)
2. Pastinaca sativa	1		UPL	Prevale	nce Index = B/A =		
3. Polygonum sp.	2		FACU-OBL		•		
4. Cyperus esculentus	2		FACW	Hydrophytic Veget	tation Indicators:		
5. Cyperus odoratus	2		FACW	1. Rapid Te	est for Hydrophytic	Vegetation	
6. Equisetum hyemale	1		FACW		ce Test is >50%		
7					ce Index is <3.01		
8	<u> </u>				ogical Adaptations ¹		orting
9					narks or on a separate s	•	
10		F-4-1 O		Problematic	: Hydrophytic Vege	etation (Expia	in)
	88 = 7	Total Cover					
Woody Vine Stratum (Plot size:)			-	dric soil and wetlan		
1				must be present,	unless disturbed of	or problemation	<u>). </u>
2	0	= Total Cove		Hydrophytic Vo	antation Procent?	Voc V	No
		- Total Cove		nyuropnytic ve	getation Present?	Yes X	_ No
Remarks: (Include photo numbers here of	r on a separate sh	neet.)					

Profile Des	cription: (Describe	to the depth ne				confirm the ab	sence of indica	tors.)		
Depth	Matrix			edox Fea						
(inches)	Color (moist)		olor (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-4	10 YR 2/1	80					Silt loam			
	2.5 Y 5/4	10	2.5 Y 4/1	10	D	M	Silt loam			
4-6	2.5 Y 5/4	90					Silt loam			
	10 YR 2/1	8	2.5 Y 4/1	2	D	M	Silt loam			
6-12	10 YR 2/1	98					Silt loam			
	2.5 Y 5/4	2					Silt loam			
12-16	2.5 Y 5/4	90	10 YR 5/8	8	С	<u> </u>	Silt loam			
¹ Type: C=C	Concentration, D=De	epletion, RM=Re	educed Matrix,	CS=Cove	red or Coa	ated Sand Gra	ins. ² Location	n: PL=Pore Lining, M=Matrix		
Hydric Soil	Indicators						Indi	cators for Problematic Hydric Soils ³ :		
Histos	ol (A1)		_	Sand	y Gleyed N	Matrix (S4)		_ Coast Prairie Redox (A16)		
Histic	Epipedon (A2)		_	Sand	y Redox (S	S5)		_ Dark Surface (S7)		
Black	Histic (A3)		_	Stripp	ed Matrix	(S6)		Iron-Manganese Masses (F12)		
Hydro	gen Sulfide (A4)	_	Loam	y Mucky N	/lineral (F1)		Very Shallow Dark Surface (TF12)			
Stratifi	ed Layers (A5)	_	Loam	y Gleyed I	Matrix (F2)		Other (Explain in Remarks)			
2 cm N	/luck (A10)		_	Deple	ted Matrix	(F3)				
Deplet	ed Below Dark Surf	face (A11)	_	Redo	x Dark Sui	rface (F6)				
Thick I	Dark Surface (A12)		_	Deple	ted Dark S	Surface (F7)	3lr	ndicators of hydrophytic vegetation		
Sandy	Mucky Mineral (S1)	_	X Redo	x Depress	ions (F8)	and wetland hydrology must be present,			
5 cm N	Mucky Peat or Peat	(S3)						unless disturbed or problematic.		
Type: Depth (in Remarks:	ches): 10 YR 3/2 2						Hydric S	Soil Present? Yes X No		
HYDROLOG	GY									
Wetland Hy	drology Indicators	s:								
Primary Indi	cators (minimum of	f one is required	l; check all that	apply)		Se	econdary Indica	tors (minimum of two required)		
Surfac	e Water (A1)	-	V	Vater-Stair	ned Leave	es (B9)	-	Surface Soil Cracks (B6)		
	Vater Table (A2)		A	quatic Fa	una (B13)			Drainage Patterns (B10)		
Satura	tion (A3)		—т	rue Aquat	ic Plants (B14)	Dry-Season Water Table (C2)			
Water	Marks (B1)		—_	lydrogen S	Sulfide Od	or (C1)		Crayfish Burrows (C8)		
	ent Deposits (B2)			-		es on Living R	toots	Saturation Visible on Aerial		
	eposits (B3)					d Iron (C4)		Imagery (C9)		
X Algal N	Mat or Crust (B4)		—— R	ecent Iror	n Reductio	n in Tilled Soi	ls (C6)	Stunted or Stressed Plants (D1)		
	eposits (B5)		—_т	hin Muck	Surface (C	27)	<u> </u>	Geomorphic Position (D2)		
	ation Visible on Aeria	al Imagery (B7)			Vell Data (•		FAC-Neutral Test (D5)		
	ely Vegetated Conc			-	lain in Rer					
Field Obse	rvations:									
Surface Wa	ter Present?		Yes	N	lo X	Depth (inche	s)	Wetland Hydrology		
Water Table	Present?		Yes		lo X	Depth (inche	s) >16	Present?		
Saturation F	Present? (includes c	capillary fringe)	Yes		lo X	Depth (inche	s)	Yes X No		
Describe Re	ecorded Data (streat	m gauge, monit	oring well, aeri	al photos.	previous i	inspections) , i	f available.	<u> </u>		
				· /	<u> </u>					
Remarks:										

Project/Site: SPCSL 2A (Tier 3)		City/	County: L	ogan	Sampling Date	: 10/2	8/2010
Applicant/Owner: UPRR				State: IL	Sampling Point	: <u>D</u> I	P 32
Investigator(s): DP, DM			Section, To	ownship, Range: S13, T	18N, R04W		
	side ditch			Local Relief (concave	e, convex, none) : <u>c</u>	oncave	
· · · /	' 28.34" N	Long:	8	39° 29' 47.86" W	Datum: NAD 83		
Soil Map Unit Name: 43A - Ipava silt Ioam	0-2% slopes				NWI Class	sification: N	lone
Are climatic/hydrologic conditions on the site	typical for this	time of year?	Y	es X No (If n	o, explain in Rema	rks)	
Are Vegetation , Soil , or H	ydrology	significantly	disturbed	? Are "Normal Circu	ımstances" present?	Yes	X No
Are Vegetation , Soil , or H	ydrology	naturally pro	blematic?	(If needed, e	explain any answer	s in Remark	ks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sa	-					
Hydrophytic Vegetation Present? Yes				, , <u>, , , , , , , , , , , , , , , , , </u>	•		
Hydric Soil Present? Yes		-	le the S	Sampled Area within a W	/etland? Ve	s X No	,
•		-	13 1116 0	bampied Alea Within a W	retiana: re.		' ——
Wetland Hydrology Present? Yes	X No	_					
Remarks: Wetland DP-P. PEMA. Locate	ed in west track	side ditch bet	ween highv	way and railroad.			
VEGETATION - Use scientific names of p	lants.						
	Absolute	Dominant	Indicator	Dominance Test W			
Tree Stratum (Plot size: r = 30')	% Cover	Species?	Status	Number of Dominan		4	(.)
1				That Are OBL, FAC\	N, or FAC:	1	(A)
2				-			
3				Total Number of Dor		4	(D)
4				Species Across All S		1	(B)
5	0 =	Total Cover		-			
Continue/Chart h Charter / Diet cine		Total Covei		Percent of Dominant	•	4000/	(4 (5)
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FAC\	/v, or FAC:	100%	(A/B)
1				Prevalence Index V	Vorkoboot:		
3.				OBL species		x 1 =	0
4				FACW species		x 2 =	0
<u></u>				FAC species			0
·	0 =	Total Cover		FACU species		x 4 =	0
Herb Stratum (Plot size: r = 5')				UPL species		x 5 =	0
Eleocharis erythropoda	70	yes	OBL	Column Totals:	0	(A)	0 (B)
2. Carex sp.	15		FACU-OBL	_	nce Index = B/A =	· /	
3. Poa pratensis	15		FAC	-	_		
4.				Hydrophytic Veget	ation Indicators:		
5.				1. Rapid Tes	st for Hydrophytic V	egetation	
6.				X 2. Dominano	ce Test is >50%		
7.				3. Prevalence	ce Index is <3.01		
8.				4. Morpholo	gical Adaptations¹ (Provide supp	orting
9				data in Rem	arks or on a separate sh	eet)	
0				Problematic	Hydrophytic Veget	ation¹ (Expla	iin)
	100 =	Total Cover					
Woody Vine Stratum (Plot size:)			¹ Indicators of hyd	ric soil and wetland	hydrology	
1.				must be present,	unless disturbed or	problemati	C.
					·	· <u></u>	
2.		= Total Cove		_	etation Present?		

Profile Desc	cription: (Describe	to the depth nee				onfirm the a	bsence of indica	tors.)	
Depth	Matrix			edox Feat					
(inches)	Color (moist)	<u> % Co</u>	lor (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-6	10 YR 2/2	100					Silty clay loam	Very moist	
6-14	10 YR 2/1		5 YR 5/8	1	C	<u>M</u>	Silty clay loam		
14-15	2.5 Y 5/3	90					Silty clay loam		
	10 YR 2/1	10					Silt loam		
15-24	10 YR 2/1		5 YR 5/8	1	C	<u>M</u>	Silt loam		
24-30	10 YR 2/1	97 7	5 YR 5/8	3	<u> </u>	<u> </u>	Silt loam		
¹ Type: C=C	oncentration, D=De	epletion, RM=Re	duced Matrix,	CS=Cove	red or Coa	ted Sand Gr	rains. ² Location	n: PL=Pore Lining, M=Matrix	
Hydric Soil	Indicators						Indi	cators for Problematic Hydric Soils ³ :	
Histoso	ol (A1)		_	Sandy	y Gleyed M	latrix (S4)		Coast Prairie Redox (A16)	
Histic E	pipedon (A2)	_	Sandy	y Redox (S	5)		Dark Surface (S7)		
Black H	listic (A3)	_	Stripp	ed Matrix (S6)		Iron-Manganese Masses (F12)		
Hydrog	en Sulfide (A4)		Loam	y Mucky M	ineral (F1)		Very Shallow Dark Surface (TF12)		
Stratifie	ed Layers (A5)		Loam	y Gleyed M	latrix (F2)	X	Other (Explain in Remarks)		
2 cm M	uck (A10)		Deple	ted Matrix	(F3)		_		
Deplete	ed Below Dark Surf	face (A11)		Redo	x Dark Surf	face (F6)			
Thick D	ark Surface (A12)		Deple	ted Dark S	urface (F7)	31	edicators of hydrophytic vocatation		
Sandy	Mucky Mineral (S1		Redo	x Depression	ons (F8)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present,		
5 cm M	ucky Peat or Peat	(S3)						unless disturbed or problematic.	
Restrictive I	Layer: (if observed)							
Type:									
Depth (inc	ches):						Hydric S	Soil Present? Yes X No	
Remarks:	No hydric soils inc	dicators observed	d. Soils assun	ned hydrid	per Step 1	12b of the 19	987 Corps Deline	eation Manual.	
LIVEROL OC									
HYDROLOG									
_	drology Indicators		-1111-414				N	to an experience of the constant	
·	cators (minimum of	one is requirea;				_	secondary Indica	tors (minimum of two required)	
	e Water (A1)				ned Leaves	s (B9)		Surface Soil Cracks (B6)	
	ater Table (A2)			•	una (B13)		X Drainage Patterns (B10)		
	ion (A3)				ic Plants (E			_ Dry-Season Water Table (C2)	
	Marks (B1)			-	Sulfide Odo			Crayfish Burrows (C8)	
	ent Deposits (B2)					s on Living	Roots	_Saturation Visible on Aerial Imagery (C9)	
	eposits (B3)				of Reduced	` '			
	lat or Crust (B4)					n in Tilled So	` ′	_Stunted or Stressed Plants (D1)	
	posits (B5)				Surface (C	•		Geomorphic Position (D2)	
	tion Visible on Aeri			_	Vell Data ([X	FAC-Neutral Test (D5)	
Sparse	ly Vegetated Conc	ave Surface (B8)	0	ther (Exp	lain in Rem	arks)			
Field Obser	vations:								
Surface Wat	er Present?		Yes	N	lo X	Depth (inch	es)	Wetland Hydrology	
Water Table	Present?		Yes	N	lo X	Depth (inch	es)	Present?	
Saturation P	resent? (includes d	capillary fringe)	Yes	N	lo X	Depth (inch	es)	Yes X No	
Describe Re	corded Data (strea	m gauge, monito	ring well, aeria	al photos,	previous ir	nspections) ,	if available.		
Remarks:									
iteillaiks.									

Project/Site: SPCSL 2A (Tier 3)			City	//County: <u>I</u>	Logan	Sampling Date:	10/28/2010
Applicant/Owner: UPRR					State: IL	Sampling Point:	DP 33
Investigator(s): DP, DM				Section, 7	Township, Range: S13,		
Landform (hillslope, terrace, etc.):		side ditch				ve, convex, none) : con	cave
Slope (%): 0-2 Lat:		31.60" N	Long	j:	89° 29' 44.60" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava s						NWI Classific	-
Are climatic/hydrologic conditions or			-	? \	 ,	no, explain in Remarks,)
Are Vegetation, Soil	, or Hy	drology	significant	ly disturbed	d? Are "Normal Circ	cumstances" present?	Yes X No
Are Vegetation, Soil	, or Hy	drology	naturally pro	oblematic?	(If needed,	, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach	site ma	p showing s	ampling point	locations	, transects, important	features, etc.	
Hydrophytic Vegetation Present?	Yes	X No					
Hydric Soil Present?	Yes	X No		Is the	Sampled Area within a	Wetland? Yes	X No
Wetland Hydrology Present?	Yes	X No					
Remarks: Wetland DP-Q1 & DP-	O2 DEI	MA/DEMC 9	Sample point D	D 33 ropro	sents both wetlands. W	Actionds abut each other	r at Culvert
168.05.	·QZ. FLI	VIAVELIVIC.	Sample point D	r 33 lepie	sents both wetlands. W	reliands abut each other	at Cuivert
100.00.							
VEGETATION - Use scientific nan	nes of pl	ants.					
		Absolute	Dominant	Indicator	Dominance Test V	Worksheet:	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Domina		
1					That Are OBL, FAC	CW, or FAC:	2 (A)
2					_		
3					Total Number of Do		
4					Species Across All	Strata:	2 (B)
5					_		
		0	= Total Cover		Percent of Domina	•	
Sapling/Shrub Stratum (Plot size:	·)			That Are OBL, FAC	CW, or FAC:	100% (A/B)
1.					_		
2					Prevalence Index		0
3					OBL species FACW species	x 1	
5.		-			FAC species	x 2	
·		1	= Total Cover		FACU species	x 4	
Herb Stratum(Plot size: r = 5	j')				UPL species	x 5	
1. Scirpus atrovirens	—′	40	yes	OBL	Column Totals:	O (A	
2. Poa pratensis		15		FAC	Prevale	ence Index = B/A =	, <u> </u>
3. Carex sp.		40	yes	FACU-OB	—		
4.					Hydrophytic Vege	etation Indicators:	
5.					1. Rapid T	est for Hydrophytic Veg	etation
6					X 2. Domina	nce Test is >50%	
7					_	nce Index is <3.01	
8					_	logical Adaptations ¹ (Pro	
9					_	emarks or on a separate sheet)	
10			- Tatal Cause		Problemati	ic Hydrophytic Vegetatio	nı. (Explain)
Manda Vina Otratana (D. 1.		95	= Total Cover		41	alaia aali eestee 0 - 11	ada a la su c
Woody Vine Stratum (Plot size:)			1	dric soil and wetland hy	0,
1					must be present	t, unless disturbed or pro	obiematic.
2		0	= Total Cov		Hvdrophytic Va	agetation Present?	Yes X No
			1	CI	Hydrophytic Ve	egetation Present?	Yes X No
Remarks: (Include photo numbers							
PH 87-89 N,E,S. Wetland in east ro	adside d	itch. Other v	egetation includ	ded; <i>Typha</i>	a latifolia. Carex sp. As	ssumed to be FACW or	wetter.

Depth	Matrix		Re	edox Fea	luics			
(inches)	Color (moist)	% (Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10 YR 2/1	100					Silty clay loam	
4-6	10 YR 2/1	20					Silty clay loam	
	2.5 Y 4/3	70	2.5 Y 4/1	8	D	М	Silty clay loam	
			10 YR 5/8	2	С	М		
Type: C=C	Concentration, D=De	pletion, RM=R	Reduced Matrix,	CS=Cove	ered or Coate	ed Sand Gra	ins. ² Locatio	n: PL=Pore Lining, M=Matrix
ydric Soil	Indicators						Indi	cators for Problematic Hydric Soils ³ :
Histos	ol (A1)			Sand	y Gleyed Ma	atrix (S4)		Coast Prairie Redox (A16)
Histic I	Epipedon (A2)			Sand	y Redox (S5	5)		Dark Surface (S7)
Black I	Histic (A3)			Stripp	ed Matrix (S	86)		Iron-Manganese Masses (F12)
— Hydrog	gen Sulfide (A4)			Loam	ıy Mucky Miı	neral (F1)		Very Shallow Dark Surface (TF12)
Stratifi	ied Layers (A5)			Loam	y Gleyed Ma	atrix (F2)	X	Other (Explain in Remarks)
2 cm N	Muck (A10)			Deple	eted Matrix (F3)		_
	ted Below Dark Surf	face (A11)	· · · · · · · · · · · · · · · · · · ·		x Dark Surfa			
Thick I	Dark Surface (A12)		·	 Deple	eted Dark Su	ırface (F7)	3.	
)		Redo	x Depressio	ns (F8)		ndicators of hydrophytic vegetation wetland hydrology must be present,
Sandy	Mucky Mineral (S1)	,					una	wedana nyarology mast be present,
	Mucky Mineral (S1) Mucky Peat or Peat		_					unless disturbed or problematic.
5 cm N	Mucky Peat or Peat	(S3)						unless disturbed or problematic.
5 cm N		(S3)						unless disturbed or problematic.
5 cm N Restrictive Type:	Mucky Peat or Peat Layer: (if observed)	(S3)						
5 cm N	Mucky Peat or Peat Layer: (if observed)	(S3)					Hydric :	unless disturbed or problematic. Soil Present? Yes X No
5 cm N Restrictive Type: Depth (in	Mucky Peat or Peat Layer: (if observed)	(S3)	ssumed hydric p	er Step 1	2b of the 19	87 Corps De	-	Soil Present? Yes X No
5 cm Nestrictive Type: Depth (in	Mucky Peat or Peat Layer: (if observed oches):	(S3)	ssumed hydric p	er Step 1	2b of the 19	87 Corps De	-	Soil Present? Yes X No
5 cm Mestrictive Type: Depth (in	Mucky Peat or Peat Layer: (if observed, oches): Water table at 6 in	(S3)	ssumed hydric p	er Step 1	2b of the 19	87 Corps De	-	Soil Present? Yes X No
5 cm Nestrictive Type: Depth (in	Mucky Peat or Peat Layer: (if observed) aches): Water table at 6 in	(S3)	ssumed hydric p	er Step 1	2b of the 19	87 Corps De	-	Soil Present? Yes X No
5 cm N Restrictive Type: Depth (in Remarks:	Mucky Peat or Peat Layer: (if observed) ches): Water table at 6 in GY ydrology Indicators	(S3) nches. Soils as:			2b of the 19		lineation Manu	Soil Present? Yes X No al.
5 cm Mestrictive Type: Depth (in Remarks: IYDROLOG Vetland Hy	Mucky Peat or Peat Layer: (if observed) iches): Water table at 6 in GY ydrology Indicators icators (minimum of	(S3) nches. Soils as:	rd; check all that	apply)		Se	lineation Manu	Soil Present? Yes X No al. ators (minimum of two required)
5 cm N Restrictive Type: Depth (in Remarks: HYDROLOG Vetland Hy Primary Indi	Mucky Peat or Peat Layer: (if observed) oches): Water table at 6 in GY ydrology Indicators icators (minimum of the Water (A1)	(S3) nches. Soils as:	d; check all that	apply) /ater-Stail	ned Leaves	Se	lineation Manu	Soil Present? Yes X No lal. Intors (minimum of two required) Surface Soil Cracks (B6)
5 cm N Restrictive Type: Depth (in Remarks: HYDROLOG Vetland Hy Primary Indi Surfac X High V	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Water table at 6 in GY Inches): Water table at 6 in	(S3) nches. Soils as:	d; check all that	<i>apply)</i> /ater-Stair	ned Leaves una (B13)	<u>Se</u> (B9)	lineation Manu	Soil Present? Yes X No ral. Interest (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
5 cm N Restrictive Type: Depth (in Remarks: HYDROLOG Vetland Hy Primary Indi Surfac X High V X Satura	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Wydrology Indicators icators (minimum of the Water (A1) Water Table (A2) ation (A3)	(S3) nches. Soils as:	d; check all that W Ad	apply) /ater-Stai quatic Fa rue Aquat	ned Leaves una (B13) tic Plants (B	Se (B9)	lineation Manu	Soil Present? Yes X No al. Interest (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
5 cm N Restrictive Type: Depth (in Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High V X Satura Water	Mucky Peat or Peat Layer: (if observed) ches): Water table at 6 in GY /drology Indicators icators (minimum of the Water (A1) Vater Table (A2) ation (A3) Marks (B1)	(S3) nches. Soils as:	od; check all that W Ad Tr	apply) /ater-Stair quatic Fa rue Aquat	ned Leaves una (B13) tic Plants (B Sulfide Odor	Se (B9) 14) (C1)	econdary Indica	Soil Present? Yes X No al. Interest (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
5 cm N Restrictive Type: Depth (in Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High V X Satura Water Sedim	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Water table at 6 in GY Inches): Water table at 6 in Water table at 6 in Water table (A1) Water Table (A2) Intion (A3) Marks (B1) Inent Deposits (B2)	(S3) nches. Soils as:	od; check all that WA	apply) /ater-Stair quatic Fa rue Aquat ydrogen \$ xidized R	ned Leaves una (B13) tic Plants (B Sulfide Odor thizospheres	Se (B9) 14) (C1) s on Living R	econdary Indica	Soil Present? Yes X No real. Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial
5 cm N Restrictive Type: Depth (in Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High V X Satura Water Sedim Drift D	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Wydrology Indicators icators (minimum of the Water (A1) Water Table (A2) ation (A3) Marks (B1) the posits (B2) the posits (B3)	(S3) nches. Soils as:	od; check all that with the control of the control	apply) /ater-Stail quatic Fa rue Aquat ydrogen S xidized R resence c	ned Leaves una (B13) tic Plants (B Sulfide Odor thizospheres of Reduced I	Se (B9) 14) (C1) s on Living R ron (C4)	econdary Indica	Soil Present? Yes X No al. Interest (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
5 cm M Restrictive Type: Depth (in Remarks: HYDROLOG Vetland Hy Primary Indi Surfact X High W X Satura Water Sedim Drift D Algal M	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Water table at 6 in Water table (A1) Water Table (A2) Water Table (A2) Water Table (A2) Water Table (B4) Water Table (B4) Water Table (B4)	(S3) nches. Soils as:	od; check all that W AG Tr H O Pr	apply) /ater-Stair quatic Fa rue Aquat ydrogen \$ xidized R resence c ecent Iror	ned Leaves una (B13) tic Plants (B Sulfide Odor hizospheres of Reduced I	Se (B9) 14) (C1) (C1) (on Living R (ron (C4) in Tilled Soil	econdary Indica	sturation Visible on Aerial Imagery (C9) Soil Present? Yes X No al. Yes X No al. Xetors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
5 cm N Restrictive Type: Depth (in Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High V X Satura Water Sedim Drift D Algal N Iron Do	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Water table at 6 in Water table at 6 in Water table (A1) Water (A1) Water (A2) Water (A3) Marks (B1) Marks (B1) Ment Deposits (B2) Mater Deposits (B3) Wat or Crust (B4) Meposits (B5)	(S3) I) Inches. Soils as: s: f one is require	od; check all that	apply) /ater-Stail quatic Fa rue Aquat ydrogen S xidized R resence c ecent Iron	ned Leaves una (B13) tic Plants (B Sulfide Odor hizospheres of Reduced I n Reduction Surface (C7	Se (B9) 14) (C1) s on Living R ron (C4) in Tilled Soil	econdary Indica	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
5 cm N Restrictive Type: Depth (in Remarks: HYDROLOG Vetland Hy Primary Indi Surfac X High V X Satura Water Sedim Drift D Algal N Iron Do Inunda	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Water table at 6 in Water table at 6 in Water table (A2) Water (A1) Water Table (A2) Water (A3) Marks (B1) Went Deposits (B2) Weposits (B3) Mat or Crust (B4) Peposits (B5) Wation Visible on Aeric	(S3) nches. Soils as s: f one is require	od; check all that a way of the control of the cont	apply) /ater-Stail quatic Fa rue Aquat ydrogen S xidized R resence c ecent Iron nin Muck auge or V	ned Leaves una (B13) tic Plants (B Sulfide Odor thizospheres of Reduced I n Reduction Surface (C7	Se (B9) 14) (C1) s on Living R ron (C4) in Tilled Soil)	econdary Indica	stures (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
5 cm N Restrictive Type: _ Depth (in Remarks: IYDROLOG Vetland Hy Primary Indi Surfac X High V X Satura Water Sedim Drift D Algal N Iron Do Inunda	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Water table at 6 in Water table at 6 in Water table (A1) Water (A1) Water (A2) Water (A3) Marks (B1) Marks (B1) Ment Deposits (B2) Mater Deposits (B3) Wat or Crust (B4) Meposits (B5)	(S3) nches. Soils as s: f one is require	od; check all that a way of the control of the cont	apply) /ater-Stail quatic Fa rue Aquat ydrogen S xidized R resence c ecent Iron nin Muck auge or V	ned Leaves una (B13) tic Plants (B Sulfide Odor hizospheres of Reduced I n Reduction Surface (C7	Se (B9) 14) (C1) s on Living R ron (C4) in Tilled Soil)	econdary Indica	Soil Present? Yes X No al. Interest (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
5 cm N Restrictive Type: _ Depth (in Remarks: HYDROLOG Vetland Hy Primary Indi Surfac X High V X Satura Water Sedim Drift D Algal N Iron Do Inunda Sparse	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Water table at 6 in Water table at 6 in Water Table (A2) Aution (A3) Marks (B1) Ident Deposits (B2) Ident Deposits (B3) Mat or Crust (B4) Ident Peposits (B5) Ident Visible on Aericely Vegetated Concerns	(S3) nches. Soils as s: f one is require	od; check all that a way of the control of the cont	apply) /ater-Stail quatic Fa rue Aquat ydrogen S xidized R resence c ecent Iron nin Muck auge or V	ned Leaves una (B13) tic Plants (B Sulfide Odor thizospheres of Reduced I n Reduction Surface (C7	Se (B9) 14) (C1) s on Living R ron (C4) in Tilled Soil)	econdary Indica	Soil Present? Yes X No al. Interest (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
5 cm N Restrictive Type: Depth (in Remarks: HYDROLOG Vetland Hy Primary Indi Surfac X High V X Satura Water Sedim Drift D Algal N Iron Do Inunda Sparse	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Water table at 6 in Water table at 6 in Water table (A2) Water Table (A2) Water Table (A2) Water Table (A2) Water Table (B4) Weeposits (B3) Mat or Crust (B4) Peposits (B5) Water Table (B5) Water Crust (B4) Weeposits (B5) Water Crust (B4) Weeposits (B5)	(S3) nches. Soils as s: f one is require	od; check all that a way of the control of the cont	apply) /ater-Stair quatic Fa rue Aquat ydrogen S xidized R resence c ecent Iron nin Muck auge or V	ned Leaves una (B13) tic Plants (B Sulfide Odor thizospheres of Reduced I n Reduction Surface (C7 Vell Data (D	Se (B9) 14) (C1) s on Living R ron (C4) in Tilled Soil)	econdary Indica	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology
5 cm M Restrictive Type: Depth (in Remarks: HYDROLOG Wetland Hy Primary Indi Surfac X High V X Satura Water Sedim Drift D Algal M Iron Do Inunda Sparse Field Obset Surface Wat	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Water table at 6 in Water table at 6 in Water table (A2) Water (A1) Water Table (A2) Water Table	(S3) nches. Soils as s: f one is require	d; check all that W Ac Tr H; O Pr Rc Tt G88) Yes	apply) fater-Stair quatic Fa rue Aquat ydrogen S xidized R resence c ecent Iron nin Muck auge or V	ned Leaves una (B13) tic Plants (B Sulfide Odor chizospheres of Reduced I n Reduction Surface (C7 Vell Data (D lain in Rema	Se (B9) 14) (C1) s on Living R ron (C4) in Tilled Soil) 9)	econdary Indication Manuscondary Indication Manusconda	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
5 cm N Restrictive Type: _ Depth (in Remarks: HYDROLOG Wetland Hy Primary Indi Surface X High V X Satura Water Sedim Drift D Algal N Iron Do Inunda Sparse Surface Water Water Table	Mucky Peat or Peat Layer: (if observed) Inches): Water table at 6 in Water table at 6 in Water table at 6 in Water table (A2) Water (A1) Water Table (A2) Water Table	al Imagery (B7 ave Surface (B	rd; check all that W Ad Tr Ht O Re Tr S8) Yes Yes	apply) /ater-Stail quatic Fa rue Aquat ydrogen S xidized R resence c ecent Iron nin Muck auge or V ther (Exp	ned Leaves una (B13) tic Plants (B Sulfide Odor thizospheres of Reduced I n Reduction Surface (C7 Well Data (D lain in Rema	Se (B9) 14) (C1) (con Living R (ron (C4) (in Tilled Soil () () () () () () () () () () () () ()	econdary Indication Manuscondary Indication Manusconda	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology

Project/Site: SPCSL 2A (Tier 3)		City/	County: Log	jan	Sampling Dat	ie: 10/2 8	8/2010
Applicant/Owner: UPRR				State: IL	Sampling Poir	nt: DF	P 34
Investigator(s): DP, DM			Section, Tov	vnship, Range: S13, 7	T18N, R04W		
· · · · · · · · · · · · · · · · · · ·	side ditch			Local Relief (concav	re, convex, none):	concave	
'	' 34.22" N	Long:	89°	² 29' 41.31" W	Datum: NAD 83		
Soil Map Unit Name: 43A - Ipava silt Ioam	, 0-2% slopes				NWI Clas	ssification: N	one
Are climatic/hydrologic conditions on the site	typical for this	time of year?	Yes	SX No (If I	no, explain in Rem	arks)	
Are Vegetation, Soil, or H	ydrology	significantly	disturbed?	Are "Normal Circ	umstances" present	? Yes	X No _
Are Vegetation, Soil, or H	ydrology	naturally prob	olematic?	(If needed,	explain any answe	rs in Remark	rs.)
SUMMARY OF FINDINGS - Attach site ma	ıp showing sa	– mpling point l	locations, tr	ansects, important f	eatures, etc.		
Hydrophytic Vegetation Present? Yes	X No						
Hydric Soil Present? Yes	X No	_	Is the Sa	mpled Area within a V	Vetland? Ye	es X No)
Wetland Hydrology Present? Yes	X No	_					
<u> </u>	and in wort track	- kaida ditab adir	acont to the	aget of Watland DD O	11 Eringo wotland	along stroop	
Remarks: Wetland DP-R. PEMC. Locat channel.	ed in west track	kside ditch adja	acent to the t	east of Welland DP-Q	(i. Fillige welland	along stream	1
Chaine.							
VEGETATION - Use scientific names of p	lants						
TEGETATION COC SCIENTING HARMES OF P	Absolute	Dominant	Indicator	Dominance Test W	Vorksheet:		
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominar			
1.				That Are OBL, FAC	W, or FAC:	1	(A)
2.							
3				Total Number of Do			
4				Species Across All	Strata:	1	(B)
5							
	=	Total Cover		Percent of Dominar	•		
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FAC	W, or FAC:	100%	(A/B)
1							
2				Prevalence Index \	Worksneet:	v 1 =	0
3				OBL species FACW species			0
5				FAC species			0
·	1 =	Total Cover		FACU species			0
Herb Stratum (Plot size: r = 5')	<u> </u>	Total Gover		UPL species			0
1. Phalaris arundinacea	85	yes	FACW+	Column Totals:	0		0 (B)
2. Typha latifolia	5		OBL	Prevale	nce Index = B/A =	` ′	 `´
3. Ambrosia trifida	5		FAC+		•		
4. Polygonum sp.	2		FACU-OBL	Hydrophytic Veget	tation Indicators:		
5. Echinochloa crus-galli	10		FACW	1. Rapid Te	est for Hydrophytic	Vegetation	
6. Conium maculatum	5		FACW	X 2. Dominan	nce Test is >50%		
7					ice Index is ≤3.01		
8				4. Morpholo	ogical Adaptations ¹	(Provide supp	orting
9					marks or on a separate s	•	
10				Problemation	c Hydrophytic Vege	etation' (Expla	in)
	112=	Total Cover					
Woody Vine Stratum (Plot size:)			-	dric soil and wetlan		
1				must be present,	, unless disturbed o	or problemation	C.
2							
	0	= Total Cove	r	Hydrophytic Ve	getation Present?	? Yes X	_ No
Remarks: (Include photo numbers here or	on a separate s	sheet.)		•			

Profile Des	cription: (Describe to the	depth needed to	docum	ent the	indicator o	or confirm	the abse	nce of indica	tors.)
Depth	Matrix		Re	edox Fe	eatures				
(inches)	Color (moist) %	Color (mo	oist)	%	Туре	e ¹ Loc	c ²	Texture	Remarks
					_				
							<u> </u>		
,					_				
					_				
¹ Type: C=C	oncentration, D=Depletion	ı, RM=Reduced	Matrix, (CS=Co	vered or C	Coated Sar	nd Grains	. ² Location	n: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators							Indic	cators for Problematic Hydric Soils ³ :
Histoso				Sar	ndy Gleved	d Matrix (S	64)		Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redox		,		Dark Surface (S7)
	Histic (A3)			_	pped Matr				ron-Manganese Masses (F12)
	gen Sulfide (A4)					/ Mineral (I	F1)		Very Shallow Dark Surface (TF12)
	ed Layers (A5)					d Matrix (F		X	Other (Explain in Remarks)
	luck (A10)				oleted Mat		ŕ		-
Deplet	ed Below Dark Surface (A	.11)		Rec	dox Dark S	Surface (F6	3)		
Thick [Dark Surface (A12)			— Dep	oleted Darl	k Surface	(F7)	3,	dicators of hydrophytic vegetation
Sandy	Mucky Mineral (S1)			Rec	dox Depres	ssions (F8	3)		wetland hydrology must be present,
5 cm N	lucky Peat or Peat (S3)								unless disturbed or problematic.
Restrictive	Layer: (if observed)								
Type:	Layer: (iii observed)								
Depth (in	ches):							Hydric 9	Soil Present? Yes X No
		0-11		0	t 10b -f	E H 4007	0 D		
Remarks:	No pit dug to to inundation	on. Soils assume	ea nyarı	c per S	tep 12b of	r the 1987	Corps De	elineation Ma	inuai.
HYDROLOG	SY.								
Wetland Hy	drology Indicators:								
Primary Indi	cators (minimum of one is	required; check	all that	apply)			Seco	ndary Indicat	tors (minimum of two required)
X Surfac	e Water (A1)		W	ater-St	ained Lea	ves (B9)			Surface Soil Cracks (B6)
High W	/ater Table (A2)		Ad	quatic F	auna (B1	3)			Drainage Patterns (B10)
X Satura	tion (A3)		Tr	ue Aqu	atic Plants	s (B14)			Dry-Season Water Table (C2)
Water	Marks (B1)		H ₂	ydroger	n Sulfide C	Odor (C1)			Crayfish Burrows (C8)
Sedime	ent Deposits (B2)		O:	xidized	Rhizosph	eres on Liv	ving Root	:s	Saturation Visible on Aerial
Drift De	eposits (B3)		Pr	esence	of Reduc	ed Iron (C	4)		Imagery (C9)
Algal N	lat or Crust (B4)		R	ecent Ir	on Reduct	tion in Tille	ed Soils (C6)	Stunted or Stressed Plants (D1)
Iron De	eposits (B5)		Th	nin Muc	k Surface	(C7)		X	Geomorphic Position (D2)
Inunda	tion Visible on Aerial Imag	jery (B7)	G	auge or	r Well Data	a (D9)			_FAC-Neutral Test (D5)
Sparse	ly Vegetated Concave Su	rface (B8)	O	ther (E)	xplain in R	Remarks)			
Field Obser	vations:								
Surface Wat	er Present?		Yes 2	X	No	Depth ((inches)	6	Wetland Hydrology
Water Table	Present?		Yes		No X	Depth ((inches)		Present?
Saturation P	resent? (includes capillar)	/ fringe)	Yes	X	No	Depth ((inches)	0	Yes X No
Describe Re	corded Data (stream gaug	ge, monitoring w	ell, aeria	al photo	s, previou	s inspectio	ons) , if av	/ailable.	
Remarks:									

Project/Site: SPCSL 2A (Tier 3)		City/	County: Log	yan	Sampling Date	:. 10/2	28/2010
Applicant/Owner: UPRR				State: IL	Sampling Point	t: D	P 36
Investigator(s): DP, DM			Section, Tov	vnship, Range: S13, T	18N, R04W		
	Iside ditch			Local Relief (concave		concave	
· ` ` <u> </u>	' 51.23" N	Long:	89	° 29' 24.73" W	Datum: NAD 83		
Soil Map Unit Name: 712A - Spaulding sil	ty clay loam,	0-2% slopes			NWI Clas	sification: <u>I</u>	None
Are climatic/hydrologic conditions on the sit	e typical for thi	is time of year?	Yes	s X No (If r	no, explain in Rema	rks)	
Are Vegetation, Soil, or F	lydrology	significantly	y disturbed?	Are "Normal Circu	umstances" present?	Yes	X No
Are Vegetation , Soil , or H	lydrology	naturally pro	blematic?	(If needed,	explain any answer	s in Remar	rks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing s	— ampling point	locations, tr	ansects, important fo	eatures, etc.		
Hydrophytic Vegetation Present? Yes				· · ·	•		
Hydric Soil Present? Yes		_	Is the Sa	ımpled Area within a W	/etland? Ye	s X N	0
Wetland Hydrology Present? Yes			10 1110 00	impica / ii ca witiiii a v	retaile: Te	<u> </u>	~
vveiland rydrology Present?		_					
Remarks: Wetland DP-S. PEMA.							
VEGETATION - Use scientific names of p	lants.			1			
Tana Observana (Distraina)	Absolute	Dominant	Indicator	Dominance Test W			
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominar That Are OBL, FAC		1	(4)
2.				That Ale Obl., FAC	W, OI FAC.	1	(A)
3.				Total Number of Do			
4				Species Across All S		1	(B)
5.					_	•	
··	0	= Total Cover		Demonstrat Demoisson	t O!		
Sapling/Shrub Stratum (Plot size:				Percent of Dominan That Are OBL, FAC	•	100%	(A/B)
1.	/			mat Aic OBE, I AO	-	100 /0	(A/B)
2.				Prevalence Index V	Vorksheet:		
3.				OBL species		x 1 =	0
4.				FACW species		x 2 =	0
5.				FAC species		x 3 =	0
	0	= Total Cover		FACU species		x 4 =	0
Herb Stratum (Plot size: r = 5')				UPL species		x 5 =	0
Spartina pectinata	70	yes	FACW+	Column Totals:	0	(A)	0 (B)
2. Carex sp.	25	yes	FACU-OBL	Prevaler	nce Index = B/A =		
3. Apocynum cannabinum	5		FAC				
4. Symphyotrichum lanceolatum	2		NI	Hydrophytic Veget	ation Indicators:		
5. Equisetum hyemale	3		FACW-	1. Rapid Te	st for Hydrophytic \	egetation/	
6. Polygonum sp.	1		FACU-OBL		ce Test is >50%		
7					ce Index is <3.01		
8					gical Adaptations¹ (porting
9					narks or on a separate sh	•	
0				Problemation	Hydrophytic Veget	ation' (Expl	ain)
	106	= Total Cover					
Woody Vine Stratum (Plot size:)			1	ric soil and wetland	, ,,	
1				must be present,	unless disturbed or	problemat	ic.
2.		= Total Cove		1	getation Present?	.,	
	0					Yes X	No

Profile Description: (Describe to the depth needed			or or conf	rm the abs	sence of indica	ators.)
Depth Matrix (inches) Color (moist) % Color		lox Features	1	. 2		
Color (molot) 70 Color	(moist)		/pe ¹	Loc ²	Texture	Remarks
0-8 10 YR 4/2 97 7.5 Y	R 5/6	3	<u>c</u> _		Silt loam	moist
						-
						-
						-
 						
¹ Type: C=Concentration, D=Depletion, RM=Reduc	ed Matrix, CS	S=Covered o	r Coated	Sand Grai	ns. ² Locatio	n: PL=Pore Lining, M=Matrix
Hydric Soil Indicators					Ind	cators for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gle	yed Matri	k (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)		Sandy Red	lox (S5)			Dark Surface (S7)
Black Histic (A3)		Stripped M	atrix (S6)			Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)		Loamy Mu	cky Miner	al (F1)		Very Shallow Dark Surface (TF12)
Stratified Layers (A5)		Loamy Gle	yed Matri	x (F2)	X	Other (Explain in Remarks)
2 cm Muck (A10)		Depleted M	1atrix (F3)		
Depleted Below Dark Surface (A11)		Redox Dar	k Surface	(F6)		
Thick Dark Surface (A12)		Depleted D	ark Surfa	ce (F7)	³ I	ndicators of hydrophytic vegetation
Sandy Mucky Mineral (S1)		Redox Dep	ressions	(F8)		I wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)				unless disturbed or problematic.		
Restrictive Layer: (if observed) Type:						
Depth (inches):					Hydric	Soil Present? Yes X No
Remarks: Saturation of soils at 4 inches and wa	ter table at 8	inches. Soil	s assume	d hydric p	er Step 12b of	the 1987 Corps Delineation
Manual.				, .	·	·
HYDROLOGY						
Wetland Hydrology Indicators:						
Primary Indicators (minimum of one is required; che		,			condary Indica	tors (minimum of two required)
Surface Water (A1)		ter-Stained L	•	9)		0 (0 !! 0 ! (D0)
X High Water Table (A2)		atic Fauna (I			-	Surface Soil Cracks (B6)
						Drainage Patterns (B10)
X Saturation (A3)		e Aquatic Pla	ints (B14)			Drainage Patterns (B10) Dry-Season Water Table (C2)
Water Marks (B1)	Hyd	e Aquatic Pla Irogen Sulfide	ints (B14) e Odor (C	1)		Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Water Marks (B1) Sediment Deposits (B2)	Hyd Oxid	e Aquatic Pla Irogen Sulfide dized Rhizos	ints (B14) e Odor (C pheres o	1) n Living Ro		Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Hyd Oxid Pre	e Aquatic Pla Irogen Sulfido dized Rhizos sence of Rec	ints (B14) e Odor (C pheres of luced Iron	:1) n Living Ro n (C4)	pots	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Hyd Oxid Pre:	e Aquatic Pla Irogen Sulfide dized Rhizos sence of Rec cent Iron Red	ents (B14) e Odor (C pheres of fuced Iron uction in	:1) n Living Ro n (C4)	oots	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Hyd Oxid Pre:	e Aquatic Pla Irogen Sulfido dized Rhizos sence of Rec	ents (B14) e Odor (C pheres of fuced Iron uction in	:1) n Living Ro n (C4)	ootsx	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Hyd Oxid Pres Red Thir	e Aquatic Platrogen Sulfidedized Rhizos sence of Recent Iron Red in Muck Surfauge or Well D	e Odor (Control of the Control of th	11) n Living Ro n (C4) Tilled Soils	ootsx	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Hyd Oxid Pres Red Thir	e Aquatic Pla Irogen Sulfide dized Rhizos sence of Rec sent Iron Red n Muck Surfa	e Odor (Control of the Control of th	11) n Living Ro n (C4) Tilled Soils	ootsx	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Hyd Oxid Pres Red Thir	e Aquatic Platrogen Sulfidedized Rhizos sence of Recent Iron Red in Muck Surfauge or Well D	e Odor (Control of the Control of th	11) n Living Ro n (C4) Tilled Soils	ootsx	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Hyd Oxid Pres Red Thir	e Aquatic Platrogen Sulfidedized Rhizos sence of Recent Iron Red in Muck Surfauge or Well D	e Odor (Copheres of duced Iron uction in ce (C7) that (D9) in Remark	11) n Living Ro n (C4) Tilled Soils	oots S (C6) X	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations:	Hyd Oxid Pre: Rec Thir Gau	e Aquatic Pla Irogen Sulfid dized Rhizos sence of Rec cent Iron Red n Muck Surfa uge or Well D er (Explain ir	e Odor (C pheres of duced Iron uction in ce (C7) thata (D9) in Remark	1) n Living Ro n (C4) Tilled Soils	x (C6) x	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present?	Hyd Oxid Pres Red Thir Gau Oth	e Aquatic Pla Irogen Sulfid dized Rhizos sence of Rec cent Iron Red n Muck Surfa uge or Well D er (Explain ir	e Odor (Copheres or duced Iron uction in ce (C7) eata (D9) or Remark	th (inches	x (C6)	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present?	Hyd Oxid Pres Red Thir Gau Oth Yes Yes X Yes X	e Aquatic Pla Irogen Sulfiddized Rhizos sence of Recent Iron Red n Muck Surfa uge or Well Der (Explain ir No X No No	e Odor (Copheres of duced Iron uction in ce (C7) enta (D9) en Remark	th (inches	x (C6)	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?
Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Hyd Oxid Pres Red Thir Gau Oth Yes Yes X Yes X	e Aquatic Pla Irogen Sulfiddized Rhizos sence of Recent Iron Red n Muck Surfa uge or Well Der (Explain ir No X No No	e Odor (Copheres of duced Iron uction in ce (C7) enta (D9) en Remark	th (inches	x (C6)	Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?

Project/Site: SPCSL 2A (Tier 3)	_	City/C	ounty: Lo	ogan	Sampling Date:	10/28/2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	DP 37
Investigator(s): DP, DM		s	ection, To	ownship, Range: S13, T		
	ackside ditch			Local Relief (concave		cave
· ` ` ′ 	° 0' 56.08" N	Long:	89	9° 29' 19.80" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava silt loa	am, 0-2% slopes				NWI Classific	cation: None
Are climatic/hydrologic conditions on the	site typical for this ti	ime of year?	Ye	es X No (If no	o, explain in Remarks)
Are Vegetation, Soil, o	r Hydrology	significantly of	disturbed?	Are "Normal Circu	mstances" present?	Yes X No
Are Vegetation, Soil, o	r Hydrology	naturally proble	ematic?	(If needed, e	xplain any answers ir	Remarks.)
SUMMARY OF FINDINGS - Attach site	map showing sam	pling point lo	cations, t	transects, important fe	atures, etc.	
Hydrophytic Vegetation Present? Ye	es X No					
Hydric Soil Present? Ye	es X No		Is the Sa	ampled Area within a W	etland? Yes	X No
Wetland Hydrology Present? Ye	es X No				_	
Remarks: Wetland DP-T. PEMA. We	est trackeido ditch					
Remarks: Welland DP-1. PEIVIA. WE	est trackside ditch.					
VEGETATION - Use scientific names of	of plants.					
	Absolute	Dominant	Indicator	Dominance Test Wo	orksheet:	
Tree Stratum (Plot size:) % Cover	Species?	Status	Number of Dominant	Species	
1	<u> </u>			That Are OBL, FACV	V, or FAC:	1 (A)
2						
3				Total Number of Don		
4				Species Across All S	trata:	(B)
5		-1-1-0				
	<u> </u>	otal Cover		Percent of Dominant	•	
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACV	V, or FAC:	100% (A/B)
1				Dunyalamaa Inday W	la ulca la a a ti	
2				Prevalence Index W	vorksneet: x 1	= 0
3				FACW species	x 2	
5.				FAC species	^2	
	0 = T	otal Cover		FACU species	x 4	
Herb Stratum (Plot size: r = 5')			UPL species	x 5	
1. Spartina pectinata	80	yes	FACW+	Column Totals:	O (A	
2. Ambrosia trifida	5		FAC+	Prevalen	ce Index = B/A =	
3. Toxicodendron radicans	5		FAC+			
4. Carex sp.	10	F	ACU-OBL	Hydrophytic Vegeta	tion Indicators:	
5.				1. Rapid Tes	t for Hydrophytic Veg	etation
6				X 2. Dominano		
7				·	e Index is <3.01	
8				· —	gical Adaptations¹ (Pro	
9				·	arks or on a separate sheet	
10				Problematic	Hydrophytic Vegetation	on' (Explain)
	100 = T	otal Cover				
Woody Vine Stratum (Plot size:)			-	ic soil and wetland hy	= -
1.				must be present, t	unless disturbed or pr	oblematic.
2	0	- Total Cayor		Usadronbutio Voc	otation Drocont?	Voc. V. No.
		= Total Cover		Hydrophytic Veg	etation Present?	Yes X No
Remarks: (Include photo numbers here	or on a separate sh	eet.)				
PH 93 - S from sample point.						

Profile Des	cription: (Describe	to the depth ne	eded to docum	ent the in	dicator or	confirm the a	bsence of indica	tors.)
Depth	Matrix			edox Fea				
(inches)	Color (moist)	<u> %</u> Co	olor (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-2	10 YR 2/2	100					Silt loam	
2-8	10 YR 2/2		0 YR 5/8		C	M	Silty clay loam	
	10 YR 2/1	10						
	2.5 Y 5/8	19						
8-10	10 YR 2/1	100					Silty clay loam	
10-16	10 YR 4/3	50					Silty clay loam	
	2.5 Y 5/8	50						
¹ Type: C=C	Concentration, D=De	epletion, RM=Re	duced Matrix,	CS=Cove	red or Co	ated Sand Gr	rains. ² Location	n: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators						Indi	cators for Problematic Hydric Soils ³ :
Histos	ol (A1)		_	Sand	y Gleyed	Matrix (S4)		Coast Prairie Redox (A16)
Histic	Epipedon (A2)		_	Sand	y Redox (S5)		Dark Surface (S7)
Black	Histic (A3)		_	Stripp	ed Matrix	(S6)		Iron-Manganese Masses (F12)
Hydro	gen Sulfide (A4)		_	Loam	ıy Mucky I	Mineral (F1)		Very Shallow Dark Surface (TF12)
Stratifi	ed Layers (A5)		_	Loam	y Gleyed	Matrix (F2)	X	Other (Explain in Remarks)
2 cm N	/luck (A10)		_	Deple	eted Matrix	(F3)		
Deplet	ed Below Dark Surf	face (A11)	_	Redo	x Dark Su	rface (F6)		
Thick	Dark Surface (A12)		_	Deple	eted Dark	Surface (F7)	3 _{Ir}	ndicators of hydrophytic vegetation
Sandy	Mucky Mineral (S1		Redo	x Depress	ions (F8)	and wetland hydrology must be present,		
5 cm N	Mucky Peat or Peat						unless disturbed or problematic.	
Restrictive	Layer: (if observed)						
Type:								
Depth (in	ches):						Hydric	Soil Present? Yes X No
Remarks:	Soils assumed hy	dric per Step 12	b of the 1987 (Corps Del	ineation N	lanual.		
	′ 5/8 80 7.5 YR 5/8			•				
10 YF	R 5/1 17							
HYDROLO	GY							
Wetland Hy	drology Indicators	s:						
Primary Indi	cators (minimum of	one is required,	check all that	apply)		8	Secondary Indica	tors (minimum of two required)
Surfac	e Water (A1)		W	/ater-Stai	ned Leave	es (B9)		Surface Soil Cracks (B6)
High V	Vater Table (A2)		A	quatic Fa	una (B13)			Drainage Patterns (B10)
X Satura	tion (A3)		T	rue Aquat	tic Plants	(B14)		Dry-Season Water Table (C2)
Water	Marks (B1)		н	ydrogen (Sulfide Oc	or (C1)		Crayfish Burrows (C8)
Sedim	ent Deposits (B2)		0	xidized R	hizospher	es on Living I	Roots	Saturation Visible on Aerial
Drift D	eposits (B3)		P	resence o	of Reduce	d Iron (C4)		Imagery (C9)
Algal N	Mat or Crust (B4)		R	ecent Iron	n Reductio	n in Tilled Sc	oils (C6)	Stunted or Stressed Plants (D1)
Iron D	eposits (B5)		T	hin Muck	Surface (C7)	X	Geomorphic Position (D2)
Inunda	ation Visible on Aeria	al Imagery (B7)	G	auge or V	Vell Data	(D9)	X	FAC-Neutral Test (D5)
Sparse	ely Vegetated Conc	ave Surface (B8) <u> </u>	ther (Exp	lain in Re	marks)		_
Field Obse	rvations:							
Surface Wa	ter Present?		Yes	^	10 X	Depth (inche	es)	Wetland Hydrology
Water Table	Present?		Yes		10 X	Depth (inche	es)	Present?
Saturation F	Present? (includes c	apillary fringe)	Yes	X N	10	Depth (inche	es) 20	Yes <u>X</u> No
Describe Re	ecorded Data (strea	m gauge, monito	oring well, aeria	al photos,	previous	inspections) ,	if available.	
Remarks:								
i								

Project/Site: SPCSL 2A (Tier 3)		City	/County: Log	jan	Sampling Dat	te: 11/12/	/2010
Applicant/Owner: UPRR				State: IL	Sampling Poi	nt: DP	38
Investigator(s): DP, KS			Section, Tov	vnship, Range: S2	4, T18N, R04W		
· · · · · · · · · · · · · · · · · · ·	ckside ditch				cave, convex, none):	concave	
' ' '	0' 20.08" N	Long	: 89 °	29' 55.54" W	Datum: NAD 83		
Soil Map Unit Name: 68A - Sable silty cla	ıy loam, 0-2% sl	opes			NWI Cla	ssification: No	ne
Are climatic/hydrologic conditions on the si	te typical for this	time of year?	Yes	<u> X</u> No	(If no, explain in Rem	arks)	
Are Vegetation, Soil, or	Hydrology	significantl	y disturbed?	Are "Normal (Circumstances" present	? Yes X	(No _
Are Vegetation, Soil, or	Hydrology	naturally pro	blematic?	(If neede	ed, explain any answe	ers in Remarks	i.)
SUMMARY OF FINDINGS - Attach site n	nap showing sar	– mpling point	locations, tr	ansects, importar	nt features, etc.		
Hydrophytic Vegetation Present? Yes	X No						
Hydric Soil Present? Yes	X No	_	Is the Sa	mpled Area within	a Wetland? Y	es X No	
Wetland Hydrology Present? Yes	X No	_					
	na linear wotland	d in woot trool	raida ditah				
Remarks: Wetland DP-EE. PEMA. Lo	ng, iinear wetiand	a in west traci	kside ditch.				
VEGETATION - Use scientific names of	nlants						
	Absolute	Dominant	Indicator	Dominance Tes	t Worksheet:		
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Domi			
1	_			That Are OBL, F.	ACW, or FAC:	2	(A)
2.							
3	_			Total Number of			
4				Species Across	All Strata:	2	(B)
5							
	0 =	Total Cover		Percent of Domin	•		
Sapling/Shrub Stratum (Plot size:)			That Are OBL, F.	ACW, or FAC:	100%	(A/B)
1				Prevalence Inde	v Warkabaati		
2				OBL species	ex worksneet:	x 1 = 0	1
٠. ــــــــــــــــــــــــــــــــــــ				FACW species		x2= 0	
5.				FAC species	-	x3 = 0	
	0 =	Total Cover		FACU species		x 4 = 0	
Herb Stratum (Plot size: r = 5')				UPL species		x 5 = 0)
1. Eleocharis sp.	25	yes	FACW-OBL	Column Totals:	0	(A) 0) (B)
2. Spartina pectinata	60	yes	FACW+	Preva	alence Index = B/A =		
3. Capsella bursa-pastoris	10		FAC-				
4. Cyperus sp.	5		FACU-OBL	Hydrophytic Ve	getation Indicators:		
5					Test for Hydrophytic	Vegetation	
6	_				nance Test is >50%		
7					lence Index is ≤3.01		
8.					nological Adaptations ¹		rting
9	_				Remarks or on a separate satic Hydrophytic Vege	•	-1
10		Total Cover		FIODIEIII	alic Hydrophylic vege	etation (explair	1)
NV 1 Nr 01 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 =	Total Cover		41 11 1			
Woody Vine Stratum (Plot size:)				hydric soil and wetlan		
1				must be prese	ent, unless disturbed o	or problematic.	
2	0	= Total Cove		Hydronhytic	Vegetation Present?	? Yes X	No
			7 1	Tiyuropiiytic	vegetation r resent :	163 /	
Remarks: (Include photo numbers here o	r on a separate s	sheet.)					
PH 108							

Profile Description: (Describe	to the depth nee	eded to docun	nent the in	dicator or	confirm the a	bsence of indica	tors.)
Depth Matrix		F	Redox Fea	tures			
(inches) Color (moist)	% Co	olor (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4 10 YR 3/1	90 1	0 YR 4/6	10			Silt loam	
4-10 10 YR 2/1	70					Silty clay loam	
10 YR 4/2	10 1	0 YR 5/6	10	С	M		
Gley 1 2.5/N	10						
10-24 Gley 12.5/N	60 1	0 YR 5/6	20			Silt loam	
10 YR 5/1	157	.5 YR 3/3	5	С	M		
24-28 10 YR 5/1	30 1	0 YR 5/6	33			Silt loam	
¹ Type: C=Concentration, D=De	epletion, RM=Re	duced Matrix,	CS=Cove	ered or Coa	ated Sand Gr	ains. ² Location	n: PL=Pore Lining, M=Matrix
Hydric Soil Indicators						Indi	cators for Problematic Hydric Soils ³ :
Histosol (A1)			Sand	y Gleyed N	Matrix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)		_	Sand	y Redox (S5)		Dark Surface (S7)
Black Histic (A3)		_	Stripp	oed Matrix	(S6)		 Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)		_	Loam	y Mucky N	/lineral (F1)		Very Shallow Dark Surface (TF12)
Stratified Layers (A5)		_	X Loam	y Gleyed	Matrix (F2)		Other (Explain in Remarks)
2 cm Muck (A10)		_	Deple	eted Matrix	(F3)		_
Depleted Below Dark Sur	face (A11)	_	Redo	x Dark Su	rface (F6)		
Thick Dark Surface (A12)		_	Deple	eted Dark	Surface (F7)	3.	
Sandy Mucky Mineral (S1)	_	Redo	x Depress	ions (F8)		ndicators of hydrophytic vegetation wetland hydrology must be present,
5 cm Mucky Peat or Peat	(S3)	_					unless disturbed or problematic.
Restrictive Layer: (if observed Type: Depth (inches):	()					Hvdric :	Soil Present? Yes X No
Remarks:						, ,	
Nemarks.							
HIVEROLOGY							
HYDROLOGY							
Wetland Hydrology Indicators		shook all that	t annly)			'aaandam, Indiaa	toro (minimum of two required)
Primary Indicators (minimum of	r one is requirea;				_	econdary indica	tors (minimum of two required)
Surface Water (A1)				ned Leave	s (B9)		Surface Soil Cracks (B6)
High Water Table (A2)				una (B13)	D44)		Drainage Patterns (B10)
X Saturation (A3)				tic Plants (_ Dry-Season Water Table (C2)
Water Marks (B1)			-	Sulfide Od			Crayfish Burrows (C8)
Sediment Deposits (B2)					es on Living F		Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)					d Iron (C4)		
X Algal Mat or Crust (B4)					n in Tilled So	` ′	_ Stunted or Stressed Plants (D1)
Iron Deposits (B5)				Surface (0	•	<u> </u>	Geomorphic Position (D2)
Inundation Visible on Aeri	al Imagery (B7)		_	Well Data (FAC-Neutral Test (D5)
Sparsely Vegetated Conc	ave Surface (B8)(Other (Exp	lain in Rei	marks)		
Field Observations:							
Surface Water Present?		Yes	١	No X	Depth (inche	es)	Wetland Hydrology
Water Table Present?		Yes	<u> </u>	No X	Depth (inche	es)	Present?
Saturation Present? (includes of	capillary fringe)	Yes	X N	No	Depth (inche	es) 0	Yes <u>X</u> No
Describe Recorded Data (strea	m gauge, monito	oring well, aer	ial photos,	previous	inspections) ,	if available.	
Remarks:							

Project/Site: SPCSL 2A (Tier 3)		City/County:	: Logan	Sampling Date:	11/12/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	DP 39
Investigator(s): DP, KS		Section	n, Township, Range: S26, 1	•	
• • • • • • • • • • • • • • • • • • • •	Trackside ditch		_	re, convex, none) : conc	ave
· · · /	39° 59' 3.99" N	Long:	89° 31' 10.99" W	Datum: NAD 83	
Soil Map Unit Name: 68A - Sable silty	y clay loam, 0-2% slo	pes		NWI Classifica	ation: None
Are climatic/hydrologic conditions on the	ne site typical for this ti	me of year?	Yes X No (If I	no, explain in Remarks)	
Are Vegetation, Soil	, or Hydrology	significantly disturb	oed? Are "Normal Circ	umstances" present?	Yes X No
Are Vegetation , Soil	, or Hydrology r	naturally problemation	c? (If needed,	explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach si	te map showing sam	pling point location	ns, transects, important f	eatures, etc.	
Hydrophytic Vegetation Present?	Yes X No				
Hydric Soil Present?	Yes X No	ls th	ne Sampled Area within a V	Vetland? Yes	X No
•	Yes X No				
Remarks: Wetland DP-FF. PEMA.	South end of wetland	at Culvert 170.40.			
VEGETATION - Use scientific names	•		T		
Tree Stratum (Plot size:	Absolute) % Cover	Dominant Indica Species? Statu			
1		Species: Statu	That Are OBL, FAC	•	1 (A)
2					
3.			Total Number of Do	nminant	
4.			Species Across All		1 (B)
5.			 '		
	0 = T	otal Cover	Percent of Dominan	at Species	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FAC	•	100% (A/B)
1.			1		(1,42)
2.			Prevalence Index \	Worksheet:	
3.			OBL species	x 1	= 0
4.			FACW species	x 2	= 0
5.			FAC species	x 3	= 0
	0 = T	otal Cover	FACU species	x 4	= 0
Herb Stratum (Plot size: r = 5')		UPL species	x 5 :	
1. Phalaris arundinacea	90	yes FACV		0 (A)) <u> </u>
2. Solidago missouriensis	3	UPL	Prevale	nce Index = B/A =	
3. Carex sp.	2	FACU-0			
4			Hydrophytic Veget		
5			'	est for Hydrophytic Vege	tation
6.				nce Test is >50%	
7				nce Index is <3.01	
8			·	ogical Adaptations¹ (Prov	ide supporting
9				marks or on a separate sheet) c Hydrophytic Vegetation	n¹ (Evolain)
10	95 = T	otal Cover		7 Trydrophlytic Vegetation	i (Explain)
Manada Vina Otratara (Diataina	95 - 1	olai Covei	Aladia shara af bura		
Woody Vine Stratum (Plot size:)		-	dric soil and wetland hyd	
1			must be present,	unless disturbed or pro	biematic.
2	0 =	= Total Cover	 Hydrophytic Ve	getation Present? Y	es X No
Pomorko: (Include abote aumhere he	aro or on a concrete sh	enet l			
Remarks: (Include photo numbers he			wetter		
OHWM is approx. 1 ft wide and 6-10" of	леер. Сагех sp. Assur	ned to be FACW of	weller.		

Profile Des	cription: (Describe to	the depth neede	d to docun	ent the	indicator o	or confirm	the abse	nce of indica	ntors.)
Depth	Matrix		F	edox F	eatures				
(inches)	Color (moist)	% Color	(moist)	%	Туре	e ¹ Loc	c ²	Texture	Remarks
,									
					_				
¹ Type: C=C	oncentration, D=Deple	etion, RM=Reduc	ed Matrix,	CS=Co	overed or C	Coated Sar	nd Grains	s. ² Location	n: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators							Indi	cators for Problematic Hydric Soils ³ :
Histoso				Sa	ndy Gleyed	d Matrix (S	64)		Coast Prairie Redox (A16)
	Epipedon (A2)				ndy Redox		,		Dark Surface (S7)
	Histic (A3)		_		ipped Matr				
	gen Sulfide (A4)		_		 amy Mucky		F1)		Very Shallow Dark Surface (TF12)
	ed Layers (A5)		_		amy Gleye	,		X	Other (Explain in Remarks)
	luck (A10)				pleted Mat		•		_ ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `
Deplet	ed Below Dark Surface	e (A11)		Re	dox Dark S	Surface (F	6)		
Thick [Dark Surface (A12)			De	pleted Darl	k Surface	(F7)	31.	ndicators of hydrophytic vegetation
Sandy	Mucky Mineral (S1)			Re	dox Depre	ssions (F8	3)		wetland hydrology must be present,
5 cm N	lucky Peat or Peat (S3	3)							unless disturbed or problematic.
Restrictive	Layer: (if observed)								
Type:	Layer: (ii oboci vea)								
Depth (in	ches):							Hydric	Soil Present? Yes X No
				alada a a	- Ot 40h	-64400	7.0		
Remarks:	No pit dug due to inu	ndation. Soils as	ssumed ny	aric pe	r Step 12b	of the 198	37 Corps	Delineation I	vianuai.
HYDROLOG	SY								
Wetland Hy	drology Indicators:								
Primary Indi	cators (minimum of on	e is required; che	eck all that	apply)			Seco	ndary Indica	tors (minimum of two required)
X Surfac	e Water (A1)		V	Vater-S	tained Lea	ves (B9)			Surface Soil Cracks (B6)
High W	/ater Table (A2)			quatic	Fauna (B1	3)		X	Drainage Patterns (B10)
X Satura	tion (A3)		T	rue Aqı	uatic Plants	s (B14)			Dry-Season Water Table (C2)
Water	Marks (B1)			lydroge	n Sulfide C	Odor (C1)			Crayfish Burrows (C8)
Sedime	ent Deposits (B2)			xidizec	d Rhizosph	eres on Li	ving Roo	ts	_Saturation Visible on Aerial
X Drift De	eposits (B3)		F	resenc	e of Reduc	ced Iron (C	(4)		Imagery (C9)
Algal N	Mat or Crust (B4)		F	Recent I	ron Reduc	tion in Tille	ed Soils (C6)	Stunted or Stressed Plants (D1)
Iron De	eposits (B5)		T	hin Mu	ck Surface	(C7)		Х	Geomorphic Position (D2)
Inunda	tion Visible on Aerial I	magery (B7)		auge o	or Well Data	a (D9)			FAC-Neutral Test (D5)
Sparse	ely Vegetated Concave	Surface (B8)		other (E	xplain in R	Remarks)			
Field Obser	vations:								
Surface Wat	er Present?		Yes	Χ	No	Depth ((inches)	3	Wetland Hydrology
Water Table	Present?		Yes		No X	Depth ((inches)		Present?
Saturation P	resent? (includes capi	illary fringe)	Yes _	X	No	Depth ((inches)	0	Yes X No
Describe Re	corded Data (stream g	gauge, monitoring	g well, aeri	al photo	os, previou	s inspectio	ons) , if a	vailable.	
Remarks:									

Project/Site: SPCSL 2A (Tier 3)		City/Cour	nty: Loga	an	Sampling Date:	12/1/2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	KS 19
Investigator(s): KK, KS, KT		Sect		nship, Range: S10, 1		
Landform (hillslope, terrace, etc.):	Road ditch				re, convex, none) : conc	ave
Slope (%): 0-2 Lat:	40° 12' 20.25" N	Long:	89°	17' 46.67" W	Datum: NAD 83	
Soil Map Unit Name: 712A- Spauld	ling silty clay loam, 0	-2% slopes			NWI Classifica	ition: PEMCx
Are climatic/hydrologic conditions or	n the site typical for this	s time of year?	Yes	X No (If I	no, explain in Remarks)	
Are Vegetation, Soil	, or Hydrology	significantly dist	urbed?	Are "Normal Circ	cumstances" present?	Yes X No
Are Vegetation , Soil	, or Hydrology	naturally problema	atic?	(If needed,	explain any answers in I	Remarks.)
SUMMARY OF FINDINGS - Attach	site map showing sa	_ ampling point locat	tions, tra	nsects, important f	eatures, etc.	
Hydrophytic Vegetation Present?	Yes X No					
Hydric Soil Present?	Yes X No	_ s	s the Sam	npled Area within a V	Wetland? Yes	(No
Wetland Hydrology Present?	Yes X No	_		•		
		-				
Remarks: Wetland KS-S. PEMC	Ditch wetland between	en tracks and road.	At Culve	ert 150.92.		
VECETATION Has a significance						
VEGETATION - Use scientific nan	•			Dominanaa Taat M	No visa ha a ti	
Tree Stratum (Plot size:	Absolute) % Cover		dicator status	Dominance Test W Number of Dominar		
1.		Sp. 5.		That Are OBL, FAC	•	(A)
2.				,	·	` ′
3.				Total Number of Do	ominant	
4.				Species Across All		(B)
5.						
	0 =	= Total Cover		Percent of Dominar	nt Species	
Sapling/Shrub Stratum (Plot size:	·)			That Are OBL, FAC	•	(A/B)
1.						
2.				Prevalence Index \	Worksheet:	
3.				OBL species	x 1 :	= 0
4				FACW species	x 2 :	
5				FAC species	x 3 :	
		= Total Cover		FACU species	x 4 :	
Herb Stratum (Plot size: r = 5	<u> </u>	_		UPL species	x 5 =	
Typha latifolia	100	yes C	OBL	Column Totals:	0 (A)	(B)
2				Prevale	ence Index = B/A =	
3. 4.				Hydrophytic Veget	tation Indicators:	
5.					est for Hydrophytic Vege	tation
6.					nce Test is >50%	lation
7					nce Index is <3.01	
8.					ogical Adaptations¹ (Provi	ide supporting
9.					marks or on a separate sheet)	
0.				<u> </u>	c Hydrophytic Vegetation	ា¹ (Explain)
	100 =	= Total Cover				
Woody Vine Stratum (Plot size:)			¹Indicators of hvo	dric soil and wetland hyd	rology
1.				· ·	, unless disturbed or prol	••
2.				, ,	· · ·	
	0	= Total Cover		Hydrophytic Ve	getation Present? Ye	es X No
Damanka, (Inglise phata nimbara	h = == = = = = = = = = = = = = = = = =	-64				
Remarks: (Include photo numbers	nere or on a separate	Sileet.)				
PH-7 NE at wetland.						

Profile Des	cription: (Describe to	the depth nee	ded to docum	ent the	indicator o	or confirm the a	absence of indica	ators.)
Depth	Matrix		Re	edox Fe	eatures			
(inches)	Color (moist)	% Co	lor (moist)	%	Туре	Loc ²	Texture	Remarks
	-							
					_			
¹ Type: C=0	Concentration, D=Dep	letion, RM=Re	duced Matrix,	CS=Co	vered or C	oated Sand G	rains. ² Locatio	n: PL=Pore Lining, M=Matrix
Hydric Soil	•	•	-					icators for Problematic Hydric Soils ³ :
1	ol (A1)			Sar	ndv Gleved	d Matrix (S4)	iliu	Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redox			Dark Surface (S7)
	Histic (A3)		_		pped Matr			Iron-Manganese Masses (F12)
	gen Sulfide (A4)		_			Mineral (F1)		Very Shallow Dark Surface (TF12)
	ed Layers (A5)		_		-	d Matrix (F2)		Other (Explain in Remarks)
_	Muck (A10)		_		oleted Mat			
_	ted Below Dark Surfac	ce (A11)	_			Surface (F6)		
	Dark Surface (A12)	,	_	— Dep	oleted Darl	k Surface (F7)	3.	
Sandy	Mucky Mineral (S1)		_	Red	dox Depre	ssions (F8)		ndicators of hydrophytic vegetation I wetland hydrology must be present,
5 cm l	Mucky Peat or Peat (S	33)	_				u	unless disturbed or problematic.
Restrictive	Layer: (if observed)						T	
Type:	Layer: (" observed)							
Depth (in	iches) ·						Hydric	Soil Present? Yes X No
	,	datian Cail		duia .a.a.a	Ctan 10h	-f th - 1007 C-		
Remarks:	No pit dug due to in	undation. Soil	s assumed nyo	inc per	Step 120	of the 1987 Co	orps Delineation	ivianuai.
HYDROLO	GY							
Wetland Hy	/drology Indicators:							
Primary Ind	icators (minimum of o	ne is required;	check all that	apply)		3	Secondary Indica	ators (minimum of two required)
X Surfac	e Water (A1)		W	ater-St	ained Lea	ves (B9)		Surface Soil Cracks (B6)
High V	Vater Table (A2)		A	quatic F	auna (B1	3)		Drainage Patterns (B10)
X Satura	ation (A3)		Tr	ue Aqu	atic Plants	s (B14)		Dry-Season Water Table (C2)
Water	Marks (B1)		H	ydroger	n Sulfide C	Odor (C1)		Crayfish Burrows (C8)
Sedim	ent Deposits (B2)		0	xidized	Rhizosph	eres on Living	Roots	Saturation Visible on Aerial
Drift D	eposits (B3)		Pi	esence	of Reduc	ed Iron (C4)		Imagery (C9)
Algal I	Mat or Crust (B4)		R	ecent Ir	on Reduc	tion in Tilled So	oils (C6)	Stunted or Stressed Plants (D1)
Iron D	eposits (B5)				k Surface	,		Geomorphic Position (D2)
Inunda	ation Visible on Aerial	Imagery (B7)	G	auge o	r Well Data	a (D9)		FAC-Neutral Test (D5)
Spars	ely Vegetated Concav	e Surface (B8)	0	ther (E	xplain in R	emarks)		
Field Obse	rvations:	-		,				
Surface Wa	ter Present?		Yes	X	No	Depth (inch	es) 6	Wetland Hydrology
Water Table	e Present?		Yes		No X	Depth (inch	es) > 6	Present?
Saturation F	Present? (includes cap	pillary fringe)	Yes	<u> </u>	No	Depth (inch	es) 0	Yes <u>X</u> No
Describe Re	ecorded Data (stream	gauge, monito	ring well, aeria	al photo	s, previou	s inspections)	, if available.	
Domorto								
Remarks:								

Project/Site: SPCSL 2A (Tier 3)		City/Count	y. Logun	Sampling Date:	12/1/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	KS 20
Investigator(s): KK, KS, KT		Section	on, Township, Range: S3,		
	ditch			ave, convex, none) : con	cave
· · · /	12' 30.55" N	Long:	89° 17' 36.77" W	Datum: NAD 83	
Soil Map Unit Name: 68A - Sable silty cla	y loam, 0-2% slo	pes		NWI Classific	ation: None
Are climatic/hydrologic conditions on the si	te typical for this t	ime of year?	Yes X No (/	lf no, explain in Remarks)	!
Are Vegetation, Soil, or	Hydrology	significantly distu	rbed? Are "Normal Ci	rcumstances" present?	Yes X No
Are Vegetation , Soil , or	Hydrology	naturally problemat	tic? (If needed	d, explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site m	nap showing sam	pling point location	ons, transects, important	t features, etc.	
	X No		•	·	
	X No	ls :	the Sampled Area within a	Wetland? Yes	X No
Wetland Hydrology Present? Yes			are campiou / a ca wiamir a		
Remarks: Wetland KS-T. PEMA. Wetl	and within west tra	ackside ditch. At C	ulvert 150.92.		
VEOETATION II : 115					
VEGETATION - Use scientific names of	•		D T	W	
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Indic Species? Sta			
1.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	- CA	That Are OBL, FA	•	(A)
2.					
3.			Total Number of D	Dominant	
4.			Species Across A		(B)
5.					
	0 = 7	otal Cover	Percent of Domina	ant Species	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FA	•	(A/B)
1.					
2.			Prevalence Index	k Worksheet:	
3.			OBL species	x 1	= 0
4			FACW species	x 2	= 0
5			FAC species	x 3	= 0
	0 = 7	otal Cover	FACU species	x 4	
Herb Stratum (Plot size: r = 5')			UPL species	x 5	
1. Phalaris arundinacea	100	yes FAC		0 (A	(B)
2			Prevai	lence Index = B/A =	
3			Hydrophytic Voc	etation Indicators:	
4 5.				Test for Hydrophytic Vege	etation
o. 6.	 -			ance Test is >50%	,tation
7.				ence Index is <3.01	
8.				ological Adaptations¹ (Prov	vide supporting
9.	<u> </u>		`	emarks or on a separate sheet)	
0.			Problema	tic Hydrophytic Vegetatio	n¹ (Explain)
	100 = 7	otal Cover			
Woody Vine Stratum (Plot size:)		¹ Indicators of h	ydric soil and wetland hyd	drology
1.				nt, unless disturbed or pro	
2.				·	
	0	= Total Cover	Hydrophytic V	egetation Present? Y	es X No
			I		

Profile Desc	cription: (Describe	to the depth n	eeded to docume	nt the in	dicator o	confirm the al	bsence of indica	ators.)
Depth	Matrix		Re	dox Fea	tures			
(inches)	Color (moist)	% (Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-14	10 YR 3/1	100						
					·			
¹ Type: C=C	oncentration, D=De	pletion, RM=R	educed Matrix, C	S=Cove	ered or Co	oated Sand Gra	ains. ² Locatio	n: PL=Pore Lining, M=Matrix
Hydric Soil		<u>'</u>						icators for Problematic Hydric Soils ³ :
Histoso				Sand	v Gleved	Matrix (S4)		Coast Prairie Redox (A16)
_	Epipedon (A2)				y Redox			Dark Surface (S7)
	listic (A3)				ed Matri			Iron-Manganese Masses (F12)
	en Sulfide (A4)			_		Mineral (F1)		Very Shallow Dark Surface (TF12)
— · ·	ed Layers (A5)			_		Matrix (F2)	x	Other (Explain in Remarks)
	luck (A10)				eted Matri			
	ed Below Dark Surfa	ace (A11)				urface (F6)		
	ark Surface (A12)	,		_		Surface (F7)	3.	
	Mucky Mineral (S1)			_		sions (F8)		ndicators of hydrophytic vegetation I wetland hydrology must be present,
	lucky Peat or Peat (S3)		_	·	, ,	anc	unless disturbed or problematic.
Restrictive	Layer: (if observed)							
Type:	eayer: (ii observed)							
Depth (inc	ches):						Hydric	Soil Present? Yes X No
	,				0 "		•	
Remarks: Manual.	Soils were saturate	ed and water t	able present at 4	inches.	Soils ass	sumed nydric p	per Step 12b of	the 1987 Corps Delineation
Mariaai.								
HYDROLOG	iY							
Wetland Hy	drology Indicators	:						
Primary India	cators (minimum of	one is require	d; check all that a	pply)		Se	econdary Indica	ators (minimum of two required)
Surface	e Water (A1)		Wa	ater-Stai	ned Leav	es (B9)		Surface Soil Cracks (B6)
X High W	ater Table (A2)		Aq	uatic Fa	una (B13)		Drainage Patterns (B10)
X Saturat	ion (A3)		Tru	ie Aquat	tic Plants	(B14)		Dry-Season Water Table (C2)
Water I	Marks (B1)		— Ну	drogen S	Sulfide O	dor (C1)		Crayfish Burrows (C8)
Sedime	ent Deposits (B2)		Ox	idized R	hizosphe	res on Living F	Roots	Saturation Visible on Aerial
Drift De	eposits (B3)		Pre	esence o	of Reduce	ed Iron (C4)		Imagery (C9)
Algal M	lat or Crust (B4)		Re	cent Iror	n Reducti	on in Tilled Soi	ils (C6)	Stunted or Stressed Plants (D1)
Iron De	posits (B5)		Thi	in Muck	Surface (C7)		Geomorphic Position (D2)
Inunda	tion Visible on Aeria	I Imagery (B7) <u>——</u> Ga	uge or V	Vell Data	(D9)		FAC-Neutral Test (D5)
Sparse	ly Vegetated Conca	ve Surface (B	8) <u>Oth</u>	ner <i>(Exp</i>	lain in Re	emarks)		
Field Obser	vations:							
Surface Wat	er Present?		Yes	^	10 X	Depth (inche	es) >4	Wetland Hydrology
Water Table	Present?		Yes X	_ N	10	Depth (inche	es) 4	Present?
Saturation P	resent? (includes ca	apillary fringe)	Yes X	<u> </u>	lo	Depth (inche	es) 0	Yes X No
Describe Re	corded Data (stream	n gauge, mon	itoring well, aerial	photos,	previous	inspections),	if available.	
Daws - :-!								
Remarks:								

Project/Site: SPCSL 2A (Tier 3)		City/County:	Sangamon	Sampling Date:	6/13/2011
Applicant/Owner: UPRR			State: IL	Sampling Point:	KS 41
Investigator(s): KT, KS		Section,	Township, Range: S2, T		
• • • • • • • • • • • • • • • • • • • •	Trackside ditch			ve, convex, none) : conc	ave
· · · /	89° 36' 13.61" N	Long:	89° 44' 16.25" W	Datum: NAD 83	
Soil Map Unit Name: 50A - Virden sil	y clay loam, 0-2% slope	es	_	NWI Classifica	ition: None
Are climatic/hydrologic conditions on the	e site typical for this time	of year?	Yes X No (If	no, explain in Remarks)	
Are Vegetation , Soil	, or Hydrology sig	gnificantly disturbe	ed? Are "Normal Circ	cumstances" present?	Yes X No
		urally problematic?	? (If needed.	explain any answers in I	Remarks.)
SUMMARY OF FINDINGS - Attach si					,
	Yes X No	ig point location	o, transcoto, important	outuros, otor	
		1- 41	. O I I A	M-4110	Z. N.
,	Yes X No	is the	e Sampled Area within a V	Wetland? Yes <u>></u>	K No
Wetland Hydrology Present?	Yes X No				
Remarks: Wetland KS-48. PEMA.	Isolated within west track	side ditch.			
VEGETATION - Use scientific names	of plants.				
	Absolute Do	minant Indicato	Dominance Test V	Vorksheet:	
Tree Stratum (Plot size: r = 30') % Cover Sp	ecies? Status	Number of Domina	nt Species	
1			That Are OBL, FAC	;W, or FAC:	3 (A)
2			_		
3			Total Number of Do		
4			Species Across All	Strata:	3 (B)
5			_		
		l Cover	Percent of Dominar		
Sapling/Shrub Stratum (Plot size:	r = 15')		That Are OBL, FAC	;W, or FAC:	100% (A/B)
1			_		
2			Prevalence Index		
3			OBL species	x 1 :	
4			FACW species	x 2 :	
5			FAC species	x 3 :	
Harle Otratura (Distrains	10 = Tota	I Cover	FACU species	x 4 :	
Herb Stratum (Plot size: r = 5'	_'		UPL species	x 5 =	
Scirpus sp. Echinochloa crus-galli		yes FACW-O		$\frac{0}{\text{ence Index} = B/A =} $ (A)	0 (B)
Ambrosia trifida		yes FACW ves FAC+	— Flevale	ince index – b/A –	
4.		yes FAC+	Hydrophytic Vege	tation Indicators:	
5.		 -		est for Hydrophytic Vege	tation
6.			— I —— ·	nce Test is >50%	lation
7.			_	nce Index is <3.01	
8.			_	ogical Adaptations¹ (Provi	ide supporting
9.			_ `	marks or on a separate sheet)	
10.			_	c Hydrophytic Vegetation	า¹ (Explain)
	80 = Tota	l Cover	-		
Woody Vine Stratum (Plot size:			¹ Indicators of hyd	dric soil and wetland hyd	rology
1				, unless disturbed or prol	
2				, a	
	0 = To	otal Cover	Hvdrophytic Ve	getation Present? Ye	es X No
			, 3. 0011, 1.0 40	g-13.10.1.100.11.1	
Remarks: (Include photo numbers he	re or on a separate sheet	.)			

Profile Desc	cription: (Describe t	o the depth ne	eded to docume	ent the in	dicator o	r confirm the al	bsence of indica	tors.)
Depth	Matrix		Re	dox Fea	tures			
(inches)	Color (moist)	% C	olor (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10 YR 3/1	100						
			_					
¹ Type: C=C	oncentration, D=Dep	oletion, RM=Re	educed Matrix, C	S=Cove	red or Co	oated Sand Gra	ains. ² Location	n: PL=Pore Lining, M=Matrix
Hydric Soil								cators for Problematic Hydric Soils ³ :
Histoso				Sand	v Gleved	Matrix (S4)		Coast Prairie Redox (A16)
_	Epipedon (A2)		_		y Redox (×	Dark Surface (S7)
	listic (A3)				ed Matrix			Iron-Manganese Masses (F12)
_	en Sulfide (A4)		_			Mineral (F1)		Very Shallow Dark Surface (TF12)
	ed Layers (A5)					Matrix (F2)	x	Other (Explain in Remarks)
	luck (A10)		_	_	eted Matri			
	ed Below Dark Surfa	ce (A11)		_ `		urface (F6)		
	Oark Surface (A12)	,		_		Surface (F7)	3	
	Mucky Mineral (S1)		-	_ `		sions (F8)		dicators of hydrophytic vegetation wetland hydrology must be present,
	ucky Peat or Peat (S3)			·	, ,		unless disturbed or problematic.
Restrictive	Layer: (if observed)							
Type:	_ 							
Depth (inc	ches):						Hydric S	Soil Present? Yes X No
						mahla Caila a	Í	
Remarks: Delineation I		ce; therefore, r	iot textured, con	or may b	e questio	nable. Solls as	ssumea nyanc p	er Step 12b of the 1987 Corps
Dominoution 1	viariaai.							
HYDROLOG	iΥ							
Wetland Hy	drology Indicators:							
Primary India	cators (minimum of o	one is required	; check all that a	apply)		Se	econdary Indica	tors (minimum of two required)
Surface	e Water (A1)		W	ater-Stai	ned Leav	es (B9)		Surface Soil Cracks (B6)
High W	ater Table (A2)		Ac	uatic Fa	una (B13)		Drainage Patterns (B10)
X Saturat	ion (A3)		Tr	ue Aquat	tic Plants	(B14)		Dry-Season Water Table (C2)
Water I	Marks (B1)		—— Hy	drogen S	Sulfide O	dor (C1)		Crayfish Burrows (C8)
Sedime	ent Deposits (B2)		O	idized R	hizosphe	res on Living F	Roots	Saturation Visible on Aerial
Drift De	eposits (B3)		—— Pr	esence o	of Reduce	ed Iron (C4)	<u> </u>	Imagery (C9)
Algal M	lat or Crust (B4)		Re	ecent Iron	n Reducti	on in Tilled Soi	ils (C6)	Stunted or Stressed Plants (D1)
Iron De	posits (B5)		Th	in Muck	Surface ((C7)	X	Geomorphic Position (D2)
Inunda	tion Visible on Aerial	Imagery (B7)	Ga	auge or V	Vell Data	(D9)	X	FAC-Neutral Test (D5)
Sparse	ly Vegetated Conca	ve Surface (B8	Ot	her <i>(Exp</i>	lain in Re	emarks)		_
Field Obser	vations:							
Surface Wat	er Present?		Yes	^	lo X	Depth (inche	es)	Wetland Hydrology
Water Table	Present?		Yes	^	lo X	Depth (inche	es)	Present?
Saturation P	resent? (includes ca	pillary fringe)	Yes _>	<u> </u>	lo	Depth (inche	es) 0	Yes X No
Describe Re	corded Data (stream	gauge, monit	oring well, aeria	l photos,	previous	inspections),	if available.	
Remarks:								
. tomarks.								
Ī								

Project/Site: SPCSL 2A (Tier 3)		City/C	County: Sai	ngamon	Sampling Date:	6/14/2011
Applicant/Owner: UPRR				State: IL	Sampling Point:	KS 42
Investigator(s): KT, KS			Section, Tov	vnship, Range: S3, T13	BN, R06W	
· · · · · · · · · · · · · · · · · · ·	dplain/channel				convex, none): conca	ive
	5' 50.89" N	Long:	89	° 44' 27.34" W	Datum: NAD 83	
Soil Map Unit Name: 86B - Osco silt loam,	, 2-5% slopes				NWI Classificat	ion: PUBG
Are climatic/hydrologic conditions on the site	e typical for this	ime of year?	Yes	s X No (If no	o, explain in Remarks)	
Are Vegetation , Soil , or H	ydrology	significantly	disturbed?	Are "Normal Circur	nstances" present?	Yes X No
Are Vegetation , Soil , or H	ydrology	naturally prob	lematic?	(If needed, e	xplain any answers in R	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing san	npling point lo	ocations, tr	ansects, important fea	atures, etc.	
Hydrophytic Vegetation Present? Yes						
•	X No		Is the Sa	impled Area within a We	etland? Yes X	No
Wetland Hydrology Present? Yes					<u> </u>	
-						
Remarks: Wetland KS-49A & KS-49B. F	PEMA/PFOC. Fi	inge wetlands	along chan	inel. At Culvert 200.15.		
VEGETATION - Use scientific names of p	lanta					
VEGETATION - Use scientific fiames of p	Absolute	Dominant	Indicator	Dominance Test Wo	rksheet:	
Tree Stratum (Plot size: r = 30')	% Cover	Species?	Status	Number of Dominant		
1. Salix nigra	60	yes	OBL	That Are OBL, FACW	/, or FAC:	4 (A)
2. Acer saccharinum	30	yes	FACW			
3				Total Number of Dom		
4				Species Across All St	trata:	4 (B)
5						
		Total Cover		Percent of Dominant	•	
	: 15')			That Are OBL, FACW	/, or FAC: 1	00% (A/B)
1. Salix exigua	5	yes	OBL			
2				Prevalence Index W		0
3				OBL species	x 1 = x 2 =	
4 5.				FACW species FAC species	x 3 =	
·	10 =	Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: r = 5')				UPL species	x 5 =	0
1. Phalaris arundinacea	90	yes	FACW+	Column Totals:	0 (A)	0 (B)
2.				Prevalend	ce Index = B/A =	
3.						
4.				Hydrophytic Vegeta	tion Indicators:	
5.				X 1. Rapid Tes	t for Hydrophytic Vegeta	ation
6				X 2. Dominance		
7					e Index is <u><</u> 3.01	
8				<u> </u>	ical Adaptations ¹ (Provid	le supporting
9					rks or on a separate sheet)	l (Fla::a)
10		Fatal Carra		Problematic i	Hydrophytic Vegetation	(Explain)
	90 =	Total Cover		4		
Woody Vine Stratum (Plot size:)			-	ic soil and wetland hydr	
1				must be present, u	inless disturbed or prob	іепіацс.
2	0	= Total Cover		Hydrophytic Vege	etation Present? Ye	s_X_No
Remarks: (Include photo numbers here or	on a separate si	neet.)				
,		,				

Profile Des	scription: (Describe to the dep	oth needed to docun	ent the	e indicator c	r confirm the	absence of indica	ators.)
Depth	Matrix	F	edox F	eatures			
(inches)	Color (moist) %	Color (moist)	%	Туре	¹ Loc ²	Texture	Remarks
				<u></u>			
¹ Type: C=0	Concentration, D=Depletion, R	M=Reduced Matrix,	CS=C	overed or C	oated Sand G	Grains. ² Locatio	n: PL=Pore Lining, M=Matrix
Hydric Soil	I Indicators					Indi	icators for Problematic Hydric Soils ³ :
Histos	sol (A1)		Sa	andy Gleyed	Matrix (S4)		Coast Prairie Redox (A16)
Histic	Epipedon (A2)	_	Sa	andy Redox	(S5)		Dark Surface (S7)
Black	Histic (A3)	_	St	ripped Matri	x (S6)		Iron-Manganese Masses (F12)
Hydro	gen Sulfide (A4)	_	Lo	amy Mucky	Mineral (F1)		Very Shallow Dark Surface (TF12)
Stratif	ied Layers (A5)	_	Lo	amy Gleyed	d Matrix (F2)	X	Other (Explain in Remarks)
2 cm l	Muck (A10)	_	De	epleted Mati	ix (F3)		_
Deple	ted Below Dark Surface (A11)	_	Re	edox Dark S	urface (F6)		
Thick	Dark Surface (A12)	_	De	epleted Dark	Surface (F7)	31	ndicators of hydrophytic vegetation
Sandy	/ Mucky Mineral (S1)	_	Re	edox Depres	ssions (F8)		I wetland hydrology must be present,
5 cm I	Mucky Peat or Peat (S3)						unless disturbed or problematic.
Restrictive	Layer: (if observed)						
Type:							
Depth (in	nches):					Hydric	Soil Present? Yes X No
Remarks:	No soil pit dug due to inund	ation Soils assume	d hydri	c ner Sten	12h of the 108	7 Corns Delineat	ion Manual
ixemarks.	No son pit dug due to mand	ation. Jons assume	u nyun	c per Step	120 01 1116 190	7 Corps Delinear	ion manual.
HYDROLO	GY						
Wetland Hy	ydrology Indicators:						
Primary Ind	icators (minimum of one is red	quired; check all that	apply)	1	<u>.</u>	Secondary Indica	ators (minimum of two required)
X Surfac	ce Water (A1)	V	Vater-S	Stained Leav	/es (B9)		Surface Soil Cracks (B6)
High \	Water Table (A2)		quatic	Fauna (B13	3)		Drainage Patterns (B10)
X Satura	ation (A3)	1	rue Aq	uatic Plants	s (B14)		Dry-Season Water Table (C2)
Water	Marks (B1)	t	lydroge	en Sulfide C	dor (C1)		_ Crayfish Burrows (C8)
Sedim	nent Deposits (B2)		xidize	d Rhizosphe	eres on Living	Roots	Saturation Visible on Aerial
Drift D	Deposits (B3)	F	resend	ce of Reduc	ed Iron (C4)		Imagery (C9)
	Mat or Crust (B4)	F	Recent	Iron Reduct	ion in Tilled S	oils (C6)	_Stunted or Stressed Plants (D1)
	eposits (B5)		hin Mu	ick Surface	(C7)	X	Geomorphic Position (D2)
	ation Visible on Aerial Imagery		-	or Well Data		X	FAC-Neutral Test (D5)
Spars	ely Vegetated Concave Surfac	ce (B8)(Other (E	Explain in R	emarks)		
Field Obse	rvations:						
	ter Present?	Yes _	X	No	Depth (inch	· -	Wetland Hydrology
Water Table		Yes _		No X	Depth (inch	· -	Present?
Saturation F	Present? (includes capillary fri	nge) Yes _	X	No	Depth (inch	nes) 0	Yes X No
Describe R	ecorded Data (stream gauge,	monitoring well, aer	al phot	os, previous	s inspections)	, if available.	
Remarks:							

Project/Site: SPCSL 2A (Tier 3)		City/County: Sai	ngamon	Sampling Date:	6/14/2011
Applicant/Owner: UPRR			State: IL	Sampling Point:	KS 43
Investigator(s): KT, KS		Section, Tov	vnship, Range: S2, T1	3N, R06W	
· · · · · · · · · · · · · · · · · · ·	side ditch			, convex, none) : conc	ave
' ' '	6' 26.68" N	Long: 89)° 44' 9.91" W	Datum: NAD 83	
Soil Map Unit Name: 50A - Virden silty cla	y loam, 0-2% slopes			NWI Classifica	tion: None
Are climatic/hydrologic conditions on the site	e typical for this time of	year? Yes	S X No (If no	o, explain in Remarks)	
Are Vegetation, Soil, or H	ydrology signi	ficantly disturbed?	Are "Normal Circu	mstances" present?	Yes X No
Are Vegetation , Soil , or H	ydrology natura	lly problematic?	(If needed, e	xplain any answers in F	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling	point locations, tr	ansects, important fe	atures, etc.	
Hydrophytic Vegetation Present? Yes	X No				
Hydric Soil Present? Yes	X No	Is the Sa	mpled Area within a W	etland? Yes X	No
•	X No		•		
-	Downstroom (cost) is	2 of flowing shapp	al with watland frings	Non wotland shannel w	ithin atudy
Remarks: Wetland KS-50. PEMF/PFOC area. At Culvert 199.40.	. Downstream (east) i	S 2 It nowing chann	ei with wetland fringe.	inon-wetiand channel w	itnin study
VEGETATION - Use scientific names of p	lants.				
Tree Stratum (Plot size: r = 30')	Absolute Domir % Cover Specie		Dominance Test Wo		
1. Salix nigra	20 yes	o OBL	That Are OBL, FACV	V, or FAC:	4 (A)
2.					
3			Total Number of Don		
4			Species Across All S	trata:	4 (B)
5					
	20 = Total C	over	Percent of Dominant	•	
	: <u>15'</u>)		That Are OBL, FACV	V, or FAC:1	00% (A/B)
1. Salix bebbiana	5 yes	FACW+			
2			Prevalence Index W		0
3			OBL species FACW species	x 1 = x 2 =	
4 5.			FACW species FAC species	x 2 =	
·	10 = Total C	over	FACU species	x 4 =	
Herb Stratum (Plot size: r = 5')			UPL species	x 5 =	
1. Leersia oryzoides	60 yes	o OBL	Column Totals:	0 (A)	0 (B)
2. Scirpus atrovirens	20 yes		Prevalen	ce Index = B/A =	
3. Typha latifolia	10	OBL			
4. Carex sp.	10	FACW-OBL	Hydrophytic Vegeta	tion Indicators:	
5.			X 1. Rapid Tes	t for Hydrophytic Veget	ation
6			X 2. Dominano		
7				e Index is <u><</u> 3.01	
8				gical Adaptations¹ (Provid	de supporting
9				arks or on a separate sheet)	1/5
10	400 - Tatal C		Problematic	Hydrophytic Vegetation	(Explain)
Marada Vina Otra i	= Total C	over	11		
Woody Vine Stratum (Plot size:)			ic soil and wetland hydr	
1			must be present, t	unless disturbed or prob	петпапс.
2	0 = Tota	l Cover	Hydrophytic Veg	etation Present? Ye	es X No
Remarks: (Include photo numbers here or Carex sp. Assumed to be FACW or wetter.	on a separate sheet.)				

Profile Des	cription: (Describe to	the depth needed	to docur	nent the	indicator o	or confirm th	he absence	e of indicat	fors.)
Depth	Matrix		F	Redox F	eatures				
(inches)	Color (moist)	% Color (moist)	%	Туре	e ¹ Loc ²	. Te	xture	Remarks
,									
¹ Type: C=C	oncentration, D=Deple	tion, RM=Reduce	ed Matrix,	CS=C	overed or C	Coated Sand	d Grains.	² Location	: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators							Indic	ators for Problematic Hydric Soils ³ :
Histoso				Sa	ndy Gleved	d Matrix (S4	1)		Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redox		,		Dark Surface (S7)
	Histic (A3)		_		ripped Matr				Iron-Manganese Masses (F12)
	gen Sulfide (A4)		_			/ Mineral (F	1)		Very Shallow Dark Surface (TF12)
	ed Layers (A5)		_			d Matrix (F2	,	X	Other (Explain in Remarks)
	luck (A10)		_		pleted Mat		,		- ' '
Deplet	ed Below Dark Surface	e (A11)	_	Re	dox Dark S	Surface (F6))		
Thick [Dark Surface (A12)		_	De	pleted Dar	k Surface (I	F7)	31	dicators of hydrophytic vegetation
Sandy	Mucky Mineral (S1)		_	Re	dox Depre	ssions (F8)			wetland hydrology must be present,
5 cm N	lucky Peat or Peat (S3	5)	_						unless disturbed or problematic.
Restrictive	Layer: (if observed)								
Type:	Layer: (iii oboci vea)								
Depth (in	ches):							Hydric S	oil Present? Yes X No
		d-ti O-il			- Ot 40b	-64 4007	7 O D - I		
Remarks:	No pit dug due to inu	ndation. Soils as	sumea ny	arıc pe	r Step 12b	of the 1987	Corps De	lineation iv	ianuai.
HYDROLOG	SY								
Wetland Hy	drology Indicators:								
Primary Indi	cators (minimum of on	e is required; che	ck all tha	t apply)			Seconda	ary Indicat	ors (minimum of two required)
X Surfac	e Water (A1)		\	Nater-S	tained Lea	ves (B9)			Surface Soil Cracks (B6)
High W	/ater Table (A2)			Aquatic	Fauna (B1	3)			Drainage Patterns (B10)
X Satura	tion (A3)			Γrue Aq	uatic Plants	s (B14)			Dry-Season Water Table (C2)
Water	Marks (B1)		H	Hydroge	en Sulfide C	Odor (C1)			Crayfish Burrows (C8)
Sedime	ent Deposits (B2)			Oxidized	d Rhizosph	eres on Livi	ing Roots		Saturation Visible on Aerial
Drift De	eposits (B3)		F	Presenc	e of Reduc	ced Iron (C4	1)		Imagery (C9)
Algal N	Mat or Crust (B4)		F	Recent	Iron Reduc	tion in Tilled	d Soils (C6)	Stunted or Stressed Plants (D1)
Iron De	eposits (B5)			Γhin Mu	ck Surface	(C7)		X	Geomorphic Position (D2)
Inunda	tion Visible on Aerial Ir	magery (B7)		Gauge o	or Well Data	a (D9)		X	FAC-Neutral Test (D5)
Sparse	ely Vegetated Concave	Surface (B8)	(Other (E	Explain in R	Remarks)			
Field Obser	vations:								
Surface Wat	er Present?		Yes	Χ	No	Depth (ii	nches)	3	Wetland Hydrology
Water Table	Present?		Yes		No X	Depth (ii	nches)		Present?
Saturation P	resent? (includes capi	llary fringe)	Yes	Χ	No	Depth (ii	nches)	0	Yes X No
Describe Re	corded Data (stream g	auge, monitoring	well, aer	ial phot	os, previou	s inspection	ns) , if avail	able.	
Remarks:									

Project/Site: SPCSL 2A (Tier 3)		Oity	/County: Sai	igamon	Sampling Dat		4/2011
Applicant/Owner: UPRR				State: IL	Sampling Poir	nt: K	S 44
Investigator(s): KT, KS			Section, Tov	vnship, Range: S2, T			
	kside ditch			Local Relief (concav			
' ` ´	6' 35.18" N	Long	: 89	9° 44' 5.59" W	Datum: NAD 83		
Soil Map Unit Name: 43A - Ipava silt Ioam						ssification: <u>N</u>	vone
Are climatic/hydrologic conditions on the site		•		 	no, explain in Rema	,	
Are Vegetation, Soil, or H	lydrology	significantl	y disturbed?	Are "Normal Circ	cumstances" present?	? Yes _	X No
Are Vegetation, Soil, or H	lydrology	naturally pro	blematic?	(If needed,	explain any answe	rs in Remar	ks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sa	mpling point	locations, tr	ansects, important f	eatures, etc.		
Hydrophytic Vegetation Present? Yes	X No						
Hydric Soil Present? Yes	X No	_	Is the Sa	impled Area within a V	Vetland? Ye	es X No	0
Wetland Hydrology Present? Yes	X No						
Remarks: Wetland KS-51. PEMC/PFOA	Landatad in w	-	ditab				
Remarks: Welland KS-51. PEMC/PFOA	A. Isolated in w	est trackside (JITCH.				
VEGETATION - Use scientific names of p	lants						
VEGETATION GGG GGIGHANG HAMES OF P	Absolute	Dominant	Indicator	Dominance Test V	Vorksheet:		
Tree Stratum (Plot size: r = 30')	% Cover	Species?	Status	Number of Dominar			
1. Ulmus americana	30	yes	FACW-	That Are OBL, FAC	W, or FAC:	3	(A)
2.					•		
3				Total Number of Do	minant		
4				Species Across All	Strata:	3	(B)
5							
		: Total Cover		Percent of Dominar	nt Species		
Sapling/Shrub Stratum (Plot size: r =	= 15')			That Are OBL, FAC	W, or FAC:	100%	(A/B)
1							
2				Prevalence Index	Worksheet:		
3				OBL species		x 1 =	0
4				FACW species FAC species		x 2 =	0
5	0 =	Total Cover		FACU species		x 4 =	0
Herb Stratum (Plot size: r = 5')		Total Gover		UPL species		x 5 =	0
1. Carex sp.	50	yes	FACW-OBL	Column Totals:	0	(A)	0 (B)
2. Leersia oryzoides	50	yes	OBL		ence Index = B/A =	()	(-/
3.					-		
4.				Hydrophytic Vege	tation Indicators:		
5.				X 1. Rapid Te	est for Hydrophytic	Vegetation	
6.				X 2. Dominar	nce Test is >50%		
7				3. Prevalen	nce Index is <3.01		
8				4. Morpholo	ogical Adaptations ¹	(Provide supp	porting
9					marks or on a separate s	•	
0				Problemation ——	c Hydrophytic Vege	etation' (Expl	ain)
	100 =	: Total Cover					
Woody Vine Stratum (Plot size:)			1	dric soil and wetlan	, ,,	
1				must be present,	, unless disturbed o	or problemat	ic.
2		T-4.10		Disability 1 42 34			
	0	= Total Cove	er	Hyarophytic Ve	getation Present?	Yes X	No

Profile Des	cription: (Describe to	the depth nee	eded to docum	ent the	indicator o	or confirm the	absence of inc	dicators.)
Depth	Matrix		R	edox Fe	eatures			
(inches)	Color (moist)	% Co	olor (moist)	%	Туре	¹ Loc ²	Texture	Remarks
	-							
¹ Type: C=C	concentration, D=Dep	letion, RM=Re	duced Matrix,	CS=Co	vered or C	oated Sand G	Grains. ² Loca	ation: PL=Pore Lining, M=Matrix
Hydric Soil								Indicators for Problematic Hydric Soils ³ :
Histos				Sar	ndv Gleved	d Matrix (S4)	·	Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redox		=	Dark Surface (S7)
	Histic (A3)		_		pped Matr		-	Iron-Manganese Masses (F12)
	gen Sulfide (A4)		_			Mineral (F1)	-	Very Shallow Dark Surface (TF12)
— ·	ed Layers (A5)		_		-	d Matrix (F2)	=	X Other (Explain in Remarks)
	/luck (A10)		_		oleted Mat		=	
	ed Below Dark Surfac	ce (A11)	_			Surface (F6)		
— ·	Dark Surface (A12)	,	_			k Surface (F7))	3
_	Mucky Mineral (S1)		_			ssions (F8)		³ Indicators of hydrophytic vegetation and wetland hydrology must be present,
5 cm N	Mucky Peat or Peat (S	3)	_		·	, ,	•	unless disturbed or problematic.
Postrictivo	Layer: (if observed)							
_	Layer. (II Observed)							
Type: Depth (in	ches):						Llyd	Iric Soil Present? Yes X No
Remarks:	No pit dug due to in	undation. Soil	s assumed hyd	dric per	Step 12b	of the 1987 Co	orps Delineation	on Manual.
HYDROLO	GY							
Wetland Hy	drology Indicators:							
Primary Ind	cators (minimum of o	ne is required;	check all that	apply)			Secondary Inc	dicators (minimum of two required)
X Surfac	e Water (A1)		W	ater-St	ained Lea	ves (B9)		Surface Soil Cracks (B6)
High V	Vater Table (A2)		A	quatic F	auna (B1	3)	_	Drainage Patterns (B10)
X Satura	tion (A3)		T	ue Aqu	atic Plants	s (B14)	_	Dry-Season Water Table (C2)
Water	Marks (B1)		— н	ydroger	n Sulfide C	Odor (C1)	_	Crayfish Burrows (C8)
Sedim	ent Deposits (B2)			xidized	Rhizosph	eres on Living	Roots	Saturation Visible on Aerial
Drift D	eposits (B3)		P	esence	e of Reduc	ed Iron (C4)	_	Imagery (C9)
Algal N	Mat or Crust (B4)		R	ecent Ir	on Reduc	tion in Tilled S	oils (C6)	Stunted or Stressed Plants (D1)
Iron D	eposits (B5)		TI	nin Muc	k Surface	(C7)	_	X Geomorphic Position (D2)
Inunda	tion Visible on Aerial	Imagery (B7)	G	auge oi	r Well Data	a (D9)	_	x FAC-Neutral Test (D5)
Sparse	ely Vegetated Concav	e Surface (B8)) <u> </u>	ther (E	xplain in R	emarks)	_	
Field Obse	rvations:							
Surface Wa	ter Present?		Yes	X	No	Depth (inch	nes) 3	Wetland Hydrology
Water Table			Yes		No X	Depth (inch	nes)	Present?
Saturation F	resent? (includes cap	oillary fringe)	Yes	X	No	Depth (inch	nes) 0	Yes X No
Describe Re	ecorded Data (stream	gauge, monito	oring well, aeria	l photo	s, previou	s inspections)	, if available.	
Remarks:								

Project/Site: SPCSL 2A (Tier 3)		City/0	County: Sa	angamon	Sampling Date:	6/14/2011
Applicant/Owner: UPRR				State: IL	Sampling Point:	KS 45
Investigator(s): KT, KS		;	Section, To	ownship, Range: S2, T1	3N, R06W	
	eek/floodplain			Local Relief (concave	, convex, none) : <u>cor</u>	ncave
· · · /	36' 35.78" N	Long:	8	39° 44' 3.99" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava silt loa	ım, 0-2% slopes				NWI Classifi	ication: None
Are climatic/hydrologic conditions on the	site typical for this t	ime of year?	Ye	es X No (If no	o, explain in Remarks	s)
Are Vegetation, Soil, o	r Hydrology	significantly	disturbed?	? Are "Normal Circu	mstances" present?	Yes X No
Are Vegetation , Soil , o	r Hydrology	naturally prob	lematic?	(If needed, e	explain any answers i	n Remarks.)
SUMMARY OF FINDINGS - Attach site	map showing san	pling point l	ocations,	transects, important fe	atures, etc.	
Hydrophytic Vegetation Present? Ye						
Hydric Soil Present? Ye	s X No		Is the S	Sampled Area within a W	etland? Yes	X No
Wetland Hydrology Present? Ye						
Remarks: Wetland KS-52. PEMF/PF0	C. Fringe wetland	d along chann	el.			
VEGETATION II : «G						
VEGETATION - Use scientific names o	-	5		Dominance Test We	- wko ho o ti	
Tree Stratum (Plot size: r = 30'	Absolute) % Cover	Dominant Species?	Indicator Status	Number of Dominant		
1. Salix nigra	30	yes	OBL	That Are OBL, FACV	•	5 (A)
2.				·		
3.				Total Number of Don	ninant	
4.				Species Across All S	trata:	5 (B)
5.				_		<u> </u>
	30 = 7	Total Cover		Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size:	r = 15')			That Are OBL, FACV	V, or FAC:	100% (A/B)
1. Salix nigra	10	yes	OBL			
2				Prevalence Index W	/orksheet:	
3	<u> </u>			OBL species		1 =0
4				FACW species		2 = 0
5		<u> </u>		FAC species		3 = 0
Harb Stratum (Diet size: - 51	10= 7	Total Cover		FACU species		4 = 0
Herb Stratum (Plot size: r = 5'	20	V00	ODI	UPL species Column Totals:		5 = 0 (A) 0 (B)
Schoenoplectus tabernaemontani Leersia oryzoides	60	yes	OBL	_	ice Index = B/A =	A) 0 (B)
Carex vulpinoidea		yes	OBL	- I levalen	ce ilidex – b/A –	
4.		,,,,	OBL	Hydrophytic Vegeta	ation Indicators:	_
5.				• · · · · ·	st for Hydrophytic Veg	getation
6.				X 2. Dominano		
7.				3. Prevalenc	ce Index is <3.01	
8.				4. Morpholog	gical Adaptations¹ (Pro	ovide supporting
9.				data in Rema	arks or on a separate sheet	t)
10.				Problematic	Hydrophytic Vegetati	ion¹ (Explain)
	100 = 7	Total Cover				
Woody Vine Stratum (Plot size:)			¹ Indicators of hydr	ric soil and wetland hy	ydrology
1.				must be present, i	unless disturbed or pr	roblematic.
2				_		
	0	= Total Cover	•	Hydrophytic Veg	etation Present?	Yes X No
Remarks: (Include photo numbers here	or on a separate sl	neet.)				
,	•	,				

Depth Matrix inches) Color (moist) % Color	Neuo	x Features			
	r (moist)	% Туре	e ¹ Loc ²	Texture	Remarks
	i (moist)	70 1996		Texture	Remarks
					-
Type: C=Concentration, D=Depletion, RM=Redu	ced Matrix, CS=	=Covered or C	Coated Sand Gra	ains. ² Location	n: PL=Pore Lining, M=Matrix
/dric Soil Indicators				Indi	cators for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gleye	d Matrix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)		Sandy Redox	(S5)		Dark Surface (S7)
Black Histic (A3)		Stripped Mati	rix (S6)		Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)		Loamy Mucky	y Mineral (F1)		Very Shallow Dark Surface (TF12)
Stratified Layers (A5)		Loamy Gleye	ed Matrix (F2)	X	Other (Explain in Remarks)
2 cm Muck (A10)		Depleted Mat	trix (F3)		_
Depleted Below Dark Surface (A11)		Redox Dark S	Surface (F6)		
Thick Dark Surface (A12)		Depleted Dar	k Surface (F7)	3,,,	dicators of hydrophytic vegetation
Sandy Mucky Mineral (S1)		Redox Depre	essions (F8)		wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)					unless disturbed or problematic.
estrictive Layer: (if observed)					
Type: Depth (inches):				Hvdric S	Soil Present? Yes X No
Depth (inches):		Ot 40h	-fth - 4007 O-		Soil Present? Yes X No
• •	assumed hydric	per Step 12b	of the 1987 Cor		
Depth (inches):	assumed hydric	per Step 12b	of the 1987 Cor		
Depth (inches):	assumed hydric	per Step 12b	of the 1987 Cor		
Depth (inches): emarks: No pit dug due to inundation. Soils	assumed hydric	per Step 12b	of the 1987 Cor		
Depth (inches): emarks: No pit dug due to inundation. Soils a				ps Delineation N	
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY //etland Hydrology Indicators:	heck all that app		<u>S</u>	ps Delineation N	Manual.
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one is required; c.	heck all that app	oly)	<u>S</u> 	ps Delineation N	Manual. tors (minimum of two required)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; c. X Surface Water (A1) High Water Table (A2)	heck all that app Wate Aqua	oly) r-Stained Lea	<u>S</u> ives (B9)	ps Delineation N	Manual. tors (minimum of two required) Surface Soil Cracks (B6)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; c. X Surface Water (A1) High Water Table (A2)	heck all that app Wate Aqua	oly) r-Stained Lea tic Fauna (B1	<u>S</u> ives (B9) 3) s (B14)	ps Delineation N	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; color of the color of t	heck all that app Wate Aqua True Hydro	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (<u>S</u> ives (B9) 3) s (B14)	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; ca X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	heck all that app Wate Aqua True Hydro	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (Sives (B9) 3) s (B14) Odor (C1) heres on Living F	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; ca X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	heck all that app Wate Aqua True Hydro Oxidi	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc	Sives (B9) 3) s (B14) Odor (C1) heres on Living F	ps Delineation Necondary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; color of the color of t	heck all that app Wate Aqua True Hydro Oxidi Prese	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc	Solves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) ction in Tilled Sol	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; ca X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	heck all that app Wate Aqua True Hydro Oxidi Prese Rece	oly) Ir-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc	sives (B9) 3) s (B14) Odor (C1) heres on Living Fod Iron (C4) stion in Tilled Soil	ps Delineation Necondary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one is required; c. X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	heck all that app Wate Aqua True Hydro Oxidi Prese Rece Thin	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduce int Iron Reduce Muck Surface	Eves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) stion in Tilled Soil	ps Delineation Necondary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; color of the color of t	heck all that app Wate Aqua True Hydro Oxidi Prese Rece Thin	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface ge or Well Dat	Eves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) stion in Tilled Soil	ps Delineation Necondary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Pepth (inches): emarks: No pit dug due to inundation. Soils and soils and soils are personal to the pit of th	heck all that app Wate Aqua True Hydro Oxidi Prese Rece Thin	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface ge or Well Dat	Eves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) stion in Tilled Soil	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Depth (inches): emarks: No pit dug due to inundation. Soils and soils and soils and soils are provided by the soils and soils and soils are provided by the soils are provide	heck all that app Wate Aqua True Hydro Oxidi Prese Rece Thin I Gaug	oly) or-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc ont Iron Reduc Muck Surface ge or Well Dat or (Explain in F	Silves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) ction in Tilled Soil e (C7) a (D9) Remarks)	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Pepth (inches): emarks: No pit dug due to inundation. Soils and soils and soils and soils are presented and soils are present	heck all that app Wate Aqua True Hydro Oxidi Prese Rece Thin Gaug Other	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface ge or Well Dat r (Explain in F	Silves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) ction in Tilled Soil et (C7) ha (D9) Remarks) Depth (inche)	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology

Project/Site: SPCSL 2A (Tier 3)		City/Co	ounty: San	gamon	Sampling Date:	6/14/2011
Applicant/Owner: UPRR				State: IL	Sampling Point:	KS 46
Investigator(s): KT, KS		Se	ection, Tow	nship, Range: S35, T	14N, R06W	
, , , , , , , , , , , , , , , , , , , ,	Trackside ditch				e, convex, none) : con	cave
· · · /	39° 36' 47.17" N	Long:	89°	43' 59.87" W	Datum: NAD 83	
Soil Map Unit Name: 50A - Virden sil	ty clay loam, 0-2% sl	opes			NWI Classific	ation: None
Are climatic/hydrologic conditions on t	he site typical for this t	ime of year?	Yes	X No (If n	o, explain in Remarks,)
Are Vegetation, Soil	, or Hydrology	significantly di	isturbed?	Are "Normal Circu	imstances" present?	Yes X No
Are Vegetation , Soil	, or Hydrology	naturally proble	ematic?	(If needed, e	explain any answers in	n Remarks.)
SUMMARY OF FINDINGS - Attach s	ite map showing san	pling point lo	cations, tra	ansects, important fe	atures, etc.	
Hydrophytic Vegetation Present?	Yes X No					
Hydric Soil Present?	Yes X No		Is the Sai	mpled Area within a W	etland? Yes	X No
Wetland Hydrology Present?	Yes X No			r		
Remarks: Wetland KS-53. PEMC/	PFOC. Isolated in we	st trackside ditc	h.			
VEGETATION - Use scientific name	•			ls : = .w		
Tree Stratum (Plot size: r = 30'	Absolute) % Cover	Dominant I Species?	Indicator Status	Dominance Test We Number of Dominant		
1. Ulmus americana	60	·	FACW-	That Are OBL, FACV	•	3 (A)
2. Salix nigra	10	,,,,,	OBL			
3.				Total Number of Dor	ninant	
4.				Species Across All S		3 (B)
5.						
	70 = 1	Total Cover		Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size:	r = 15')			That Are OBL, FACV	•	100% (A/B)
1.						
2.				Prevalence Index W	/orksheet:	
3				OBL species	x 1	1 = 0
4				FACW species	x 2	
5				FAC species	x 3	
	0 = 7	Total Cover		FACU species	x 4	
Herb Stratum (Plot size: r = 5'	_) _			UPL species	x 5	
1. Apocynum cannabinum			FAC	Column Totals:	$\frac{0}{10000000000000000000000000000000000$	A) 0 (B)
2. Carex sp.	<u>20</u>		ACU-OBL	Prevalen	ice Index = B/A =	
Cephalanthus occidentalis 4.		yes	OBL	Hydrophytic Vegeta	ation Indicators:	
5.					st for Hydrophytic Veg	etation
6.	 ·			X 2. Dominano		otation
7.					ce Index is <3.01	
8.					gical Adaptations¹ (Pro	vide supporting
9.					arks or on a separate sheet	
10.				Problematic	Hydrophytic Vegetation	on¹ (Explain)
	95 = 7	Total Cover				
Woody Vine Stratum (Plot size:)			¹ Indicators of hydr	ric soil and wetland hy	'drology
1.				must be present,	unless disturbed or pro	oblematic.
2.						
	0	= Total Cover		Hydrophytic Veg	etation Present?	Yes X No
Remarks: (Include photo numbers he	ere or on a senarate st	neet)				
Carex sp. Assumed FACW or wetter.	or on a separate si	,				
Carest open tooding a recent of motion						

Depth Matrix inches) Color (moist) % Color	Neuo	x Features			
	r (moist)	% Туре	e ¹ Loc ²	Texture	Remarks
	i (moist)	70 1996		Texture	Remarks
					-
Type: C=Concentration, D=Depletion, RM=Redu	ced Matrix, CS=	=Covered or C	Coated Sand Gra	ains. ² Location	n: PL=Pore Lining, M=Matrix
/dric Soil Indicators				Indi	cators for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gleye	d Matrix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)		Sandy Redox	(S5)		Dark Surface (S7)
Black Histic (A3)		Stripped Mati	rix (S6)		Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)		Loamy Mucky	y Mineral (F1)		Very Shallow Dark Surface (TF12)
Stratified Layers (A5)		Loamy Gleye	ed Matrix (F2)	X	Other (Explain in Remarks)
2 cm Muck (A10)		Depleted Mat	trix (F3)		_
Depleted Below Dark Surface (A11)		Redox Dark S	Surface (F6)		
Thick Dark Surface (A12)		Depleted Dar	k Surface (F7)	3,	dicators of hydrophytic vegetation
Sandy Mucky Mineral (S1)		Redox Depre	essions (F8)		wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)					unless disturbed or problematic.
estrictive Layer: (if observed)					
Type: Depth (inches):				Hvdric S	Soil Present? Yes X No
Depth (inches):		Ot 40h	-fth - 4007 O-		Soil Present? Yes X No
• •	assumed hydric	per Step 12b	of the 1987 Cor		
Depth (inches):	assumed hydric	per Step 12b	of the 1987 Cor		
Depth (inches):	assumed hydric	per Step 12b	of the 1987 Cor		
Depth (inches): emarks: No pit dug due to inundation. Soils	assumed hydric	per Step 12b	of the 1987 Cor		
Depth (inches): emarks: No pit dug due to inundation. Soils a				ps Delineation N	
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY //etland Hydrology Indicators:	heck all that app		<u>S</u>	ps Delineation N	Manual.
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY //etland Hydrology Indicators: rimary Indicators (minimum of one is required; c.	heck all that app	oly)	<u>S</u> 	ps Delineation N	Manual. tors (minimum of two required)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; c. X Surface Water (A1) High Water Table (A2)	heck all that app Wate Aqua	oly) r-Stained Lea	<u>S</u> ives (B9)	ps Delineation N	Manual. tors (minimum of two required) Surface Soil Cracks (B6)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; c. X Surface Water (A1) High Water Table (A2)	heck all that app Wate Aqua	oly) r-Stained Lea tic Fauna (B1	<u>S</u> ives (B9) 3) s (B14)	ps Delineation N	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; color of the color of t	heck all that app Wate Aqua True Hydro	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (<u>S</u> ives (B9) 3) s (B14)	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; ca X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	heck all that app Wate Aqua True Hydro	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (Sives (B9) 3) s (B14) Odor (C1) heres on Living F	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; ca X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	heck all that app Wate Aqua True Hydro Oxidi	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc	Sives (B9) 3) s (B14) Odor (C1) heres on Living F	ps Delineation Necondary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; color of the color of t	heck all that app Wate Aqua True Hydro Oxidi Prese	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc	Solves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) ction in Tilled Sol	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; ca X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	heck all that app Wate Aqua True Hydro Oxidi Prese Rece	oly) Ir-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc	sives (B9) 3) s (B14) Odor (C1) heres on Living Fod Iron (C4) stion in Tilled Soil	ps Delineation Necondary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY Vetland Hydrology Indicators: rimary Indicators (minimum of one is required; c. X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	heck all that app Wate Aqua True Hydro Oxidi Prese Rece Thin	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc	Eves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) stion in Tilled Soil	ps Delineation Necondary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Depth (inches): emarks: No pit dug due to inundation. Soils a YDROLOGY /etland Hydrology Indicators: rimary Indicators (minimum of one is required; color of the color of t	heck all that app Wate Aqua True Hydro Oxidi Prese Rece Thin	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface ge or Well Dat	Eves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) stion in Tilled Soil	ps Delineation Necondary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Pepth (inches): emarks: No pit dug due to inundation. Soils and soils and soils are personal to the pit of th	heck all that app Wate Aqua True Hydro Oxidi Prese Rece Thin	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface ge or Well Dat	Eves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) stion in Tilled Soil	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Depth (inches): emarks: No pit dug due to inundation. Soils and soils and soils and soils are provided by the soils and soils and soils are provided by the soils are provide	heck all that app Wate Aqua True Hydro Oxidi Prese Rece Thin I Gaug	oly) or-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc ont Iron Reduc Muck Surface ge or Well Dat or (Explain in F	Silves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) ction in Tilled Soil e (C7) a (D9) Remarks)	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Pepth (inches): emarks: No pit dug due to inundation. Soils and soils and soils and soils are presented and soils are present	heck all that app Wate Aqua True Hydro Oxidi Prese Rece Thin Gaug Other	oly) r-Stained Lea tic Fauna (B1 Aquatic Plant ogen Sulfide (zed Rhizosph ence of Reduc nt Iron Reduc Muck Surface ge or Well Dat r (Explain in F	Silves (B9) 3) s (B14) Odor (C1) heres on Living Forced Iron (C4) ction in Tilled Soil et (C7) ha (D9) Remarks) Depth (inche)	ps Delineation I	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology

	Project/Site: SPCSL 2A (Tier 3)		City/County:	Sangamon	Sampling Date:	6/14/2011
Landform / millslope, terrace, stc. Trackside ditch Local Relief (conceve, convex, convex, cone) concave	Applicant/Owner: UPRR			State: IL	Sampling Point:	KS 47
Slopic (%) 0.2 Lat 39° 37° 7.20° N Long 89° 43′ 48.71° W Datum NAO 83	Investigator(s): KT, KS		Section,	Township, Range: S35	, T14N, R06W	
Soil Map Unit Name: 50A - Virden sitty clay loam, 0-2% slopes				Local Relief (conca	ave, convex, none) : <u>co</u>	ncave
Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks) Are Vegetation , Soll , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No (If no, explain in Remarks) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophylic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No Hydric Soil Present? Yes X No Seemarks: Vetland KS-54. PEMC/PFOC. Isolated within east trackside ditch. Fringe wetland around open water. VEGETATION - Use scientific names of plants. Tree Stratum (Plot size: r = 30') % Cover Species? Status (Number of Dominant Species 1. Salix in/gra 3 on yes OBL Total Number of Dominant Species Arross All Stratus: 2 (B) Sapiling/Shrub Stratum (Plot size: r = 15') Total Cover Prevalence Index Worksheet: Number of Dominant Species Arross All Stratus: 2 (B) FACW species Arross All Stratus: 2 (B) FACW species Arross All Stratus: 2 (B) Sapiling/Shrub Stratum (Plot size: r = 15') Total Cover Prevalence Index Worksheet: Number of Dominant Species Arross All Stratus: 2 (B) FACW species Arross All Stratus: 3 (B) FACW species Arross All Stratus: 4 (B) FACW species Arross All Stra				89° 43' 48.71" W		
Are Vegetation Soil Or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No Are Vegetation Soil Or Hydrology naturally problematic? (if needed, explain any answers in Remarks.)	Soil Map Unit Name: <u>50A - Virden silty cla</u>	y loam, 0-2% slope	es		NWI Classif	ication: None
Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)	Are climatic/hydrologic conditions on the site	typical for this time	of year?	Yes X No (lf no, explain in Remark	s)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrocypylic Vegetation Present? Yes X No Is the Sampled Area within a Wetland? Yes X No Wetland Hydrology Present? Yes X No Semarks: Wetland KS-54. PEMC/PFOC. Isolated within east trackside ditch. Fringe wetland around open water. VEGETATION - Use scientific names of plants. Tree Stratum (Plot size: r = 30')	Are Vegetation, Soil, or H	ydrology si	gnificantly disturbe	ed? Are "Normal Ci	rcumstances" present?	Yes X No
Hydrophytic Vegetation Present? Yes X No	Are Vegetation , Soil , or H	ydrology nat	urally problematic	? (If needed	d, explain any answers	in Remarks.)
Hydroc Soil Present? Yes X No Is the Sampled Area within a Wetland? Yes X No	SUMMARY OF FINDINGS - Attach site ma	p showing sampli	ng point location	s, transects, important	t features, etc.	
Remarks: Wetland KS-54. PEMC/PFOC. Isolated within east trackside ditch. Fringe wetland around open water. VEGETATION - Use scientific names of plants.	Hydrophytic Vegetation Present? Yes	X No				
Remarks: Wetland KS-54. PEMC/PFOC. Isolated within east trackside ditch. Fringe wetland around open water. VEGETATION - Use scientific names of plants. Tree Stratum (Plot size: r = 30') Absolute Dominant Indicator Species Status Number of Dominant Species Status Status Species Status S	Hydric Soil Present? Yes	X No	Is the	e Sampled Area within a	Wetland? Yes	X No
Vegetation Veg	-				•	
VEGETATION - Use scientific names of plants. Dominant Species Tree Stratum (Plot size: r = 30') Absolute Species Status OBL Species That Are OBL, FACW, or FAC: 2 (A)	-					
Dominance Test Worksheet: Number of Dominant Species Statum (Plot size: r = 30') Absolute % Cover Species Statum (Plot size: r = 30') Absolute % Cover Statum (Plot size: r = 15') That Are OBL, FACW, or FAC: 2	Remarks: Wetland KS-54. PEMC/PFOC	. Isolated within ea	st trackside ditch.	Fringe wetland around	open water.	
Dominance Tree Stratum Plot size: r = 30') Absolute % Cover Species' Status Species S						
Dominance Tree Stratum Plot size: r = 30') Absolute % Cover Species' Status Species S	NECETATION Has a destile a successful	14-				
Tree Stratum (Plot size: r = 30')	VEGETATION - Use scientific names of p			Dominanas Toot	Markabaati	
1. Salix nigra 30 yes OBL 7 That Are OBL, FACW, or FAC: 2 (A) 2. 3. 4. 5. 30 = Total Cover 8 Sapling/Shrub Stratum (Plot size: r = 15') 1. 2. 7 Prevalence Index Worksheet: 0 DBL species 1	Tree Stratum (Plot size: r = 30')					
2	`					2 (A)
Species Across All Strata: 2 (B)	2.			-		
Sapling/Shrub Stratum (Plot size: r = 15') Total Cover Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)	3.			Total Number of D	Dominant	
Sapling/Shrub Stratum	4.			Species Across A	II Strata:	2 (B)
Part	5.			<u> </u>	_	
Prevalence Index Worksheet: OBL species		30 = Tota	I Cover	Percent of Domina	ant Species	
OBL species	Sapling/Shrub Stratum (Plot size: r =	15')		That Are OBL, FA	CW, or FAC:	100% (A/B)
OBL species	1					
### FACW species	2			<u> </u>	x Worksheet:	
FAC species X 3 = 0	3			— ·		
Herb Stratum (Plot size: r = 5') 100 yes FACW+ FACW+ UPL species x 4 = 0 UPL species x 5 = 0 Column Totals: 0 (A) 0 (B) Prevalence Index = B/A =	4					
Herb Stratum (Plot size: r = 5') 100 yes FACW+ Column Totals: 0 (A) 0 (B)	5		1.0			
1. Phalaris arundinacea 100 yes FACW+ Column Totals: 0 (A) 0 (B) Prevalence Index = B/A = 3.	Horb Stratum (Diot aizo: r = 5')	= 10ta	i Cover			
Prevalence Index = B/A = Hydrophytic Vegetation Indicators: X 1. Rapid Test for Hydrophytic Vegetation		100	VAS FACW	· ·		
3. 4. 5. 6. 7. 8. 9. 0. 100 = Total Cover Hydrophytic Vegetation Indicators: X 1. Rapid Test for Hydrophytic Vegetation X 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes X No Hydrophytic Vegetation Present? Yes X No	2	100	yes TACW	_ _		(A) <u>U</u> (B)
Hydrophytic Vegetation Indicators: X 1. Rapid Test for Hydrophytic Vegetation X 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Woody Vine Stratum (Plot size:) 1.				-		
X 1. Rapid Test for Hydrophytic Vegetation X 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Total Cover ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes X No	4.			Hydrophytic Veg	etation Indicators:	
3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Total Cover Woody Vine Stratum (Plot size:) 1 0 = Total Cover Hydrophytic Vegetation Present? Yes X No	5.					getation
8. 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 9. 7 Problematic Hydrophytic Vegetation¹ (Explain) Woody Vine Stratum (Plot size:) 1.	6.			X 2. Domina	ance Test is >50%	
9. data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Woody Vine Stratum (Plot size:) 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	7.			3. Prevale	ence Index is <3.01	
O	8.			4. Morpho	ological Adaptations¹ (Pi	ovide supporting
100	9			_	·	•
Woody Vine Stratum (Plot size:) 1	10			Problema	itic Hydrophytic Vegetat	ion¹ (Explain)
must be present, unless disturbed or problematic. 2		100 = Tota	l Cover			
2	Woody Vine Stratum (Plot size:)			=	
0 = Total Cover Hydrophytic Vegetation Present? Yes X No	1			must be preser	nt, unless disturbed or p	roblematic.
	2			_		
Remarks: (Include photo numbers here or on a separate sheet.)		<u> </u>	otal Cover	Hydrophytic V	regetation Present?	Yes X No
	Remarks: (Include photo numbers here or	on a separate sheet	.)	-		

Profile Des	cription: (Describe to th	ne depth needed t	o docum	ent the	indicator o	or confirm the	e absence of i	indicate	ors.)
Depth	Matrix		R	edox F	eatures				
(inches)	Color (moist)	% Color (m	oist)	%	Туре	Loc ²	Texture	e	Remarks
					_		_		
						<u> </u>	_		
							_		
,									
					_	_			
							_		
¹ Type: C=C	oncentration, D=Depleti	ion, RM=Reduced	Matrix,	CS=Co	vered or C	coated Sand	Grains. ² Lo	cation	: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators							Indica	ators for Problematic Hydric Soils ³ :
Histoso				Sa	ndy Gleved	d Matrix (S4)			Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redox				Dark Surface (S7)
	Histic (A3)		_		ipped Matr				Iron-Manganese Masses (F12)
	gen Sulfide (A4)		_			/ Mineral (F1))		Very Shallow Dark Surface (TF12)
	ed Layers (A5)		_			d Matrix (F2)	•	X	Other (Explain in Remarks)
	luck (A10)		_		pleted Mat				•
Deplet	ed Below Dark Surface	(A11)	_	Re	dox Dark S	Surface (F6)			
Thick [Dark Surface (A12)		_	De	pleted Darl	k Surface (F7	7)	31	dicators of hydrophytic vegetation
Sandy	Mucky Mineral (S1)			Re	dox Depre	ssions (F8)			vetland hydrology must be present,
5 cm N	lucky Peat or Peat (S3)		_						inless disturbed or problematic.
Restrictive	Layer: (if observed)								
Type:	Layer: (" obcorvea)								
Depth (in	ches):						Н.	vdric Sa	oil Present? Yes X No
	-	detien Oeile een		4-1	. 01 101-	-f.H 4007.			
Remarks:	No pit dug due to inun	dation. Soils assi	ımea ny	arıc pei	Step 12b	of the 1987 (Corps Delinea	ation IVI	anuai.
HYDROLOG	SY.								
Wetland Hy	drology Indicators:								
Primary Indi	cators (minimum of one	is required; check	k all that	apply)			Secondary I	ndicate	ors (minimum of two required)
X Surfac	e Water (A1)		V	Vater-S	tained Lea	ves (B9)			Surface Soil Cracks (B6)
High W	/ater Table (A2)		A	quatic l	Fauna (B1	3)			Drainage Patterns (B10)
X Satura	tion (A3)		T	rue Aqı	uatic Plants	s (B14)			Dry-Season Water Table (C2)
Water	Marks (B1)			lydroge	n Sulfide C	Odor (C1)			Crayfish Burrows (C8)
Sedime	ent Deposits (B2)			xidized	Rhizosph	eres on Livin	g Roots		Saturation Visible on Aerial
Drift De	eposits (B3)		P	resenc	e of Reduc	ed Iron (C4)			Imagery (C9)
Algal N	lat or Crust (B4)		F	lecent I	ron Reduc	tion in Tilled	Soils (C6)		Stunted or Stressed Plants (D1)
Iron De	eposits (B5)		T	hin Mu	ck Surface	(C7)		Х	Geomorphic Position (D2)
Inunda	tion Visible on Aerial Im	agery (B7)		auge o	r Well Data	a (D9)		Х	FAC-Neutral Test (D5)
Sparse	ly Vegetated Concave S	Surface (B8)		ther (E	xplain in R	emarks)			
Field Obser	vations:								
Surface Wat	er Present?		Yes	Χ	No	Depth (inc	ches)	5	Wetland Hydrology
Water Table	Present?		Yes		No X	Depth (inc	ches)		Present?
Saturation P	resent? (includes capilla	ary fringe)	Yes	Х	No	Depth (inc	ches)	0	Yes X No
Describe Re	corded Data (stream ga	auge, monitoring v	vell, aeri	al photo	os, previou	s inspections	s), if available	١.	
Remarks:									

Project/Site: SPCSL 2A (Tier 3)		City/C	ounty: Sa	ingamon	Sampling Date	e: 6/14/2011
Applicant/Owner: UPRR				State: IL	Sampling Point	KS 48
Investigator(s): KT, KS		S	ection, To	wnship, Range: S35	5, T14N, R06W	
· · · · · · · · · · · · · · · · · · ·	ckside ditch				ave, convex, none) : o	concave
,	37' 17.13" N	Long:	89	9° 43' 44.91" W	Datum: NAD 83	
Soil Map Unit Name: 50A - Virden silty c	ay loam, 0-2% slo	pes			NWI Class	sification: None
Are climatic/hydrologic conditions on the si	te typical for this tin	ne of year?	Ye	es <u>X</u> No(If no, explain in Rema	rks)
Are Vegetation, Soil, or	Hydrology	significantly of	disturbed?	Are "Normal C	ircumstances" present?	Yes X No
Are Vegetation $_$, Soil $_$, or	Hydrologyn	aturally probl	ematic?	(If neede	d, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS - Attach site n	nap showing samp	ling point lo	cations, t	transects, importan	t features, etc.	
Hydrophytic Vegetation Present? Yes	X No					
Hydric Soil Present? Yes	X No		Is the Sa	ampled Area within a	a Wetland? Yes	s X No
Wetland Hydrology Present? Yes	X No					
Remarks: Wetland KS-55. PFOA. Isol	ated in west tracks	de ditch				
Nemarks. Wettand No-33. FT OA. Ison	ateu iii west tracksii	ue ulton.				
VEGETATION - Use scientific names of	plants.					
		Dominant	Indicator	Dominance Test	t Worksheet:	
Tree Stratum (Plot size: r = 30')		Species?	Status	Number of Domin	nant Species	
1. Ulmus americana	20	yes	FACW-	That Are OBL, FA	ACW, or FAC:	3 (A)
2. Populus deltoides	40	yes	FAC+			
3				Total Number of I		
4				Species Across A	All Strata:	3 (B)
5	- 					
		otal Cover		Percent of Domin	•	
	= 15')			That Are OBL, FA	ACW, or FAC:	100% (A/B)
1. Ulmus americana		yes	FACW-			
2. Salix exigua			OBL	Prevalence Inde		
3				OBL species		x 1 = 0
4. 				FACW species		$ \begin{array}{c} x 2 = \\ x 3 = \\ \end{array} $
5		otal Cover		FAC species FACU species		x = 0 $x = 0$
Herb Stratum (Plot size: r = 5')		ilai Govei		UPL species		x 5 = 0
1				Column Totals:	0	(A) $\frac{0}{0}$ (B)
2.			-		alence Index = B/A =	(1)
3.					<u> </u>	
4.				Hydrophytic Veg	getation Indicators:	
5.					Test for Hydrophytic V	/egetation
6.					ance Test is >50%	
7.				3. Preval	ence Index is ≤3.01	
8.				4. Morph	ological Adaptations¹ (Provide supporting
9.				data in F	Remarks or on a separate sh	eet)
10.				Problema	atic Hydrophytic Veget	ation¹ (Explain)
	0 = To	otal Cover	-			
Woody Vine Stratum (Plot size:)			¹ Indicators of h	nydric soil and wetland	hydrology
1.				must be prese	nt, unless disturbed or	problematic.
2.			,			
	0 =	Total Cover		Hydrophytic \	/egetation Present?	Yes X No
Remarks: (Include photo numbers here o	r on a separate she	et.)				
, ,	•	,				

Profile Des	scription: (Describe to	the depth neede	d to docur	nent the	e indicator (or confirm	n the abs	ence of indica	tors.)
Depth	Matrix		F	Redox F	eatures				
(inches)	Color (moist)	% Color	(moist)	%	Туре	e ¹ L	oc ²	Texture	Remarks
	_								
¹ Type: C=0	Concentration, D=Deple	etion, RM=Reduc	ed Matrix,	CS=C	overed or C	Coated Sa	and Grair	ns. ² Location	n: PL=Pore Lining, M=Matrix
	I Indicators		-						cators for Problematic Hydric Soils ³ :
_	sol (A1)			Sa	ndy Gleye	d Matrix ((\$4)	mun	Coast Prairie Redox (A16)
	Epipedon (A2)		_		indy Redox		(01)		Dark Surface (S7)
	Histic (A3)		-		ripped Mati			-	Iron-Manganese Masses (F12)
	gen Sulfide (A4)		_		amy Mucky		(F1)		Very Shallow Dark Surface (TF12)
— ·	ied Layers (A5)		_		amy Gleye	-		X	Other (Explain in Remarks)
	Muck (A10)		_		epleted Mat		(· -)		_ Cirier (Explain in Remarks)
	ted Below Dark Surface	e (A11)	_		edox Dark S	` '	F6)		
	Dark Surface (A12)	(_		pleted Dar	,	,	2	
	/ Mucky Mineral (S1)		_		edox Depre				ndicators of hydrophytic vegetation wetland hydrology must be present,
	Mucky Peat or Peat (S3	3)	_		·	`	,		unless disturbed or problematic.
									<u> </u>
_	Layer: (if observed)								
Type:									- W
Depth (ir	ncnes):							Hydric S	Soil Present? Yes X No
Remarks:	No pit dug due to inu	ndation. Soils a	ssumed hy	/dric pe	r Step 12b	of the 19	987 Corps	s Delineation N	Manual.
HYDROLO	GY								
	ydrology Indicators:								
	icators (minimum of on	e is required: ch	eck all tha	t apply)			Sec	condary Indica	tors (minimum of two required)
	ce Water (A1)				Stained Lea	ves (B9)		, o da. ,	Surface Soil Cracks (B6)
	Nater Table (A2)				Fauna (B1	` ,			Drainage Patterns (B10)
	ation (A3)				uatic Plant	•			Dry-Season Water Table (C2)
	Marks (B1)				en Sulfide (, ,)		Crayfish Burrows (C8)
	nent Deposits (B2)			-	d Rhizosph			ots	Saturation Visible on Aerial
	Deposits (B3)				e of Reduc		-		Imagery (C9)
	Mat or Crust (B4)				Iron Reduc			(C6)	Stunted or Stressed Plants (D1)
	eposits (B5)				ick Surface			` ′	Geomorphic Position (D2)
	ation Visible on Aerial Ir	magery (B7)			or Well Dat	, ,			FAC-Neutral Test (D5)
	ely Vegetated Concave			_	Explain in R				_ ` ` '
		. ,				•			
Field Obse			Voc	v	No	Donth	(inchas)) 0	Westernal Headers I
Water Table	ter Present?		Yes Yes	X	No X	•	n (inches) n (inches)		Wetland Hydrology Present?
	e Fresent? Present? <i>(includes capi</i>	llany fringe)	Yes	X		-	i (inches) i (inches)		
			_		No			-	Yes X No
Describe R	ecorded Data (stream g	gauge, monitorin	g well, aer	ial phot	os, previou	ıs inspec	tions) , if	available.	
Romarke: \	Water level temporarily	elevated due to	raine durin	a the n	ight and m	orning of	delinesti	on	
. tomarks.		SICTURE UUC IU	.a.i.s duill	.ac II	ignic and III	orrang or	Jonneall	O.1.	

Project/Site: SPCSL 2A (Tier 3)		City/County:	Sangamon	Sampling Date:	6/14/2011
Applicant/Owner: UPRR			State: IL	Sampling Point:	KS 49
Investigator(s): KT, KS		Section,	Township, Range: S26, 1	14N, R06W	
Landform (hillslope, terrace, etc.):	Trackside ditch		•	e, convex, none) : conca	ive
· · · /	39° 37' 39.92" N	Long:	89° 43' 32.55" W	Datum: NAD 83	
Soil Map Unit Name: 705A - Buckha	rt silt loam, 0-2% slope	es		NWI Classificat	ion: None
Are climatic/hydrologic conditions on t	the site typical for this tir	me of year?	Yes X No (If r	no, explain in Remarks)	
Are Vegetation, Soil	, or Hydrology	significantly disturbe	ed? Are "Normal Circu	umstances" present?	Yes X No
Are Vegetation , Soil	, or Hydrology n	naturally problematic	? (If needed,	explain any answers in R	Remarks.)
SUMMARY OF FINDINGS - Attach s	ite map showing sam	oling point location	s, transects, important fo	eatures, etc.	
Hydrophytic Vegetation Present?	Yes X No				
Hydric Soil Present?	Yes X No	Is the	e Sampled Area within a W	Vetland? Yes X	No
Wetland Hydrology Present?	Yes X No				
Remarks: Wetland KS-56. PFOA.	Isolated in east tracksi	de ditch.			
VECETATION Has a significances	- of plants				
VEGETATION - Use scientific name	· · · · · · · · · · · · · · · · · · ·		or Dominance Test W	/aukahaati	
Tree Stratum (Plot size: r = 30'		Dominant Indicate Species? Status			
1. Ulmus americana	 ′80	yes FACW		•	2 (A)
2. Acer saccharinum	10	FACV	<u>v</u>	·	
3.			Total Number of Do	minant	
4.			Species Across All S	Strata:	2 (B)
5.			<u> </u>		
	90 = To	otal Cover	Percent of Dominan	t Species	
Sapling/Shrub Stratum (Plot size:	r = 15')		That Are OBL, FAC	W, or FAC: 1	00% (A/B)
1. Ulmus americana	20	yes FACW	V		
2			Prevalence Index V	Norksheet:	
3			OBL species	x 1 =	
4			FACW species	x 2 =	
5	— 		FAC species	x 3 =	
Harb Stratum (Diet eizer	= To	otal Cover	FACU species	x 4 =	
Herb Stratum (Plot size: r = 5'			UPL species Column Totals:	0 x 5 =	
2				nce Index = B/A =	<u> </u>
3.				ice index – B/A –	
4.			Hydrophytic Veget	ation Indicators:	
5.				st for Hydrophytic Vegeta	ation
6.			_ '	ce Test is >50%	
7.			3. Prevalen	ce Index is <3.01	
8.			4. Morpholo	ogical Adaptations¹ (Provid	de supporting
9.			data in Ren	narks or on a separate sheet)	
10.			Problemation	Hydrophytic Vegetation	¹ (Explain)
	<u> </u>	otal Cover			
Woody Vine Stratum (Plot size:)		¹ Indicators of hyd	lric soil and wetland hydr	ology
1			must be present,	unless disturbed or prob	lematic.
2					
	0 =	Total Cover	Hydrophytic Veg	getation Present? Ye	s X No
Remarks: (Include photo numbers he	ere or on a separate sho	eet.)			
, ,		,			

Profile Des	cription: (Describe to	the depth nee	eded to docum	ent the	indicator o	or confirm the	absence of indi	icators.)
Depth	Matrix		R	edox Fe	eatures			
(inches)	Color (moist)	% Co	lor (moist)	%	Туре	Loc ²	Texture	Remarks
	-							
¹ Type: C=0	Concentration, D=Dep	letion, RM=Re	duced Matrix,	CS=Co	vered or C	oated Sand G	Grains. ² Locat	tion: PL=Pore Lining, M=Matrix
Hydric Soil	·	•	•					ndicators for Problematic Hydric Soils ³ :
1	ol (A1)			Sar	ndv Gleved	d Matrix (S4)	•••	Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redox		_	Dark Surface (S7)
	Histic (A3)		_		pped Matr		_	Iron-Manganese Masses (F12)
	gen Sulfide (A4)					Mineral (F1)	_	Very Shallow Dark Surface (TF12)
	ed Layers (A5)		-		-	d Matrix (F2)		X Other (Explain in Remarks)
_	Muck (A10)		_		oleted Mat		_	Street (Explain in Nemarks)
_	ted Below Dark Surfac	ce (A11)	_			Surface (F6)		
	Dark Surface (A12)	(* (* (*)	_			k Surface (F7)	1	2
	Mucky Mineral (S1)		_			ssions (F8)		³ Indicators of hydrophytic vegetation
	Mucky Peat or Peat (S	33)	-	_			d	nd wetland hydrology must be present, unless disturbed or problematic.
							1	<u> </u>
_	Layer: (if observed)							
Type:								
Depth (in	cnes):						Hydr	ic Soil Present? Yes X No
Remarks:	No pit dug due to in	undation. Soil	s assumed hyd	dric per	Step 12b	of the 1987 Co	orps Delineation	n Manual.
HYDROLO	GY							
	/drology Indicators:							
_	icators (minimum of o	ne is required:	check all that	apply)		,	Secondary Indi	cators (minimum of two required)
	ce Water (A1)				ained Lea	-		Surface Soil Cracks (B6)
	Vater Table (A2)				auna (B1	` '		Drainage Patterns (B10)
	ation (A3)				atic Plants	•		Dry-Season Water Table (C2)
	Marks (B1)				n Sulfide C	, ,		Crayfish Burrows (C8)
	ent Deposits (B2)					eres on Living	Roots	Saturation Visible on Aerial
_	eposits (B3)					ed Iron (C4)	_	Imagery (C9)
	Mat or Crust (B4)					tion in Tilled S	oils (C6)	Stunted or Stressed Plants (D1)
	eposits (B5)				k Surface		` ′ —	X Geomorphic Position (D2)
_	ation Visible on Aerial	Imagery (B7)			r Well Data	• •		x FAC-Neutral Test (D5)
_	ely Vegetated Concav			-	xplain in R	, ,	_	
Field Obse								
	ter Present?		Yes	X	No	Depth (inch	nes) 6	Wetland Hydrology
Water Table			Yes		No X	Depth (incl	· -	Present?
	Present? <i>(includes ca</i>	nillary fringe)	_	<u></u>	No X	Depth (inch	· -	Yes X No
			_					
Describe Re	ecorded Data (stream	gauge, monito	ning well, aerla	ıı pnoto	s, previou	s inspections)	, ii avallable.	
Remarks:								

Project/Site: SPCSL 2A (Tier 3)		City/Co	ounty: Sar		Sampling Date:	7/11/2012
Applicant/Owner: UPRR				State: IL	Sampling Point:	KS MP 1
Investigator(s): KS, MP		s	ection, Tow	vnship, Range: S26, T		
	ge wetland				e, convex, none): conc	ave
	7' 49.22" N	Long:		° 43' 29.40" W	Datum: NAD 83	·· DE044
Soil Map Unit Name: 3074A - Radford silt			-		NWI Classifica	ition: PFO1A
Are climatic/hydrologic conditions on the sit		-			no, explain in Remarks)	
Are Vegetation, Soil, or H	lydrology	significantly o	listurbed?	Are "Normal Circi	umstances" present?	Yes X No
Are Vegetation, Soil, or H	lydrology	_naturally proble	ematic?	(If needed,	explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sa	mpling point lo	cations, tr	ansects, important f	eatures, etc.	
Hydrophytic Vegetation Present? Yes	X No	_				
Hydric Soil Present? Yes	X No	_	Is the Sa	mpled Area within a W	Vetland? Yes	< No
Wetland Hydrology Present? Yes	X No	_				
Remarks: Wetland KS MP_1A - KS MP_	_1D. PEMC. F	ringe wetland al	ong Panthe	r Creek. Wetland is v	within OHWM. At Bridge	e 197.72.
VEGETATION - Use scientific names of p				Tp:	I and a lab a sale	
Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test W Number of Dominan		
1. Morus rubra	30	yes	FAC	That Are OBL, FAC	•	3 (A)
2.						
3.				Total Number of Do	minant	
4.				Species Across All S	Strata:	3 (B)
5.						
		Total Cover		Percent of Dominan	nt Species	
Sapling/Shrub Stratum (Plot size: r =	= 15')			That Are OBL, FAC	W, or FAC:	100% (A/B)
1. Morus rubra	10	yes	FAC			
2.				Prevalence Index V		•
3.				OBL species	x 1	
4 5.				FACW species FAC species	x 2 :	
J	10 =	Total Cover		FACU species	x 4	
Herb Stratum (Plot size: $r = 5'$)				UPL species	x 5 =	
1. Phalaris arundinacea	100	yes	FACW	Column Totals:	0 (A)	
2.				Prevaler	nce Index = B/A =	
3.						
4.				Hydrophytic Veget	ation Indicators:	
5.					st for Hydrophytic Vege	tation
6					ce Test is >50%	
7	,				ce Index is <3.01	
8.					ogical Adaptations¹ (Provi	de supporting
9.					narks or on a separate sheet) c Hydrophytic Vegetation	n¹ (Evolain)
10	100 =	Total Cover			Trydrophytic vegetation	i (Explail)
Woody Vine Stratum (Plot size:	100 -	13141 30001		Indicators of bus	dric soil and wetland hyd	rology
1				-	unless disturbed or pro	
2.				made do prodont,	aooo alotarboa or pro	
	0	= Total Cover		Hydrophytic Veç	getation Present? Y	es X No
Remarks: (Include photo numbers here or	on a separate :	sheet.)		_1		
Fringe on each side of channel. <i>Morus rubi</i>	ra was mainly l	ocated on slopes	of OHWIV	I providing canopy cov	ver. Phalaris arundinac	ea ea
dominant throughout. Rumex crispus, Verb	ena urticifolia,	and <i>Conium ma</i>	culatum pr	esent within herb strat	tum but sparse.	

Profile Desc	ription: (Describe	to the depth nee	eded to docume	nt the in	dicator o	or confirm the	e absence of	f indicat	fors.)
Depth	Matrix		Re	dox Fea	tures				
(inches)	Color (moist)	% Co	lor (moist)	%	Туре	Loc ²	- Textu	re	Remarks
0-4	10 YR 3/2	100					Silty loa	am	
¹ Type: C=Co	oncentration, D=De	pletion. RM=Re	duced Matrix. C	S=Cove	red or Co	oated Sand (Grains. ² L	ocation	: PL=Pore Lining, M=Matrix
Hydric Soil		,	, ,						ators for Problematic Hydric Soils ³ :
Histoso				Sand	, Glavad	Matrix (S4)		muic	Coast Prairie Redox (A16)
	pipedon (A2)		_		y Redox				Dark Surface (S7)
	listic (A3)		_		ed Matri				Iron-Manganese Masses (F12)
	en Sulfide (A4)					Mineral (F1)	١		Very Shallow Dark Surface (TF12)
	ed Layers (A5)		_			Matrix (F2)			Other (Explain in Remarks)
	uck (A10)		_	_	ted Matr				-
	ed Below Dark Surfa	ace (A11)	_	_		urface (F6)			
	ark Surface (A12)	,				Surface (F7	7)	2	
	Mucky Mineral (S1)					sions (F8)	,		dicators of hydrophytic vegetation wetland hydrology must be present,
	ucky Peat or Peat (_		(/			inless disturbed or problematic.
	-								·
	.ayer: (if observed))							
Type:									
Depth (inc								•	oil Present? Yes X No
Remarks:		-	thin OHWM the	erefore, h	ydric so	ils are assun	ned. Soils as	ssumed	hydric per Step 12b of the
1987 Corps I	Delineation Manual.								
HYDROLOG	v								
	drology Indicators	•							
_	ators (minimum of		check all that a	annly)			Secondary	Indicat	ors (minimum of two required)
_	Water (A1)	one is required,			ned Leav	/es (R9)	Occordary	maioat	Surface Soil Cracks (B6)
	ater Table (A2)				una (B13	, ,			Drainage Patterns (B10)
	ion (A3)				ic Plants				Dry-Season Water Table (C2)
	Marks (B1)			•		dor (C1)			Crayfish Burrows (C8)
	ent Deposits (B2)			_		eres on Living	a Roots		Saturation Visible on Aerial
	posits (B3)				-	ed Iron (C4)	9		Imagery (C9)
	at or Crust (B4)					ion in Tilled	Soils (C6)		Stunted or Stressed Plants (D1)
	posits (B5)				Surface		()	Х	Geomorphic Position (D2)
	ion Visible on Aeria	al Imagery (B7)			Vell Data	, ,		-	FAC-Neutral Test (D5)
	y Vegetated Conca	,		-	lain in R				
Field Obser			Vaa		lo V	Donth (inc	ahaa)		Walland Hadralana
Surface Wat Water Table			Yes	_	lo X lo	Depth (inc	· ·	4	Wetland Hydrology Present?
	resent? <i>(includes c</i> a	anillary fringe)	_			Depth (inc	· ·		
	·		Yes >	_	lo			urface	Yes <u>X</u> No
Describe Re	corded Data (strear	m gauge, monito	ring well, aeria	photos,	previous	s inspections	s), if availabl	e.	
Remarks: \/\	etland likely subme	eraed during hig	n flow events						
	Cauria intory Subility	ngou during my	. HOW CVCIIIO.						

Project/Site: SPCSL 2A (Tier 3)		City/Cou	unty: San	gamon	Sampling Date:	6/14/20	011
Applicant/Owner: UPRR				State: IL	Sampling Point:	KS 5	50
Investigator(s): KT, KS		Sec	ction, Tow	nship, Range: S22, T	16N, R05W		
	kside ditch			Local Relief (concave	e, convex, none) : <u>co</u>	oncave	
' ' '	9' 33.28" N	Long:	89°	38' 17.58" W	Datum: NAD 83		
Soil Map Unit Name: 43A - Ipava silt Ioam	, 0-2% slopes				NWI Classi	ification: Non	16
Are climatic/hydrologic conditions on the site	e typical for this tir	ne of year?	Yes	X No(If n	o, explain in Remari	ks)	
Are Vegetation, Soil, or H	lydrology	significantly dis	sturbed?	Are "Normal Circu	ımstances" present?	Yes X	No _
Are Vegetation, Soil, or H	lydrologyr	aturally probler	natic?	(If needed, e	explain any answers	in Remarks.))
SUMMARY OF FINDINGS - Attach site ma	ap showing sam	oling point loca	ations, tra	ansects, important fe	eatures, etc.		
Hydrophytic Vegetation Present? Yes	X No						
Hydric Soil Present? Yes	X No		Is the Sar	mpled Area within a W	/etland? Yes	X No	
Wetland Hydrology Present? Yes	X No						
	DEME looked d	anroccional wet	landa hatı	woon railroad tracks a	nd roodway Campl	a naint	
Remarks: Wetland KS-57A & KS-57B. F KS 50 represents both wetlands.	PEMF. ISOIAled di	epressional wet	.ianus betv	ween railload tracks a	na roadway. Sampi	e point	
The do represente bear weathing.							
VEGETATION - Use scientific names of p	lants.						
		Dominant Ir	ndicator	Dominance Test W	orksheet:		
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominan	t Species		
1				That Are OBL, FAC	N, or FAC:		(A)
2							
3				Total Number of Dor			(=)
4.				Species Across All S	otrata:		_ (B)
5	0 = Te	otal Cover					
Sanling/Shrub Stratum (Dlot size:		otal Covel		Percent of Dominant	•		(A /D)
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FAC	,, of FAC.		(A/B)
2				Prevalence Index V	Vorksheet:		
3.				OBL species		x 1 = 0	
4.				FACW species		x 2 = 0	
5.				FAC species		x 3 = 0	
	0 = Te	otal Cover		FACU species		x 4 = 0	
Herb Stratum (Plot size: r = 5')				UPL species	x	(5 = 0	
Typha angustifolia	50	yes	OBL	Column Totals:	0	(A) 0	(B)
2				Prevaler	nce Index = B/A =		
3							
4				Hydrophytic Veget		agotation	
56.				<u> </u>	st for Hydrophytic Ve ce Test is >50%	getation	
7.					ce Index is <3.01		
8.					gical Adaptations¹ (F	rovide supporti	ina
9.					arks or on a separate she		Ü
10.				Problematic	Hydrophytic Vegeta	ation¹ (Explain)	
	50 = Te	otal Cover					
Woody Vine Stratum (Plot size:)			¹ Indicators of hyd	ric soil and wetland	hydrology	
1.				must be present,	unless disturbed or	problematic.	
2.							
	0 =	Total Cover		Hydrophytic Veg	jetation Present?	Yes X	No
Remarks: (Include photo numbers here or	on a separate she	eet.)		I			
	,	•					

Profile Des	cription: (Describe to	the depth nee	ded to docum	ent the	indicator o	or confirm the	absence of ind	icators.)
Depth	Matrix		R	edox Fe	eatures			
(inches)	Color (moist)	% Co	lor (moist)	%	Туре	¹ Loc ²	Texture	Remarks
	_							
¹ Type: C=0	Concentration, D=Depl	letion, RM=Red	duced Matrix,	CS=Co	vered or C	oated Sand G	Grains. ² Locat	tion: PL=Pore Lining, M=Matrix
Hydric Soil	•	•	•					ndicators for Problematic Hydric Soils ³ :
1	ol (A1)			Sar	ndv Gleved	d Matrix (S4)		Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redox		_	Dark Surface (S7)
	Histic (A3)		_		pped Matr		_	Iron-Manganese Masses (F12)
	gen Sulfide (A4)					Mineral (F1)	_	Very Shallow Dark Surface (TF12)
	ed Layers (A5)				-	d Matrix (F2)	_	X Other (Explain in Remarks)
_	Muck (A10)		_		oleted Mat		_	etter (Explain in Heritaria)
_	ted Below Dark Surfac	ce (A11)	_			Surface (F6)		
	Dark Surface (A12)	(,)	_			k Surface (F7))	2
	Mucky Mineral (S1)		_			ssions (F8)		³ Indicators of hydrophytic vegetation
	Mucky Peat or Peat (S	3)		_			d	nd wetland hydrology must be present, unless disturbed or problematic.
								·
_	Layer: (if observed)							
Type:	-1							
Depth (in	cnes):						Hydr	ric Soil Present? Yes X No
Remarks:	No pit dug due to in	undation. Soils	s assumed hyd	dric per	Step 12b	of the 1987 Co	orps Delineatio	n Manual.
HYDROLO	GY							
	/drology Indicators:							
_	icators (minimum of o	ne is reauired:	check all that	apply)			Secondary Indi	icators (minimum of two required)
	ce Water (A1)				ained Lea	-		Surface Soil Cracks (B6)
	Vater Table (A2)				auna (B1	` '	_	Drainage Patterns (B10)
	ation (A3)			•	atic Plants	*	_	Dry-Season Water Table (C2)
	Marks (B1)				n Sulfide C	, ,	_	Crayfish Burrows (C8)
	ent Deposits (B2)			-		eres on Living	Roots	Saturation Visible on Aerial
_	eposits (B3)					ed Iron (C4)	_	Imagery (C9)
	Mat or Crust (B4)					tion in Tilled S	ioils (C6)	Stunted or Stressed Plants (D1)
	eposits (B5)				ck Surface		` ′ _	X Geomorphic Position (D2)
	ation Visible on Aerial	Imagery (B7)			r Well Data	,	_	x FAC-Neutral Test (D5)
_	ely Vegetated Concav			•	xplain in R	` '	_	
Field Obse	rvations:							
	ter Present?		Yes	X	No	Depth (inch	nes) 4	Wetland Hydrology
Water Table			Yes		No X	Depth (inch	· —	Present?
	Present? <i>(includes cap</i>	oillarv fringe)	_	X	No No	Depth (inch		Yes X No
			_					
Describe Ke	ecorded Data (stream	yauye, monito	ınıy well, aerla	ιι μποτο	o, previou	s mspections)	, ii avallable.	
Remarks:								

Project/Site: SPCSL 2A (Tier 3)		City/Cour	nty: Log	an	Sampling Date:	6/14/2011
Applicant/Owner: UPRR			_	State: II	<u> </u>	KS 51
Investigator(s): KT, KS		Sect	tion, Tow	nship, Range: <u>S</u>	2, T20N, R02W	
· · · · · · · · · · · · · · · · · · ·	ession				ncave, convex, none) : <u>co</u>	ncave
' ' ')' 53.91" N	Long:		20' 39.70" W	Datum: NAD 83	
Soil Map Unit Name: 737B - Tama silt loan	m, very deep to	sand, 2-5% slop	es		NWI Classif	ication: None
Are climatic/hydrologic conditions on the site	e typical for this t	ime of year?	Yes	XNo	_(If no, explain in Remark	rs)
Are Vegetation, Soil, or H	lydrology	significantly dist	urbed?	Are "Norma	l Circumstances" present?	Yes X No
Are Vegetation , Soil , or H	lydrology	naturally problem	atic?	(If need	ded, explain any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sam	pling point loca	tions, tra	ansects, import	ant features, etc.	
Hydrophytic Vegetation Present? Yes	X No					
Hydric Soil Present? Yes	X No	l:	s the Sar	npled Area withi	n a Wetland? Yes	X No
Wetland Hydrology Present? Yes	X No				•	<u> </u>
Remarks: Wetland KS-58. PEMC/PFO0	. Isolated in wes	st trackside ditch.				
l VEGETATION - Use scientific names of p						
VEGETATION - 036 30lentine names of p	Absolute	Dominant Inc	dicator	Dominance Te	est Worksheet:	
Tree Stratum (Plot size: r = 30')	% Cover		tatus	Number of Don		
1. Salix nigra	50	yes (OBL	That Are OBL,	FACW, or FAC:	(A)
2.						
3.				Total Number of	of Dominant	
4	. <u> </u>			Species Across	s All Strata:	(B)
5						
	= T	otal Cover		Percent of Don	ninant Species	
Sapling/Shrub Stratum (Plot size:)			That Are OBL,	FACW, or FAC:	(A/B)
1	. <u> </u>					
2.					dex Worksheet:	
3	·			OBL species		1 = 0
5.	· -			FACW species FAC species		2 = 0 $3 = 0$
3. <u> </u>	0 = T	otal Cover		FACU species	-	4 = 0
Herb Stratum (Plot size: r = 5')		olai covei		UPL species	-	5 = 0
1. Phalaris arundinacea	60	yes FA	CW+	Column Totals:		(A) 0 (B)
2.		<u> </u>	_	Pre	evalence Index = B/A =	` ,` ` ,
3.					_	
4.				Hydrophytic V	egetation Indicators:	
5.				X 1. Rap	id Test for Hydrophytic Ve	getation
6.					ninance Test is >50%	
7	. <u> </u>				valence Index is ≤3.01	
8					phological Adaptations ¹ (P	
9	· ——— -				in Remarks or on a separate shee	•
10				Problei	matic Hydrophytic Vegeta	tion' (Explain)
	60 = T	Total Cover				
Woody Vine Stratum (Plot size:)				of hydric soil and wetland h	
1.	· -			must be pres	sent, unless disturbed or p	oroblematic.
2	0 :	= Total Cover		Hydrophytic	c Vegetation Present?	Yes X No
		- Total Covel		Пушорпуш	c vegetation Fresent:	1es <u>X</u> NO
Remarks: (Include photo numbers here or	on a separate sh	neet.)				
Unvegetated surface = 40% of wetland.						

Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Hydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Technology Redox Da	ype¹ Loc² Texture or Coated Sand Grains. ²Location Ind yed Matrix (S4) dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	n: PL=Pore Lining, M=Matrix iicators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12)
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered of Alydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Technology 70 Sandy Re Sandy Re Loamy Mu Loamy Mu Loamy Mu Redox Da	or Coated Sand Grains. ² Location Ind yed Matrix (S4) dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	on: PL=Pore Lining, M=Matrix licators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12)
ydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Re Sandy Re Loamy Re Loamy Mu Loamy Gle Depleted Indicators	yed Matrix (S4) dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	icators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12)
ydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Re Sandy Re Loamy Re Loamy Mu Loamy Gle Depleted Indicators	yed Matrix (S4) dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	icators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12)
ydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Re Sandy Re Loamy Re Loamy Mu Loamy Gle Depleted Indicators	yed Matrix (S4) dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	icators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12)
ydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Sandy Re Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Re Loamy Re Loamy Mu Loamy Gle Depleted I	yed Matrix (S4) dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	icators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12)
ydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Sandy Re Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Re Loamy Re Loamy Mu Loamy Gle Depleted I	yed Matrix (S4) dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	icators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12)
ydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Sandy Re Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Re Loamy Re Loamy Mu Loamy Gle Depleted I	yed Matrix (S4) dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	icators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12)
ydric Soil Indicators Histosol (A1) Histic Epipedon (A2) Sandy Re Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Re Loamy Re Loamy Mu Loamy Gle Loamy Gle Depleted Below Dark Surface (A11) Redox Da	yed Matrix (S4) dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	icators for Problematic Hydric Soils ³ : Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12)
Histosol (A1) Sandy Gle Histic Epipedon (A2) Sandy Re Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Re Loamy Re Loamy Mt	yed Matrix (S4) dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	Coast Prairie Redox (A16) Dark Surface (S7) Iron-Manganese Masses (F12)
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Re Loamy Re Loamy Mu Loamy Gl Redox Da Depleted Below Dark Dark Dark Dark Dark Dark Dark Dark	dox (S5) latrix (S6) cky Mineral (F1) eyed Matrix (F2)	Dark Surface (S7) Iron-Manganese Masses (F12)
Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Stripped M Loamy Mt Loamy Gle Redox Da Depleted Below Dark Surface (A11) Depleted Below Dark Surface (A12)	latrix (S6) cky Mineral (F1) eyed Matrix (F2) X	Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4) Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Loamy Muck (A00) Depleted Below Dark Surface (A11) Redox Da	cky Mineral (F1) eyed Matrix (F2)	_
Stratified Layers (A5) 2 cm Muck (A10) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Loamy Glo Redox Da Redox Da	eyed Matrix (F2) X	Very Shallow Dark Surface (TF12)
2 cm Muck (A10) Depleted Depleted Below Dark Surface (A11) Redox Da Thick Dark Surface (A12) Depleted		
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Redox Da Depleted	Matrix (F3)	Other (Explain in Remarks)
Thick Dark Surface (A12) Depleted		_
	k Surface (F6)	
	Oark Surface (F7)	Indicators of hydrophytic vegetation
Sandy Mucky Mineral (S1) Redox De	araasiana (EQ)	d wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
estrictive Layer: (if observed)		
Type:		
Depth (inches):	Hydric	Soil Present? Yes X No
temarks: No pit dug due to inundation. Soils assumed hydric per Step 1	2h of the 1097 Corns Delineation	Manual
Remarks: No pit dug due to inundation. Soils assumed hydric per Step 1	20 of the 1907 Corps Delineation	iviariuai.
YDROLOGY		
etland Hydrology Indicators:		
rimary Indicators (minimum of one is required; check all that apply)	Secondary Indica	ators (minimum of two required)
X Surface Water (A1) Water-Stained I	.eaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2) Aquatic Fauna	B13)	Drainage Patterns (B10)
X Saturation (A3) True Aquatic Pl	ants (B14)	Dry-Season Water Table (C2)
Water Marks (B1) Hydrogen Sulfice	e Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizo	pheres on Living Roots	Saturation Visible on Aerial
Drift Deposits (B3) Presence of Re	duced Iron (C4)	Imagery (C9)
Algal Mat or Crust (B4) Recent Iron Rec	luction in Tilled Soils (C6)	Stunted or Stressed Plants (D1)
	ace (C7) X	Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surfa		FAC-Neutral Test (D5)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Thin Muck Surface Gauge or Well	Data (D9) X	
<u> </u>		_ ` '
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in the content of the conte		<u> </u>
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in the Imagery (B7) Gauge or Well In the Imagery (B7) Other (Explain in the Imagery (B7)		Wetland Hydrology
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in the initial of the initi	n Remarks) Depth (inches) 1	-
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Other (Explain in the content of the conte	n Remarks) Depth (inches) 1	Wetland Hydrology

Project/Site: SPCSL 2A (Tier 3)		City/County: I		Sampling Date:	6/14/2011
Applicant/Owner: UPRR			State: IL	Sampling Point:	KS 52
Investigator(s): KT, KS		Section, 7	Township, Range: S20,		
Landform (hillslope, terrace, etc.):	Ditch			e, convex, none) : conc	ave
,	40° 10' 20.55" N	Long:	89° 20' 6.48" W	Datum: NAD 83	
Soil Map Unit Name: 737B - Tama si	It lioam, very deep	to sand, 2-5% slopes		NWI Classifica	tion: None
Are climatic/hydrologic conditions on	the site typical for thi	s time of year?	Yes X No (If	no, explain in Remarks)	
Are Vegetation , Soil	, or Hydrology	significantly disturbed	d? Are "Normal Circ	umstances" present?	Yes X No
Are Vegetation , Soil	, or Hydrology	naturally problematic?	(If needed,	explain any answers in F	Remarks.)
SUMMARY OF FINDINGS - Attach s		_			,
Hydrophytic Vegetation Present?	Yes X No	7 37	,		
Hydric Soil Present?	Yes X No	ls the	Sampled Area within a V	Votland? Voc V	′ No
		_	Sampled Area within a v	Vetland? Yes X	
Wetland Hydrology Present?	Yes X No	_			
Remarks: Wetland KS-59. PFOA/	PEMC. Culvert at so	outh end of wetland. Rar	nges from six to thirty fee	t wide.	
VEGETATION - Use scientific name	s of plants.				
Tree Stratum (Plot size:	Absolute) % Cover	Dominant Indicator Species? Status	Number of Dominal		
1.			That Are OBL, FAC	W, or FAC:	(A)
2			_		
3.			Total Number of Do		(n)
4			Species Across All	Strata:	(B)
5		= Total Cover	_		
Cardina/Chards Charters (District)		- Total Covel	Percent of Dominar	•	(4.45)
Sapling/Shrub Stratum (Plot size:			That Are OBL, FAC	W, or FAC:	(A/B)
1. 2.			Prevalence Index	Norkshoot:	
3.			OBL species	x 1 =	= 0
4			FACW species	x 2 =	
5.			FAC species	x 3 =	
	0 =	= Total Cover	FACU species	x 4 =	
Herb Stratum (Plot size: r = 5')		UPL species	x 5 =	0
1. Typha latifolia	30	yes OBL	Column Totals:	0 (A)	0 (B)
2. Phalaris arundinacea	60	yes FACW+	- Prevale	nce Index = B/A =	
3.					_
4			Hydrophytic Vege	tation Indicators:	
5.			— I —— ·	est for Hydrophytic Veget	ation
6.			_	ice Test is >50%	
7			_	ce Index is <3.01	
8.			_	ogical Adaptations¹ (Provi	de supporting
9.			_	marks or on a separate sheet)	1.6
0			_ Problemation	c Hydrophytic Vegetation	' (Explain)
	90 =	= Total Cover			
Woody Vine Stratum (Plot size:)		•	dric soil and wetland hydi	••
1.			must be present,	unless disturbed or prob	nematic.
2.		= Total Cover	Hydrophytic Ve	getation Present? Ye	es_XNo
Demontos (Inglises abote assets as	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	ahaat l			
Remarks: (Include photo numbers he Other vegetation included: Acer sacc	ere or on a separate	sheet.)			

Profile Des	cription: (Describe to the	he depth needed t	o docun	ent the	indicator o	or confirm the	e absence of ir	ndicato	ors.)
Depth	Matrix		R	edox F	eatures				
(inches)	Color (moist)	% Color (n	noist)	%	Туре	Loc ²	- Texture	:	Remarks
					_	<u> </u>			
						<u> </u>	_		
							_		
							_		
						_			
							_		
¹ Type: C=C	oncentration, D=Deplet	ion, RM=Reduced	l Matrix,	CS=Co	vered or C	oated Sand	Grains. ² Loo	cation:	PL=Pore Lining, M=Matrix
Hydric Soil	Indicators							Indica	ators for Problematic Hydric Soils ³ :
Histose				Sa	ndy Gleyed	d Matrix (S4)			Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redox				Dark Surface (S7)
Black I	Black Histic (A3)				ipped Matr				Iron-Manganese Masses (F12)
Hydrog	gen Sulfide (A4)		_	Loa	amy Mucky	/ Mineral (F1))		Very Shallow Dark Surface (TF12)
Stratifi	ed Layers (A5)		_	Loa	amy Gleye	d Matrix (F2)		Х	Other (Explain in Remarks)
2 cm N	luck (A10)			De	pleted Mat	rix (F3)			
Deplet	ed Below Dark Surface	(A11)		Re	dox Dark S	Surface (F6)			
Thick [Dark Surface (A12)			De	pleted Darl	k Surface (F7	7)	3Inc	licators of hydrophytic vegetation
Sandy	Mucky Mineral (S1)		_	Re	dox Depre	ssions (F8)			vetland hydrology must be present,
5 cm N	lucky Peat or Peat (S3)							u	nless disturbed or problematic.
Restrictive	Layer: (if observed)								
Type:	• , ,								
Depth (in	ches):						Ну	dric Sc	oil Present? Yes X No
Remarks:	No pit dug due to inun	idation Soils assi	ımed hv	dric nei	r Sten 12h	of the 1987 (Corns Delinea	tion M	
rtomarko.	Tto pit dag dae to man	idation. Cons assi	unica ny	and per	Otop 120	01 110 1007	oorpo Demica	uon w	arradi.
HYDROLOG	SY .								
Wetland Hy	drology Indicators:								
	cators (minimum of one	is required; chec					Secondary Ir	ndicato	ors (minimum of two required)
	e Water (A1)				tained Lea	• •			Surface Soil Cracks (B6)
	/ater Table (A2)				Fauna (B1				Drainage Patterns (B10)
X Satura	` '				uatic Plants	, ,			Dry-Season Water Table (C2)
	Marks (B1)			-	n Sulfide C				Crayfish Burrows (C8)
	ent Deposits (B2)					eres on Living	g Roots		Saturation Visible on Aerial
	eposits (B3)					ed Iron (C4)	0 11 (00)		Imagery (C9)
	Mat or Crust (B4)					tion in Tilled s	Soils (C6)		Stunted or Stressed Plants (D1)
	eposits (B5)	· · · · · · · (D.7)			ck Surface	• •			Geomorphic Position (D2)
	tion Visible on Aerial Im	3 , ,		_	r Well Data			X	FAC-Neutral Test (D5)
Sparse	ely Vegetated Concave	Surface (B8)		uner (⊏	xplain in R	emarks)			
Field Obser	vations:								
Surface Wat	er Present?		Yes _	X	No	Depth (inc	ches)	2	Wetland Hydrology
Water Table			Yes _		No X	Depth (inc	· ·		Present?
Saturation P	resent? (includes capill	ary fringe)	Yes _	<u>X</u>	No	Depth (inc	ches)	0	Yes <u>X</u> No
Describe Re	corded Data (stream ga	auge, monitoring v	vell, aeri	al photo	os, previou	s inspections	s) , if available.		
Domorko									
Remarks:									

Project/Site: SPCSL 2A (Tier 3)		_ City/0	County: Lo	ogan	Sampling Date	e: 6/14/2011
Applicant/Owner: UPRR				State: IL	Sampling Poin	t: KS 53
Investigator(s): KT, KS			Section, To	ownship, Range: S20,	T20N, R02W	•
· · · · · · · · · · · · · · · · · · ·	oression			Local Relief (concav	re, convex, none) : <u> </u>	concave
' ` ' 	10' 34.70" N	Long:	89	9° 19' 50.09" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava silt Ioa	m, 0-2% slopes				NWI Clas	sification: None
Are climatic/hydrologic conditions on the s	ite typical for this	s time of year?	Υe	es X No (If I	no, explain in Rema	arks)
Are Vegetation, Soil, or	Hydrology	significantly	disturbed?	Are "Normal Circ	umstances" present?	Yes X No
Are Vegetation , Soil , or	Hydrology	naturally prob	olematic?	(If needed,	explain any answei	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site r	nap showing sa	_ ampling point l	ocations,	transects, important f	eatures, etc.	
Hydrophytic Vegetation Present? Yes	s X No					
Hydric Soil Present? Yes		_	Is the S	ampled Area within a V	Vetland? Ye	es X No
Wetland Hydrology Present? Yes		_				
Remarks: Wetland KS-60. PSSC/PEM	IC. Isolated dep	ression.				
VEGETATION II I III						
VEGETATION - Use scientific names of	-			Daminanaa Taa414	Vantrala anti	
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test W Number of Dominar		
1.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5,000.000		That Are OBL, FAC	•	2 (A)
2.				•	-	
3.				Total Number of Do	ominant	
4.				Species Across All		2 (B)
5.				•	-	
	0 =	Total Cover		Percent of Dominar	nt Species	
Sapling/Shrub Stratum (Plot size: r	= 15')			That Are OBL, FAC	•	100% (A/B)
Populus deltoides	10	yes	FAC+	_	-	
2.	_			Prevalence Index	Worksheet:	
3	_			OBL species		x 1 = 0
4	_			FACW species		x 2 =0
5				FAC species		x 3 = 0
	10 =	= Total Cover		FACU species		x 4 = 0
Herb Stratum (Plot size: r = 5')	00		ODI	UPL species		x = 0
1. Eleocharis sp.	20	yes	OBL	Column Totals:	nce Index = B/A =	(A) <u>0</u> (B)
2. 3.				· Frevale	ince index – b/A –	
4	_			Hydrophytic Vege	tation Indicators	
5.	_			. ' ' ' '	est for Hydrophytic \	√egetation
6.				· — ·	nce Test is >50%	
7.	_	-		· ——	ice Index is ≤3.01	
8.				4. Morpholo	ogical Adaptations ¹	(Provide supporting
9.				data in Rer	marks or on a separate sl	heet)
0.				Problemation	c Hydrophytic Vege	tation¹ (Explain)
	20 =	Total Cover		· 		
Woody Vine Stratum (Plot size:)			¹ Indicators of hyd	dric soil and wetland	d hydrology
1.				must be present,	unless disturbed o	r problematic.
2.	_					
	0	= Total Cover	r	Hydrophytic Ve	getation Present?	Yes X No
Remarks: (Include photo numbers here of	or on a separate	sheet.)				
Several dead cottonwood saplings within						

Depth Matrix inches) Color (moist) % Color	Redox Features (moist) % Type¹ Loc²	Texture Remarks
	(most) % Type Loc	Texture Remarks
	= = = = =	
		
		
		
Type: C=Concentration, D=Depletion, RM=Reduc	ced Matrix, CS=Covered or Coated Sand Grains	s. ² Location: PL=Pore Lining, M=Matrix
ydric Soil Indicators		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Redox (S5)	Dark Surface (S7)
Black Histic (A3)	Stripped Matrix (S6)	Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	X Other (Explain in Remarks)
2 cm Muck (A10)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	and wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
estrictive Layer: (if observed)		
Type:		
Depth (inches):		Hydric Soil Present? Yes X No
emarks: Not sampled due to saturation to surf	ace. Soils assumed hydric per Step 12b of the	1097 Corns Dolination Manual
emarks. Not sampled due to saturation to sum	ace. John assumed flydric per Step 125 of the	1907 Corps Delineation Manual.
YDROLOGY		
IDIOLOGI		
etland Hydrology Indicators:		
	eck all that apply) Seco	ndary Indicators (minimum of two required)
etland Hydrology Indicators:	eck all that apply) Seco Water-Stained Leaves (B9)	ndary Indicators (minimum of two required)Surface Soil Cracks (B6)
etland Hydrology Indicators: rimary Indicators (minimum of one is required; che		, ,
retland Hydrology Indicators: rimary Indicators (minimum of one is required; che Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
retland Hydrology Indicators: rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6) Drainage Patterns (B10)
retland Hydrology Indicators: rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Saturation Visible on Aerial
rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8)
rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (6)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) ts Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C4) Thin Muck Surface (C7)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Cartesian	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (Cartesian	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)
rimary Indicators (minimum of one is required; che Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) eld Observations:	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C1) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2) X FAC-Neutral Test (D5)
rimary Indicators (minimum of one is required; check Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) eld Observations: urface Water Present?	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Root Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C4) Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Yes No X Depth (inches)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology

Project/Site: SPCSL 2A (Tier 3)		City/	County: I	Logan	Sampling Date:	6/15/2011
Applicant/Owner: UPRR				State: IL	Sampling Point:	KS 60
Investigator(s): KT, KS			Section,	Township, Range: S2, T19		
· · · · · · · · · · · · · · · · · · ·	r channel				, convex, none) : conc	ave
· · · /	7' 50.33" N	Long:		89° 23' 13.21" W	Datum: NAD 83	
Soil Map Unit Name: 830 - Landfills					NWI Classifica	ition: None
Are climatic/hydrologic conditions on the sit	e typical for this	time of year?	`	Yes X No (If no	o, explain in Remarks)	
Are Vegetation, Soil, or F	lydrology	significantly	/ disturbed	d? Are "Normal Circui	mstances" present?	Yes X No
Are Vegetation , Soil , or H	Hydrology	naturally prol	blematic?	(If needed, e	explain any answers in I	Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing sar	npling point	locations	, transects, important fe	atures, etc.	
Hydrophytic Vegetation Present? Yes	X No					
Hydric Soil Present? Yes	X No	•	Is the	Sampled Area within a We	etland? Yes X	K No
Wetland Hydrology Present? Yes	X No	•		•		
			=			
Remarks: Wetland KS-67. PFOC/PEM0	C. Riverine char	nnel (Salt Cree	ek) with P	FOC/PEMC wetland adjac	ent. At Bridge 158.10.	
VEGETATION - Use scientific names of p				D T		
Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status	 Dominance Test Wo Number of Dominant 		
1. Acer saccharinum	30	yes	FACW		•	(A)
2.				_		
3.				 Total Number of Don 	ninant	
4.				Species Across All S		(B)
5.				_		
	30 =	Total Cover		Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACV	•	(A/B)
1.						
2.				Prevalence Index W	orksheet:	
3.				OBL species	x 1 =	= 0
4				FACW species	x 2 =	
5				FAC species	x 3 =	
	=	Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: r = 5')	22			UPL species	x 5 =	
1. Polygonum sp.	60	yes	FACW-OE		$0 \qquad (A)$	0 (B)
3.				_ Prevalent	ce Index = B/A =	
4.				Hydrophytic Vegeta	tion Indicators:	
5.				_ ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	st for Hydrophytic Veget	tation
6.				_	e Test is >50%	
7.				_	e Index is <3.01	
8.				_	_ gical Adaptations¹ (Provi	ide supporting
9.				_	arks or on a separate sheet)	
10.				Problematic	Hydrophytic Vegetation	า¹ (Explain)
	60 =	Total Cover		_		
Woody Vine Stratum (Plot size:)			¹ Indicators of hydr	ic soil and wetland hyd	rology
1.				must be present, u	unless disturbed or prob	olematic.
2.						
	0	= Total Cove	r	Hydrophytic Veg	etation Present? Ye	es X No
Remarks: (Include photo numbers here or	on a separate s	heet.)				
(,				

D II Madala	_	- d					
Depth Matrix (inches) Color (moist) %		edox Features	1	Loc ²	Tandona	Dament.	
Color (moist) 70	Color (moist)	<u>%</u> Ty	pe ¹	Loc	Texture	Remarks	
					Sandy loam		
2-16 10 YR 6/2 100	<u> </u>				Med. Sand		
Type: C=Concentration, D=Depletion,	RM=Reduced Matrix,	CS=Covered or	Coated S	Sand Gra	ins. ² Locati	on: PL=Pore Lining, M=Matrix	
lydric Soil Indicators					Inc	dicators for Problematic Hydric Soils ³	
Histosol (A1)		Sandy Gley	ed Matrix	(S4)		Coast Prairie Redox (A16)	
Histic Epipedon (A2)	_	Sandy Red	ox (S5)			Dark Surface (S7)	
Black Histic (A3)	_	Stripped Ma	atrix (S6)			Iron-Manganese Masses (F12)	
Hydrogen Sulfide (A4)	_	Loamy Muc	ky Minera	al (F1)		Very Shallow Dark Surface (TF12)	
Stratified Layers (A5)		Loamy Gley	yed Matrix	(F2)	,	Other (Explain in Remarks)	
2 cm Muck (A10)	_	Depleted M	latrix (F3)				
Depleted Below Dark Surface (A11		Redox Dark	s Surface	(F6)			
Thick Dark Surface (A12)	_	Depleted D	ark Surfac	ce (F7)	3	Indicators of budroubutic vocatation	
		Redox Dep	ressions ((F8)		Indicators of hydrophytic vegetation wetland hydrology must be present	
Sandy Mucky Mineral (S1)					and wetland hydrology must be p unless disturbed or problema		
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed)	_	<u> </u>				unless disturbed or problematic.	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water	mark. Highly disturbe		dox featur	es or dep		. =:	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches.	mark. Highly disturbe		dox featur	es or dep		unless disturbed or problematic.	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches.	mark. Highly disturbe		dox featur	es or dep		unless disturbed or problematic.	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators:		ed; therefore red	dox featur		oleted matrix r	unless disturbed or problematic. c Soil Present? Yes X No	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is reference)	equired; check all that	ed; therefore rec		Se	oleted matrix r	unless disturbed or problematic. c Soil Present? Yes X Not liekly. Hit wood beam at 16	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is response) Surface Water (A1)	equired; check all that	apply) /ater-Stained Le	eaves (B9	Se	oleted matrix r	unless disturbed or problematic. c Soil Present? Yes X Not not liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6)	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is resulting Surface Water (A1) High Water Table (A2)	equired; check all that N A	ed; therefore red apply) /ater-Stained Le quatic Fauna (E	 eaves (B9 313)	Se	oleted matrix r	unless disturbed or problematic. c Soil Present? Yes X Not not liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) X Drainage Patterns (B10)	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is resulting Surface Water (A1) High Water Table (A2) Saturation (A3)	equired; check all thatWA	apply) /ater-Stained Lequatic Fauna (E	 eaves (B9 313) nts (B14)		oleted matrix r	unless disturbed or problematic. c Soil Present? Yes X Not not liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2)	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is result of the second of the s	equired; check all that W A TI	apply) /ater-Stained Lequatic Fauna (Erue Aquatic Playdrogen Sulfide	eaves (B9 313) nts (B14) e Odor (C	<u>Se</u>	econdary Indic	unless disturbed or problematic. c Soil Present? Yes X Note to the North Nort	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. RYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is result in the second of the s	equired; check all thatNATH	ed; therefore red apply) /ater-Stained Le quatic Fauna (Erue Aquatic Pla ydrogen Sulfide xidized Rhizosp	eaves (B9 313) nts (B14) e Odor (C	Se 1) Living Re	econdary Indic	unless disturbed or problematic. c Soil Present? Yes X Not not liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) C Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is result of the second of the s	equired; check all that A T H	apply) /ater-Stained Lequatic Fauna (Erue Aquatic Playdrogen Sulfidexidized Rhizospresence of Red	eaves (B9 313) nts (B14) e Odor (C ² oheres on uced Iron	Se 1) Living Ro (C4)	econdary Indic	unless disturbed or problematic. c Soil Present? Yes X Note to liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) C Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is result in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	equired; check all that A TI H O P	apply) /ater-Stained Lequatic Fauna (Equatic Fauna (Equatic Playdrogen Sulfidexidized Rhizospresence of Redecent Iron Redeced	eaves (B9 313) nts (B14) e Odor (C' oheres on uced Iron uction in T	Se 1) Living Ro (C4)	econdary Indic	unless disturbed or problematic. c Soil Present? Yes X Note to liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) C Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is result in the second of the s	equired; check all that A TI H O R	apply) /ater-Stained Le quatic Pla ydrogen Sulfide xidized Rhizosp resence of Red ecent Iron Red hin Muck Surface	eaves (B9 313) nts (B14) e Odor (C ² oheres on uced Iron uction in T	Se 1) Living Ro (C4)	econdary Indic	unless disturbed or problematic. c Soil Present? Yes X Note of liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) C Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) C Geomorphic Position (D2)	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is result in the second of the s	equired; check all that A TI H O P R TY TY STY (B7)	apply) /ater-Stained Lequatic Fauna (Equatic Fauna (Equatic Playdrogen Sulfide xidized Rhizosyresence of Redecent Iron Redentin Muck Surfaceauge or Well D	eaves (B9 313) nts (B14) e Odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9)	Se 1) Living Ro (C4) Filled Soils	econdary Indic	unless disturbed or problematic. c Soil Present? Yes X Note to liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) C Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is result in the surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	equired; check all that A TI H O P R TY TY STY (B7)	apply) /ater-Stained Le quatic Pla ydrogen Sulfide xidized Rhizosp resence of Red ecent Iron Red hin Muck Surface	eaves (B9 313) nts (B14) e Odor (C ² oheres on uced Iron uction in T ce (C7) ata (D9)	Se 1) Living Ro (C4) Filled Soils	econdary Indic	unless disturbed or problematic. c Soil Present? Yes X Not not liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) X Geomorphic Position (D2)	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is result of the second of the s	equired; check all that A A T H O P R T T O R T O O O O O O O O O O O O O O	apply) /ater-Stained Lequatic Fauna (Equatic Fauna (Equatic Playdrogen Sulfide xidized Rhizosyresence of Redecent Iron Redentin Muck Surfaceauge or Well D	eaves (B9 313) nts (B14) e Odor (C' oheres on uced Iron uction in T ce (C7) ata (D9)	Se 1) Living Ro (C4) Filled Soils	econdary Indic	unless disturbed or problematic. c Soil Present? Yes X Note to liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) K Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) K Geomorphic Position (D2) K FAC-Neutral Test (D5)	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is result in Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surface Water Present?	equired; check all that A TI H O P R TY TY STY (B7)	apply) /ater-Stained Lequatic Fauna (Equatic Fauna (Equatic Playdrogen Sulfide xidized Rhizosyresence of Redecent Iron Redentin Muck Surfaceauge or Well D	eaves (B9 313) nts (B14) e Odor (Cobheres on uced Iron uction in Toce (C7) ata (D9) e Remarks	Se 1) Living Ro (C4) Tilled Soils 5)	econdary Indic	unless disturbed or problematic. c Soil Present? Yes X Note to liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) K Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) K Geomorphic Position (D2) K FAC-Neutral Test (D5) Wetland Hydrology	
5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Within ordinary high water inches. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is result of the second of the s	equired; check all that WATI	apply) /ater-Stained Lequatic Fauna (Equatic Fauna (Equatic Pauna) ydrogen Sulfidexidized Rhizospresence of Redecent Iron Redentin Muck Surfaceauge or Well Detection in the control of th	eaves (B9 313) Ints (B14) Coheres on uced Iron uction in Toce (C7) ata (D9) Remarks Dept	Se 1) Living Ro (C4) Filled Soils	econdary Indic	unless disturbed or problematic. c Soil Present? Yes X Note to liekly. Hit wood beam at 16 cators (minimum of two required) Surface Soil Cracks (B6) K Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) K Geomorphic Position (D2) K FAC-Neutral Test (D5)	

Project/Site: SPCSL 2A (Tier 3)		City/County: Sar	ngamon	Sampling Date:	6/16/2011
Applicant/Owner: UPRR			State: IL	Sampling Point:	KS 61
Investigator(s): KT, KS		Section, Tov	vnship, Range: S15, T 1		
Landform (hillslope, terrace, etc.): Floor	lplain/channel		Local Relief (concave,	, convex, none) : conca	/e
Slope (%): 0-2 Lat: 39° 34	l' 36.86" N	Long: 89 °	° 44' 51.73" W	Datum: NAD 83	
Soil Map Unit Name: 259C2 - Assumption	silt loam, 5-10% sl	opes, eroded		NWI Classification	on: None
Are climatic/hydrologic conditions on the site	typical for this time	of year? Yes	S X No (If no	o, explain in Remarks)	
Are Vegetation , Soil , or H	ydrology si	gnificantly disturbed?	Are "Normal Circur	mstances" present?	es X No
Are Vegetation , Soil , or H	ydrology nati	rally problematic?	(If needed, e.	xplain any answers in Re	emarks.)
SUMMARY OF FINDINGS - Attach site ma					
Hydrophytic Vegetation Present? Yes			•	·	
•	X No	Is the Sa	mpled Area within a We	etland? Yes X	No
Wetland Hydrology Present? Yes		10 1110 00	mpiod / ii od Willim d / / i	7 Too 7	
-					
Remarks: Wetland KS-68A & KS-68B. F	PEMC/PFOC. Fringe	e wetland along Sugar	Creek. Wetland is with	nin OWHM. At Bridge 20	01.60.
VEGETATION - Use scientific names of p	lants.				
		minant Indicator	Dominance Test Wo	orksheet:	
Tree Stratum (Plot size: r = 30')	% Cover Sp	ecies? Status	Number of Dominant	Species	
1. Acer saccharinum		yes FACW	That Are OBL, FACW	/, or FAC:	7 (A)
2. Populus deltoides	25	yes FAC+			
3			Total Number of Dom		7 (0)
4			Species Across All St	trata:	7 (B)
5	50 = Tota	I Cover			
		I Cover	Percent of Dominant	•	
	: <u>15'</u>)	FA 0\A/	That Are OBL, FACW	/, or FAC: 10	00% (A/B)
Acer saccharinum Morus rubra		/es FACW	Prevalence Index W	orkshoot:	
3. Celtis occidentalis		/es FAC-FACW FAC-FACW	OBL species	x 1 =	0
4. Carya sp.		/es FAC-FACW	FACW species	x 2 =	0
5.			FAC species	x 3 =	0
	20 = Tota	l Cover	FACU species	x 4 =	0
Herb Stratum (Plot size: r = 5')			UPL species	x 5 =	0
1. Phalaris arundinacea	50	es FACW+	Column Totals:	0 (A)	0 (B)
2. Toxicodendron radicans	10	FAC+	Prevalend	ce Index = B/A =	
3					
4			Hydrophytic Vegeta		
5				t for Hydrophytic Vegeta	tion
6			X 2. Dominance		
7				e Index is <3.01	
8.			<u> </u>	ical Adaptations¹ (Provide	supporting
9			l ——	orks or on a separate sheet) Hydrophytic Vegetation ¹	(Evnlain)
	60 = Tota	I Cover		Try drop Try to Vogotation	(Explain)
Woody Vine Stratum (Plot size:	1010	1 00 101	1Indicators of hydri	ic soil and wotland hydro	Joay
Woody Vine Stratum (Plot size:			-	ic soil and wetland hydro inless disturbed or proble	
2.			must be present, t		omado.
<u></u>	0 = T	otal Cover	Hydrophytic Vege	etation Present? Yes	X No
Remarks: (Include photo numbers here or Fringe on each side of channel.	on a separate sheet)			

	P	edox Features	,			
Depth Matrix (inches) Color (moist) %			ype ¹	Loc²	Texture	Remarks
0-15 10 YR 3/2 100			ype		Clay loam	Remarks
10 111 0/2	<u> </u>				Ciay loani	
	_					
	_					
Type: C=Concentration, D=Depletion	n, RM=Reduced Matrix,	CS=Covered	or Coate	ed Sand Gra	ains. ² Location	n: PL=Pore Lining, M=Matrix
ydric Soil Indicators					Indi	cators for Problematic Hydric Soils ³ :
Histosol (A1)		Sandy Gle	eyed Ma	atrix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)	_	Sandy Re	dox (S5	5)		Dark Surface (S7)
Black Histic (A3)	_	Stripped I	/latrix (S	S6)		Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)	_	Loamy Mi	ıcky Mir	neral (F1)		Very Shallow Dark Surface (TF12)
Stratified Layers (A5)	_	Loamy Gl	eyed Ma	atrix (F2)	X	Other (Explain in Remarks)
2 cm Muck (A10)	_	Depleted	Matrix (F3)		_
Depleted Below Dark Surface (A		Redox Da				
Thick Dark Surface (A12)	_	Depleted	Dark Su	ırface (F7)	3,,,	dicators of hydrophytic vegetation
Sandy Mucky Mineral (S1)	_	Redox De	pressio	ns (F8)		wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)						unless disturbed or problematic.
Restrictive Layer: (if observed)						
Restrictive Layer: (if observed) Type:					Hydric 9	ioil Present? Yes X No
Restrictive Layer: (if observed) Type: Depth (inches):			,			Soil Present? Yes X No
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches.	Wetland within OHWM t	herefore, hydr	ic soils	are assume		Goil Present? Yes X No
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches.	Wetland within OHWM t	herefore, hydi	ic soils	are assume		
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 987 Corps Delineation Manual.	Wetland within OHWM t	herefore, hydr	ic soils	are assume		
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 987 Corps Delineation Manual.	Wetland within OHWM t	herefore, hydr	ic soils	are assume		
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 987 Corps Delineation Manual. IYDROLOGY Vetland Hydrology Indicators:			ic soils		L d. Soils assume	
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 987 Corps Delineation Manual. IYDROLOGY Vetland Hydrology Indicators:	s required; check all that			Se	L d. Soils assume	d hydric per Step 12b of the
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 987 Corps Delineation Manual. IYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is	s required; check all that	apply)	 Leaves	Se	d. Soils assume	d hydric per Step 12b of the
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 987 Corps Delineation Manual. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is Surface Water (A1)	s required; check all that W A	apply) /ater-Stained	Leaves (B13)	<u>Se</u> (B9)	d. Soils assume	tors (minimum of two required) Surface Soil Cracks (B6)
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 1987 Corps Delineation Manual. RYDROLOGY Wetland Hydrology Indicators: Irimary Indicators (minimum of one is Surface Water (A1) High Water Table (A2)	s required; check all thatNAT	<i>apply)</i> /ater-Stained quatic Fauna	Leaves (B13) ants (B	Se (B9)	d. Soils assume	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 1987 Corps Delineation Manual. IYDROLOGY Wetland Hydrology Indicators: rimary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3)	s required; check all that W A T	apply) /ater-Stained quatic Fauna rue Aquatic P	Leaves (B13) ants (B	(B9) 14) (C1)	d. Soils assume	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 1987 Corps Delineation Manual. IYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	s required; check all that W A T H	apply) Vater-Stained quatic Fauna rue Aquatic P lydrogen Sulfi	Leaves (B13) ants (B de Odor	Se (B9) 14) (C1) s on Living R	d. Soils assume	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 987 Corps Delineation Manual. IYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	s required; check all that A T H O	apply) /ater-Stained quatic Fauna rue Aquatic Pl ydrogen Sulfii	Leaves (B13) ants (B de Odor spheres duced I	Se (B9) 14) (C1) s on Living R	d. Soils assume econdary Indica X Roots	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 987 Corps Delineation Manual. HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	s required; check all that W A T H C P	apply) /ater-Stained quatic Fauna rue Aquatic P lydrogen Sulfie exidized Rhizo resence of Re	Leaves (B13) ants (B de Odor spheres duced I duction	Se (B9) 14) 1(C1) 3 on Living Redron (C4) in Tilled Soi	econdary Indica X Roots	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 987 Corps Delineation Manual. HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	s required; check all that W A T H O P R T	apply) Vater-Stained quatic Fauna rue Aquatic Plydrogen Sulfi exidized Rhizo resence of Reference to Referenc	Leaves (B13) ants (B de Odor spheres duced I duction ace (C7	Set (B9) 14) (C1) Son Living Relation (C4) in Tilled Soi	econdary Indica X Roots Ils (C6)	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Pestrictive Layer: (if observed) Type: Depth (inches): Pemarks: Hit riprap at 15 inches. Per Corps Delineation Manual. Pydrology Petland Hydrology Indicators: Per Petrology Indicators: Per Petrology Indicators: Per Petrology Indicators: Petrology Petland Hydrology Indicators: Petrology Indicators: Petrology Petland Hydrology Indicators: Petrology Petland Hydrology Indicators: Petrology P	s required; check all that A T H O P R gery (B7)	apply) /ater-Stained quatic Fauna rue Aquatic Pi lydrogen Sulfi loxidized Rhizo resence of Reflecent Iron Reflecent Muck Surf	Leaves (B13) ants (B de Odor spheres duced I duction ace (C7	Se (B9) 14) 5 (C1) 6 on Living Relation (C4) in Tilled Soi	econdary Indica X Roots Ils (C6)	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 1987 Corps Delineation Manual. IYDROLOGY Vetland Hydrology Indicators: Remary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Images	s required; check all that A T H O P R gery (B7)	apply) Vater-Stained quatic Fauna rue Aquatic P lydrogen Sulfie exidized Rhizo resence of Re lecent Iron Re thin Muck Surf	Leaves (B13) ants (B de Odor spheres duced I duction ace (C7	Se (B9) 14) 5 (C1) 6 on Living Relation (C4) in Tilled Soi	econdary Indica X Roots Ils (C6)	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 1987 Corps Delineation Manual. IYDROLOGY Wetland Hydrology Indicators: Irimary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Images Sparsely Vegetated Concave Suriella (Inches)	s required; check all that A T H O P R gery (B7)	apply) Vater-Stained quatic Fauna rue Aquatic P lydrogen Sulfie exidized Rhizo resence of Re lecent Iron Re thin Muck Surf	Leaves (B13) ants (Bide Odor spheres duced I duction ace (C7 Data (Din Remain	Se (B9) 14) 5 (C1) 6 on Living Relation (C4) in Tilled Soi	econdary Indica X Roots ils (C6)	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 1987 Corps Delineation Manual. RYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image Sparsely Vegetated Concave Surial Concave Su	required; check all that A A T H C P R T G G P urface (B8)	apply) Vater-Stained quatic Fauna rue Aquatic Plydrogen Sulfic exidized Rhizo resence of Reference of Reference Iron Reference or Well exidized or Well exidized research with Muck Surference or Well exidized research with the research with the research research with the research wi	Leaves (B13) ants (B') de Odor spheres duced I duction ace (C7 Data (D	Se (B9) 14) 5 (C1) 6 on Living Relation (C4) in Tilled Soi 7) 9) earks)	econdary Indica X Roots Is (C6)	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Hit riprap at 15 inches. 1987 Corps Delineation Manual. HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Image	s required; check all that W A T H C P R gery (B7) G Urface (B8) Yes Yes	apply) Vater-Stained quatic Fauna rue Aquatic Plydrogen Sulfic points of Reference	Leaves (B13) ants (B de Odor spheres duced I duction ace (C7 Data (D	Se (B9) 14) 5 (C1) 6 on Living Re (ron (C4) 7) 9) 9) 9) 9cepth (inche	econdary Indica X Roots Ils (C6) X X	d hydric per Step 12b of the tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology

Project/Site: SPCSL 2A (Tier 3)		City/County: Sa	ngamon	Sampling Date:	4/24/2012
Applicant/Owner: UPRR		<u> </u>	State: IL	Sampling Point:	KS MP 12
Investigator(s): KS, MP		Section, To	wnship, Range: S3	6, T17N, R05W	
Landform (hillslope, terrace, etc.): Adja	cent to channel		Local Relief (cond	cave, convex, none) : co	ncave
Slope (%): 0-2 Lat: 39° 5 2	2' 49.17" N l	_ong: 89	° 36' 31.58" W	Datum: NAD 83	
Soil Map Unit Name: 3074A - Radford silt	loam, 0-2% slopes, free	quently flooded	_	NWI Classif	ication: None
Are climatic/hydrologic conditions on the site	e typical for this time of y	ear? Ye	s X No	(If no, explain in Remark	rs)
Are Vegetation, Soil, or H	lydrology signifi	cantly disturbed?	Are "Normal 0	Circumstances" present?	Yes X No
Are Vegetation, Soil, or H	lydrology naturall	y problematic?	(If neede	ed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sampling p	oint locations, t	ransects, importar	nt features, etc.	
Hydrophytic Vegetation Present? Yes	X No				
Hydric Soil Present? Yes	X No	Is the Sa	ampled Area within	a Wetland? Yes	X No
Wetland Hydrology Present? Yes	X No			•	
Remarks: Wetland MP-4. PEMA. Wetla	and adjacent to channel				
Welland IVII -4. I LIVIA. Wella	and adjacent to channel.				
VEGETATION - Use scientific names of p	olants.				
	Absolute Domina	nt Indicator	Dominance Tes	st Worksheet:	
Tree Stratum (Plot size: r = 30')	% Cover Species	? Status	Number of Domi	nant Species	
Populus deltoides	10 yes	FAC+	That Are OBL, F.	ACW, or FAC:	2 (A)
2					
3			Total Number of		• (-)
4			Species Across A	All Strata:	2 (B)
5	10 = Total Co	wor.			
0 1: (0) 1 0: (0) (0)	= Total Co	ivei	Percent of Domin	•	1000/
Sapling/Shrub Stratum (Plot size:)		That Are OBL, F.	ACW, or FAC:	100% (A/B)
1			Prevalence Inde	av Warkahaat:	
3			OBL species		1 = 0
4			FACW species		2 = 0
5.	· ———		FAC species		3 = 0
	0 = Total Co	ver	FACU species		4 = 0
Herb Stratum (Plot size: r = 5')			UPL species		5 = 0
1. Phalaris arundinacea	70 yes	FACW+	Column Totals:	0	(A) 0 (B)
2. Solidago gigantea	20 yes	FACW	Preva	alence Index = B/A =	
3. Carex sp.	2	FACW			
4. Rumex altissimus	5	FACW-	Hydrophytic Ve	getation Indicators:	
5	. <u> </u>			I Test for Hydrophytic Ve	getation
6				nance Test is >50%	
7				llence Index is ≤3.01	
8				nological Adaptations¹ (Pi	
9.				Remarks or on a separate shee	•
10	07		Problem	atic Hydrophytic Vegeta	tioti. (Exbigin)
	97 = Total Co	ver			
Woody Vine Stratum (Plot size:)			hydric soil and wetland h	
1			must be prese	ent, unless disturbed or p	problematic.
2.	0 = Total	Cover	Hydrophytic	Vegetation Present?	Yes X No
Remarks: (Include photo numbers here or	on a separate sheet.)		•		
PH 33 - S. Carex sp. Assumed FACW or w	vetter.				

Depth									
(inches)	Matrix			edox Feat		. 2			
<u> </u>	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks	
0-8	10 YR 3/2	100	10.VD 1/0				Loamy clay		
8-12	10 YR 2/1	80	10 YR 4/6	10	C	M			
10.00	10 YR 3/1	10							
12-20	10 YR 3/1	100							
Type: C=C	oncentration, D=De	epletion, RM=F	Reduced Matrix,	CS=Cove	red or Coa	ted Sand Gra	ains. ² Location	n: PL=Pore Lining, M=Matrix	
lydric Soil	Indicators						Indi	cators for Problematic Hydric Soils ³ :	
Histoso	l (A1)			Sandy	Gleyed M	latrix (S4)		Coast Prairie Redox (A16)	
Histic E	pipedon (A2)		_	Sandy	/ Redox (S	55)		Dark Surface (S7)	
	listic (A3)		_	Stripp	ed Matrix ((S6)		Iron-Manganese Masses (F12)	
Hydrogen Sulfide (A4)						ineral (F1)		Very Shallow Dark Surface (TF12)	
Stratified Layers (A5)					y Gleyed N	• • •	-	Other (Explain in Remarks)	
	uck (A10)			ted Matrix			_		
	ed Below Dark Surf	ace (A11)	_		x Dark Sur	` '			
	ark Surface (A12)	,	_			Surface (F7)	2		
	Mucky Mineral (S1)	_					ndicators of hydrophytic vegetation	
		_	Redox Depressions (F8)				and wetland hydrology must be present, unless disturbed or problematic.		
5 cm N	ucky Peat or Peat	(S3)						•	
							<u> </u>	<u> </u>	
Restrictive	ucky Peat or Peat _ayer: (if observed)							<u> </u>	
Restrictive	_ayer: (if observed						Hydric S	<u> </u>	
Type: Depth (inc	_ayer: (if observed						Hydric S	Soil Present? Yes X No	
Type: Depth (inc	_ayer: (if observed						Hydric S	<u> </u>	
Type: Depth (inc	_ayer: (if observed						Hydric 9	<u> </u>	
Type:	_ayer: (if observed						Hydric S	<u> </u>	
Type: Depth (included) Type: Depth (included)	_ayer: (if observed)					Hydric S	<u> </u>	
Pestrictive Type: Depth (included) Type: Dept	_ayer: (if observed	s:	ed; check all that	apply)		Se		<u> </u>	
estrictive Type: Depth (inc emarks: YDROLOG /etland Hy rimary India	Layer: (if observed, shes):	s:			ned Leaves			Goil Present? Yes X No	
Pestrictive Type: Depth (included line) Depth Vinder line) Depth (included line) Depth (Layer: (if observed, shes): SY drology Indicators (minimum of	s:	v				econdary Indica	Soil Present? Yes X No	
Pestrictive Type: Depth (included) Depth	ches): GY drology Indicators eators (minimum of	s:	V A	/ater-Stair quatic Fai		s (B9)	econdary Indica	tors (minimum of two required) Surface Soil Cracks (B6)	
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Applicant/Owner: UPRR State: IL Sampling Point: KS MP Investigator(s): KS, MP Section, Township, Range: S1, T16N, R05W Landform (hillslope, terrace, etc.): Adjacent to channel Local Relief (concave, convex, none): concave Slope (%): 3-Jan Lat: 39° 51' 57.41" N Long: 89° 36' 35.17" W Datum: NAD 83 Soil Map Unit Name: 3284A - Tice silty clay loam, 0-2% slopes, frequently flooded NWI Classification: Non Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X 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 X No Is the Sampled Area within a Wetland? Yes X No Wetland Hydrology Present? Yes X No Wetland Hydrology Present? Yes X No Remarks: Wetland MP-5. PEMA/PFOA. Located in west trackside ditch on south side of Sangamon River at Bridge 180.00. VEGETATION - Use scientific names of plants. Tree Stratum (Plot size:)	² 15
Landform (hillslope, terrace, etc.): Slope (%): 3-Jan Lat: 39° 51' 57.41" N Long: 89° 36' 35.17" W Datum: NMD 83 Soil Map Unit Name: Are climatic/hydrologic conditions on the site typical for this time of year? Are Vegetation Soil Soil Are Vegetation Soil Soil Soil Soil Soil Soil Soil Soil	
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Absolute Dominant Indicator Tree Stratum (Plot size:) % Cover Species? Status Dominante Test Worksheet: Number of Dominant Species	
Tree Stratum (Plot size:) % Cover Species? Status Number of Dominant Species	
1 That Are OBL, FACW, or FAC: 4	
	(A)
2	_
3 Total Number of Dominant	
4. Species Across All Strata: 4	(B)
5	
= Total Cover Percent of Dominant Species	
Sapling/Shrub Stratum (Plot size:) That Are OBL, FACW, or FAC:100%	(A/B)
1	
2. Prevalence Index Worksheet:	
3. OBL species x1 = 0	
4. FACW species x 2 = 0 5. FAC species x 3 = 0	
5. FAC species x 3 = 0 0 = Total Cover FACU species x 4 = 0	
Herb Stratum (Plot size: $r = 5$ ') UPL species $x = 5$	
1. Polygonum sp. 40 yes FACW-OBL Column Totals: 0 (A) 0	
2. Carex grayi 30 yes FACW+ Prevalence Index = B/A =	`
3. Chenopodium album 2 FAC-	
4. Hydrophytic Vegetation Indicators:	
51. Rapid Test for Hydrophytic Vegetation	
6. X 2. Dominance Test is >50%	
7 3. Prevalence Index is <3.01	
84. Morphological Adaptations¹ (Provide supportions)	ing
9 data in Remarks or on a separate sheet)	
Problematic Hydrophytic Vegetation¹ (Explain)	,
72 = Total Cover	
Woody Vine Stratum (Plot size: r = 15') Indicators of hydric soil and wetland hydrology	
1. Toxicodendron radicans 15 yes FAC+ must be present, unless disturbed or problematic.	
2. Vitis riparia 10 yes FACW-	NI-
25 = Total Cover Hydrophytic Vegetation Present? Yes X	No
Remarks: (Include photo numbers here or on a separate sheet.)	
Multiple trunk trees. PH 40 - 43 N, S, SE, W	

						bsence of indicat	,
Depth Matrix			edox Feat		2		
(inches) Color (moist)		or (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-10 10 YR 3/2	100			-	·	Sandy loam	
10-20 10 YR 4/2		YR 3/4	20	С	M	Sandy loam	
10 YR 3/2	40						
Type: C=Concentration, D=De	epletion, RM=Red	uced Matrix,	CS=Cove	red or Coa	ated Sand Gr	ains. ² Location	: PL=Pore Lining, M=Matrix
Hydric Soil Indicators						Indic	ators for Problematic Hydric Soils ³ :
Histosol (A1)		_	Sandy	Gleyed N	Matrix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)			X Sandy	/ Redox (S	S5)		Dark Surface (S7)
Black Histic (A3)			Stripp	ed Matrix	(S6)		Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4) Loamy					lineral (F1)		Very Shallow Dark Surface (TF12)
Stratified Layers (A5)	Loam	y Gleyed I	Matrix (F2)		Other (Explain in Remarks)		
2 cm Muck (A10)		_	Deple	ted Matrix	(F3)		
Depleted Below Dark Surf	ace (A11)		Redox	k Dark Sui	face (F6)		
Thick Dark Surface (A12)			Deple	ted Dark S	Surface (F7)	³ In	dicators of hydrophytic vegetation
Sandy Mucky Mineral (S1))		Redox	c Depress	ons (F8)		wetland hydrology must be present,
5 cm Mucky Peat or Peat	(S3)					I	unless disturbed or problematic.
Restrictive Layer: (if observed,)						
Type:							
Type:							
Depth (inches):						Hydric S	oil Present? Yes X No
Depth (inches):	ore of chroma 2 or	less: howeve	er. still bel	ieved to b	e hvdric.	Hydric S	oil Present? Yes X No
Depth (inches):	ore of chroma 2 or	less; howeve	er, still bel	ieved to b	e hydric.	Hydric S	oil Present? Yes X No_
Depth (inches): Remarks: Needs 60% or mo	ore of chroma 2 or	r less; howeve	er, still bel	ieved to b	e hydric.	Hydric S	oil Present? Yes X No
Depth (inches): Remarks: Needs 60% or mo		less; howeve	er, still bel	ieved to b	e hydric.	Hydric S	oil Present? Yes X No
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators	s:			ieved to b			
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of	s:	check all that	apply)		s		ors (minimum of two required)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1)	s:	check all that	<i>apply)</i> /ater-Stair	ned Leave	s	econdary Indicat	ors (minimum of two required) Surface Soil Cracks (B6)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2)	s:	check all that A	<i>apply)</i> /ater-Stair quatic Fau	ned Leave una (B13)	<u>s</u>	econdary Indicat	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Netland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3)	s:	check all that W A	<i>apply)</i> /ater-Stair quatic Fau rue Aquat	ned Leave una (B13) ic Plants (<u>s</u> s (B9) B14)	econdary Indicat	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	s:	check all that W A Ti	<i>apply)</i> /ater-Stair quatic Fau rue Aquat ydrogen S	ned Leave una (B13) ic Plants (Sulfide Od	S (B9) B14) or (C1)	decondary Indicat	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2)	s:	check all that N A T H	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized Rl	ned Leave una (B13) ic Plants (Sulfide Od	s (B9) B14) or (C1) es on Living I	decondary Indicat	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Netland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3)	s:	check all that A TI H O	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized Ri resence o	ned Leave una (B13) ic Plants (Sulfide Od hizosphere	S (B9) B14) or (C1) es on Living I	Secondary Indicat	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	s:	check all that W A TI H O P	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized Ri resence o ecent Iror	ned Leave una (B13) ic Plants (Sulfide Od- hizosphere f Reduced n Reductio	s (B9) B14) or (C1) es on Living I I Iron (C4) n in Tilled So	Roots	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	s: one is required; (check all that A Ti H O R TI	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized Ri resence o ecent Iron	ned Leave una (B13) ic Plants (Gulfide Od hizosphero f Reduceo n Reductio Surface (C	S (B9) B14) or (C1) es on Living I I Iron (C4) n in Tilled So	Roots X X Roots	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Netland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria	s: fone is required; al Imagery (B7)	check all that A TI H O R TI R G	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized Ri resence o ecent Iron nin Muck S auge or V	ned Leave una (B13) ic Plants (Sulfide Od- hizosphero f Reduced Reductio Surface (C	s (B9) B14) or (C1) es on Living f I Iron (C4) n in Tilled So	Roots X X Roots	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Depth (inches): Remarks: Needs 60% or model RYDROLOGY Vetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	s: fone is required; al Imagery (B7)	check all that A TI H O R TI R G	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized Ri resence o ecent Iron nin Muck S auge or V	ned Leave una (B13) ic Plants (Gulfide Od hizosphero f Reduceo n Reductio Surface (C	s (B9) B14) or (C1) es on Living f I Iron (C4) n in Tilled So	Roots X X Roots	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Netland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Conca	s: fone is required; al Imagery (B7)	check all that A TI H O R TI R G	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized Ri resence o ecent Iron nin Muck S auge or V	ned Leave una (B13) ic Plants (Sulfide Od- hizosphero f Reduced Reductio Surface (C	s (B9) B14) or (C1) es on Living f I Iron (C4) n in Tilled So	Roots X X Roots	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria	s: fone is required; al Imagery (B7)	check all that A TI H O R TI R G	apply) Vater-Stair quatic Fau Tue Aquat ydrogen S xidized RI resence o ecent Iror nin Muck S auge or W	ned Leave una (B13) ic Plants (Sulfide Od- hizosphero f Reduced Reductio Surface (C	s (B9) B14) or (C1) es on Living f I Iron (C4) n in Tilled So	Roots X X X X X	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Conca	s: fone is required; al Imagery (B7)	check all that A Ti H O R Ti G	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized RI resence o ecent Iron nin Muck S auge or W ther (Expl	ned Leave una (B13) ic Plants (Sulfide Odi hizosphero f Reduced n Reductio Surface (C Vell Data (s (B9) B14) or (C1) es on Living I I Iron (C4) n in Tilled So C7) D9) marks)	Roots X X Ross iils (C6) X x	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Conca	s: fone is required; al Imagery (B7) ave Surface (B8)	check all that A Ti H CO P R Ti G O Yes	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized Ri resence o ecent Iror auge or V ther (Expl	ned Leave una (B13) ic Plants (Gulfide Odi nizosphere f Reduceo n Reductio Surface (C Vell Data (Vell Data (Vell in Rer	S (B9) B14) or (C1) es on Living I I Iron (C4) n in Tilled So 77) D9) narks)	Roots X X Roots x x x ess)	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology
Depth (inches): Remarks: Needs 60% or mo HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Conca Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes c	al Imagery (B7) ave Surface (B8)	Check all that W A TI H O P R TI G O Yes Yes Yes Yes	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized RI resence o ecent Iron nin Muck S auge or W ther (Expl	ned Leave una (B13) ic Plants (Sulfide Odi nizosphere f Reduccio Surface (C Vell Data (Iain in Rer o X o X o X	s (B9) B14) or (C1) es on Living I I Iron (C4) n in Tilled So 7) D9) narks) Depth (inche Depth (inche	Roots X Roots x x x x x x x x x x x x x	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?
Depth (inches): Remarks: Needs 60% or model HYDROLOGY Wetland Hydrology Indicators Primary Indicators (minimum of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) X Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Sparsely Vegetated Concastications: Field Observations: Surface Water Present?	al Imagery (B7) ave Surface (B8)	Check all that W A TI H O P R TI G O Yes Yes Yes Yes	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized RI resence o ecent Iron nin Muck S auge or W ther (Expl	ned Leave una (B13) ic Plants (Sulfide Odi nizosphere f Reducci n Reductio Surface (C Vell Data (Vel	s (B9) B14) or (C1) es on Living I I Iron (C4) n in Tilled So 7) D9) narks) Depth (inche Depth (inche	Roots X Roots x x x x x x x x x x x x x	ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?

Project/Site: SPCSL 2A (Tier 3)		City/Co	ounty: San	igamon	Sampling Date:	4/24/2012
Applicant/Owner: UPRR				State: IL	Sampling Point:	KS MP 16
Investigator(s): KS, MP			ection, Tow	vnship, Range: S1, T1		
	jacent to chann				re, convex, none) : conc	ave
· · · /	° 52' 1.20" N	Long:		36' 33.35" W	Datum: NAD 83	
Soil Map Unit Name: 3074A - Radford si					NWI Classifica	
Are climatic/hydrologic conditions on the s	site typical for this	s time of year?	Yes	 `	no, explain in Remarks)	
Are Vegetation, Soil, or	Hydrology	significantly d	isturbed?	Are "Normal Circ	umstances" present?	Yes X No
Are Vegetation, Soil, or	Hydrology	naturally proble	matic?	(If needed,	explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site i	map showing sa	ampling point lo	cations, tra	ansects, important f	eatures, etc.	
Hydrophytic Vegetation Present? Yes	s X No					
Hydric Soil Present? Yes	s X No	_	Is the Sar	mpled Area within a V	Vetland? Yes	X No
Wetland Hydrology Present? Yes		_		r		
Remarks: Wetland MP-6A & MP-6B. I			ID 16 renre	econte both wetlands	Located on east and w	act side of
tracks abutting Sangamon River.	ZEIVIA/FI OA. G	alliple politi No w	Pilitepie	Sents Dour wenands.	LOCALEU OII CASL AIIG W	est side of
VEGETATION - Use scientific names of	f plants.	_		-		-
Tree Stratum (Plot size: r = 30')	Absolute) % Cover	Dominant Species?	Indicator Status	Dominance Test W Number of Dominar		
Populus deltoides	10		FAC+	That Are OBL, FAC	W, or FAC:	2 (A)
2. Acer saccharinum	90	yes	FACW			
3.				Total Number of Do		
4				Species Across All	Strata:	2 (B)
5						
	100 =	= Total Cover		Percent of Dominan	•	
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FAC	W, or FAC:	100% (A/B)
1						
2.				Prevalence Index \		•
3.				OBL species	x1	
4				FACW species	x 2 x 3	
5		= Total Cover		FAC species FACU species	x 3	
Herb Stratum (Plot size: r = 5')	,	- 10tai 0070i		UPL species	^ * * * * * * * * * * * * * * * *	
1. Polygonum sp.	, 15	yes F	ACW-OBL	Column Totals:	0 (A)	
2.		<u> </u>			nce Index = B/A =	,, ,
3.						<u> </u>
4.				Hydrophytic Veget	tation Indicators:	
5.					est for Hydrophytic Vege	etation
6.				X 2. Dominan	nce Test is >50%	
7.				3. Prevalen	nce Index is <3.01	
8.				4. Morpholo	ogical Adaptations¹ (Prov	ide supporting
9.					marks or on a separate sheet)	
0	_			Problemation	c Hydrophytic Vegetation	n¹ (Explain)
	15=	= Total Cover				
Woody Vine Stratum (Plot size:)				dric soil and wetland hyd	
1				must be present,	unless disturbed or pro	blematic.
2						
	0	= Total Cover		Hydrophytic Ve	getation Present? Y	es X No
Remarks: (Include photo numbers here	or on a separate	sheet.)		_1		
Multiple trunk trees. PH 44 - NW	,	,				
·						

	cription: (Describe to the	e depth needed to do			onfirm the ab	sence of indica	tors.)
Depth (inches)	Matrix		Redox Fea		2		
	Color (moist) 9		_	Type ¹	Loc ²	Texture	Remarks
0-20	10 YR 3/2 4		20	C	<u> </u>	Sandy	
	10 YR 4/3 4	<u> </u>					
¹ Type: C=0	Concentration, D=Depletion	n, RM=Reduced Mat	rix, CS=Cove	ered or Coat	ed Sand Gra	ins. ² Location	n: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators					Indi	cators for Problematic Hydric Soils ³ :
Histos	sol (A1)		Sand	ly Gleyed M	atrix (S4)		Coast Prairie Redox (A16)
Histic	Epipedon (A2)		X Sand	ly Redox (S	5)		Dark Surface (S7)
Black	Histic (A3)		Strip	ped Matrix (S6)		Iron-Manganese Masses (F12)
Hydro	gen Sulfide (A4)		Loan	ny Mucky Mi	neral (F1)		Very Shallow Dark Surface (TF12)
Stratif	ied Layers (A5)		Loan	ny Gleyed M	atrix (F2)		Other (Explain in Remarks)
2 cm l	Muck (A10)		Deple	eted Matrix	(F3)		_
Deple	ted Below Dark Surface (A	A11)	Redo	ox Dark Surf	ace (F6)		
Thick	Dark Surface (A12)		Deple	eted Dark S	urface (F7)	3lr	ndicators of hydrophytic vegetation
Sandy	Mucky Mineral (S1)		Redo	ox Depression	ons (F8)		wetland hydrology must be present,
5 cm l	Mucky Peat or Peat (S3)						unless disturbed or problematic.
Restrictive	Layer: (if observed)						
Type:	• , ,						
Depth (in	nches):	_				Hydric S	Soil Present? Yes X No
Remarks:		obroma 2 or loss: how	vovor still be	liouad to ba	hydrio	•	
Remarks.	Needs 60% or more of	cilionia 2 di less, nov	vever, sum be	sileved to be	riyuric.		
HYDROLO	GY						
Wetland Hy	ydrology Indicators:						
Primary Ind	icators (minimum of one i	s required; check all t	hat apply)		Se	econdary Indica	tors (minimum of two required)
Surfac	ce Water (A1)		Water-Stai	ined Leaves	(B9)		Surface Soil Cracks (B6)
High V	Vater Table (A2)		Aquatic Fa	auna (B13)		X	Drainage Patterns (B10)
Satura	ation (A3)		True Aqua	itic Plants (B	14)		Dry-Season Water Table (C2)
Water	Marks (B1)		Hydrogen	Sulfide Odo	r (C1)		Crayfish Burrows (C8)
Sedim	nent Deposits (B2)		Oxidized F	Rhizosphere	s on Living R	oots	Saturation Visible on Aerial
Drift D	eposits (B3)		Presence	of Reduced	Iron (C4)		Imagery (C9)
Algal I	Mat or Crust (B4)		Recent Iro	n Reduction	in Tilled Soi	ls (C6)	Stunted or Stressed Plants (D1)
Iron D	eposits (B5)		Thin Muck	Surface (C	7)	X	Geomorphic Position (D2)
Inunda	ation Visible on Aerial Ima	gery (B7)	Gauge or \	Well Data (D	9)	X	FAC-Neutral Test (D5)
Spars	ely Vegetated Concave S	urface (B8)	Other (Exp	olain in Rem	arks)		_
Field Obse	rvations:						
Surface Wa	iter Present?	Yes	s 1	No_X_	Depth (inche	s)	Wetland Hydrology
Water Table	e Present?	Yes	<u> </u>	No X	Depth (inche	s)	Present?
Saturation F	Present? (includes capilla	ry fringe) Yes	s <u> </u>	No X	Depth (inche	s)	Yes X No
Describe Re	ecorded Data (stream gau	ıge, monitoring well, a	aerial photos	, previous in	spections) , i	f available.	
Remarks:							

Project/Site: SPCSL 2A (Tier 3)		City/County: Log	gan	Sampling Date:	4/24/2012
Applicant/Owner: UPRR			State: IL	Sampling Point:	MP 9
Investigator(s): KS, MP		Section, Tov	vnship, Range: S16, T 2		
	nt to channel			, convex, none) : con	cave
Slope (%): 3-Jan Lat: 40° 11' 1		ong: 89	9° 19' 3.72" W	Datum: NAD 83	
Soil Map Unit Name: 68A - Sable silty clay lo	oam, 0-2% slopes			NWI Classifica	
Are climatic/hydrologic conditions on the site ty	pical for this time of ye	ar? Yes	S X No (If no	o, explain in Remarks)	
Are Vegetation, Soil, or Hyd	rology significa	antly disturbed?	Are "Normal Circu	mstances" present?	Yes X No
Are Vegetation, Soil, or Hyd	rologynaturally	problematic?	(If needed, e	xplain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sampling po	int locations, tr	ansects, important fe	atures, etc.	
Hydrophytic Vegetation Present? Yes	(No				
Hydric Soil Present? Yes		Is the Sa	mpled Area within a W	etland? Yes	X No
Wetland Hydrology Present? Yes	 < No				
		Actional MD 2A o	annosted to MD 2D 9 A	AD 20 via Culvert 152	70 Comple
Remarks: Wetland MP-3A, MP-3B, and MF Point MP 9 represents MP-3A, MP-3B, and MF		elianu iviP-sA ci	onnected to MP-36 & M	IP-3C via Cuivert 152.	70. Sample
Folia Mr 9 represents Mr-3A, Mr-3B, and Mr	30.				
VEGETATION - Use scientific names of plan	nts				
VEGETATION COC SCIENTING HARMOS OF PIAN	Absolute Dominant	Indicator	Dominance Test Wo	orksheet:	
Tree Stratum (Plot size:)	% Cover Species?		Number of Dominant		
1.			That Are OBL, FACV	V, or FAC:	2 (A)
2		_			
3		_	Total Number of Don		
4			Species Across All S	trata:	2 (B)
5					
	0 = Total Cov	er	Percent of Dominant	•	
Sapling/Shrub Stratum (Plot size: r = 1	 -	0.01	That Are OBL, FACV	V, or FAC:	100% (A/B)
1. Salix nigra	60 yes	OBL	Prevalence Index W	laukahaati	
2			OBL species	x 1	= 0
4.			FACW species	x 2	
5.		_	FAC species	x3	
· -	60 = Total Cove	er	FACU species	x 4	
Herb Stratum (Plot size: r = 5')			UPL species	x 5	= 0
1. Phalaris arundinacea	90 yes	FACW+	Column Totals:	0 (A) 0 (B)
2. Galium aparine	2	FACU	Prevalen	ce Index = B/A =	
3. Solidago gigantea	2	FACW			
4		_	Hydrophytic Vegeta		
5				st for Hydrophytic Vege	tation
6.			X 2. Dominano		
7 8.				e Index is <u><</u> 3.0¹ gical Adaptations¹ (Prov	vida avanartina
9.				arks or on a separate sheet)	ide supporting
10.				Hydrophytic Vegetatio	n¹ (Explain)
	94 = Total Cove	<u> </u>		, , , ,	,
Woody Vine Stratum (Plot size:)		¹ Indicators of hydr	ic soil and wetland hyd	drology
1.	_ ′		-	unless disturbed or pro	
2.		_	,		
	0 = Total C	over	Hydrophytic Veg	etation Present? Y	es X No
Remarks: (Include photo numbers here or on	a senarate sheet I				
PH 25 - South (MP 9); PH 24 West (RR). Stre	. ,	nately 6-8 ft wide	2		
,	and character to approxim		- ·		

						sence of indica	11013.)
Depth Matrix		Re	dox Fea				
(inches) Color (moist)	% Color	(moist)	%	Type ¹	Loc ²	Texture	Remarks
	100					Loam	
10-16 2.5 YR 4/3	50 10 Y	R 4/6	5	C	M		-
16-18 10 YR 4/2	45						
							-
Type: C=Concentration, D=Deple	tion, RM=Reduce	ed Matrix, C	S=Cove	red or Coa	ted Sand Gra	ins. ² Locatio	n: PL=Pore Lining, M=Matrix
lydric Soil Indicators						Ind	icators for Problematic Hydric Soils ³ :
Histosol (A1)			Sand	y Gleyed M	atrix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)			Sand	y Redox (S	5)		Dark Surface (S7)
Black Histic (A3)			Stripp	ed Matrix (S6)		Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)		Loam	y Mucky M	ineral (F1)		Very Shallow Dark Surface (TF12)	
Stratified Layers (A5)		Loam	y Gleyed N	latrix (F2)	X	Other (Explain in Remarks)	
2 cm Muck (A10)		Deple	ted Matrix	(F3)			
Depleted Below Dark Surface	e (A11)		Redo	x Dark Sur	ace (F6)		
Thick Dark Surface (A12)			Deple	ted Dark S	urface (F7)	3,	ndicators of hydrophytic vegetation
Sandy Mucky Mineral (S1)			Redo	x Depressi	ons (F8)		I wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3	3)						unless disturbed or problematic.
Restrictive Layer: (if observed)							
resultative Layer. (# UDSE/VEU)							
- , ,							
Type: Depth (inches):						Hydric	Soil Present? Yes X No
Type: Depth (inches):	6: however rome	wood by 1 fr	om hoth	volue and	obroma (4/2)		
Type: Depth (inches): Remarks: Soils are closest to F		-		value and	chroma (4/3)		Soil Present? Yes X No tead of 4" in the top 12". Soils
Type: Depth (inches): Remarks: Soils are closest to F		-		value and	chroma (4/3)		
Type: Depth (inches): Remarks: Soils are closest to Fassumed hydric per Step 12b of the		-		value and	chroma (4/3)		
Type: Depth (inches): Remarks: Soils are closest to F ssumed hydric per Step 12b of the STEP STEP STEP STEP STEP STEP STEP STEP		-		value and	chroma (4/3)		
Type: Depth (inches): Remarks: Soils are closest to Fissumed hydric per Step 12b of the IYDROLOGY Wetland Hydrology Indicators:	e 1987 Corps De	lineation Ma	anual.	value and		and only 2" ins	
Type: Depth (inches): Remarks: Soils are closest to Fissumed hydric per Step 12b of the IYDROLOGY Vetland Hydrology Indicators:	e 1987 Corps De	lineation Ma	pply)	value and	Se	and only 2" ins	tead of 4" in the top 12". Soils
Type: Depth (inches): Remarks: Soils are closest to Fissumed hydric per Step 12b of the STANDED STAND	e 1987 Corps De	lineation Ma	nual. pply) iter-Stair		Se	and only 2" ins	tead of 4" in the top 12". Soils
Type: Depth (inches): Remarks: Soils are closest to Fissumed hydric per Step 12b of the Step	e 1987 Corps De	ck all that a	pply) ater-Stair	ned Leaves		and only 2" ins	ators (minimum of two required) Surface Soil Cracks (B6)
Type: Depth (inches): Remarks: Soils are closest to Fissumed hydric per Step 12b of the STANDE STAN	e 1987 Corps De	ck all that a	pply) hter-Stain uatic Fan	ned Leaves una (B13)	Se (B9)	and only 2" ins	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Type: Depth (inches): Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydric per Step 12b of the Semarks: Soils are closest to Fissumed hydrology in Semarks: Soils are closes	e 1987 Corps De	ck all that a	pply) Inter-Stain Uatic Fan The Aquat The Adrogen S	ned Leaves una (B13) ic Plants (E Sulfide Odd	Se (B9)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Type: Depth (inches): Remarks: Soils are closest to Fissumed hydric per Step 12b of the SYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1)	e 1987 Corps De	ck all that a Va Aq Tru Hy	pply) ter-Stain uatic Far ie Aquat drogen \$ idized R	ned Leaves una (B13) ic Plants (E Sulfide Odd	Se (B9) B14) or (C1) s on Living R	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Type: Depth (inches): Remarks: Soils are closest to Fissumed hydric per Step 12b of the Step	e 1987 Corps De	ck all that a Ck all that a Aq Tru Hy Ox	pply) Inter-Stain Inter-Stain	ned Leaves una (B13) iic Plants (B Sulfide Odo hizosphere of Reduced	Se (B9) B14) or (C1) s on Living R	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial
Type: Depth (inches): Itemarks: Soils are closest to Fissumed hydric per Step 12b of the Step	e 1987 Corps De	ck all that a	pply) ater-Stain uatic Far ue Aquat drogen S idized R esence co	ned Leaves una (B13) iic Plants (B Sulfide Odo hizosphere of Reduced	Se (B9) 314) or (C1) s on Living Reliron (C4) in Tilled Soil	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Type: Depth (inches): Remarks: Soils are closest to Fassumed hydric per Step 12b of the Standard Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	e 1987 Corps De	ck all that a Va Aq Tru Hy Ox Pre Re	pply) ater-Stain uatic Fan ue Aquat drogen S idized R esence c cent Iror n Muck	ned Leaves una (B13) ic Plants (B Sulfide Odo hizosphere of Reduced n Reduction	Se (B9) 314) or (C1) s on Living Reliron (C4) n in Tilled Soil 7)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Type: Depth (inches): Itemarks: Soils are closest to Fissumed hydric per Step 12b of the Step	e 1987 Corps De	ck all that a Ck all that a Aq Tru Hy Ox Pre Re Th	pply) Inter-Stain Inter-Stain	ned Leaves una (B13) ic Plants (B Sulfide Odo hizosphere of Reduced n Reductior Surface (C	Se (B9) B14) or (C1) s on Living Relation (C4) in in Tilled Soil (7)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Type: Depth (inches): Itemarks: Soils are closest to Fissumed hydric per Step 12b of the Step	e 1987 Corps De	ck all that a Ck all that a Aq Tru Hy Ox Pre Re Th	pply) Inter-Stain Inter-Stain	ned Leaves una (B13) ic Plants (B Sulfide Odo hizosphere of Reduced n Reductior Surface (C Vell Data (I	Se (B9) B14) or (C1) s on Living Relation (C4) in in Tilled Soil (7)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Type: Depth (inches): Remarks: Soils are closest to Fissumed hydric per Step 12b of the Step	e 1987 Corps De	ck all that a Ck all that a Aq Tru Hy Ox Pre Re Th	pply) Inter-Stain Unatic Far Une Aquat Idrogen S Idrized R Resence co Cent Iror In Muck Unge or V Inter (Exp.	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C Vell Data (I lain in Rem	Se (B9) B14) or (C1) s on Living Relation (C4) in in Tilled Soil (7)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Type: Depth (inches): Remarks: Soils are closest to Fissumed hydric per Step 12b of the Stype of	e 1987 Corps De	ck all that a Aq Tru Hy Ox Pre Re Oth	pply) ater-Stain uatic Fan ue Aquat drogen S idized R esence c cent Iror n Muck uge or V ner (Exp.	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reductior Surface (C Vell Data (I lain in Rem	Se (B9) B14) or (C1) s on Living Relification (C4) or in Tilled Soil 7) D9) parks)	econdary Indicates oots s (C6)	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Type: Depth (inches): Remarks: Soils are closest to Fassumed hydric per Step 12b of the HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial In	e 1987 Corps De e is required; che magery (B7) Surface (B8)	ck all that a Wa Aq Tru Hy Ox Pre Re Th Ga Ott	pply) Iter-Stain uatic Fan ie Aquat drogen S idized R esence c cent Iror n Muck uge or V ner (Exp.	ned Leaves una (B13) ic Plants (B Sulfide Odo hizosphere of Reduction Surface (C Vell Data (I lain in Ren	Se (B9) 314) or (C1) s on Living R Iron (C4) n in Tilled Soil 7) 99) harks)	econdary Indicates oots s (C6)	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology
Type: Depth (inches): Remarks: Soils are closest to Filessumed hydric per Step 12b of the susumed hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial In Sparsely Vegetated Concave Surface Water Present? Vater Table Present? Saturation Present? (includes capit	e 1987 Corps De e is required; che magery (B7) Surface (B8)	ck all that a Wa Aq Tru Hy Ox Pre Re Th Ga Ottl	pply) ater-Stain uatic Fan ue Aquat drogen S idized R esence c cent Iror n Muck uge or V ner (Exp.	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced in Reduction Surface (C Vell Data (I lain in Rem	Se (B9) 314) or (C1) s on Living R Iron (C4) n in Tilled Soil 7) 7) 99) hearks) Depth (inches) Depth (inches)	and only 2" insections and 2" insections a	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?
Type: Depth (inches): Remarks: Soils are closest to Fissumed hydric per Step 12b of the summed hydrology Indicators: Primary Indicators (minimum of one Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Ir Sparsely Vegetated Concave Sield Observations: Surface Water Present?	e 1987 Corps De e is required; che magery (B7) Surface (B8)	ck all that a Wa Aq Tru Hy Ox Pre Re Th Ga Ottl	pply) ater-Stain uatic Fan ue Aquat drogen S idized R esence c cent Iror n Muck uge or V ner (Exp.	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced in Reduction Surface (C Vell Data (I lain in Rem	Se (B9) 314) or (C1) s on Living R Iron (C4) n in Tilled Soil 7) 7) 99) hearks) Depth (inches) Depth (inches)	and only 2" insections and 2" insections a	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?

Project/Site: SPCSL 2A (Tier 3)		City/	County: Lo	yan	Sampling Date	: 11/1/	2/2010
Applicant/Owner: UPRR				State: IL	Sampling Point	: <u>M</u> I	P 30
Investigator(s): MP			Section, To	wnship, Range: S24, 1			
	side ditch			Local Relief (concave	e, convex, none) : <u>c</u>	oncave	
· · · /	' 10.01" N	Long:	8	9° 30' 4.20" W	Datum: NAD 83		
Soil Map Unit Name: 68A - Sable silty clay	/ loam, 0-2% s	lopes			NWI Class	sification: N	lone
Are climatic/hydrologic conditions on the site	e typical for this	time of year?	Ye	s X No (If r	no, explain in Rema	rks)	
Are Vegetation , Soil , or H	ydrology	significantly	disturbed?	Are "Normal Circu	umstances" present?	Yes	X No
Are Vegetation , Soil , or H	ydrology	naturally pro	blematic?	(If needed,	explain any answer	s in Remark	ks.)
SUMMARY OF FINDINGS - Attach site ma		_					
Hydrophytic Vegetation Present? Yes			,	, .	,		
Hydric Soil Present? Yes		-	le the Sa	ampled Area within a W	/etland2 Ve	s X No	,
•		-	13 1110 00	ampica Area within a v	retiaria: re-		' —
Wetland Hydrology Present? Yes	X No	=					
Remarks: Wetland MP-19A & MP-19B.	PEMA. East tra	ack side ditch	opposite of \	Wetland DP-EE.			
VEGETATION - Use scientific names of p	lants.			•			
Trace Christians (Diet sine)	Absolute	Dominant	Indicator	Dominance Test W			
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominar That Are OBL, FAC		1	(4)
1. 2.				That Are OBL, FAC	W, OI FAC.	ı	(A)
2 3.				Total Number of Do			
<u> </u>				Total Number of Do Species Across All S		1	(B)
·· 5.				openie / 10.000 / 11.	_	•	
·	0 =	Total Cover		Daniel of Daniel	t O!		
Sapling/Shrub Stratum (Plot size:				Percent of Dominan That Are OBL, FAC	•	100%	(A/B)
1				mat Aic Obe, i Ao		100 /0	(A/B)
··				Prevalence Index V	Vorksheet:		
3.				OBL species		x 1 =	0
 4.				FACW species			0
5.				FAC species		x 3 =	0
	0 =	Total Cover		FACU species		x 4 =	0
Herb Stratum (Plot size: r = 5')				UPL species		x 5 =	0
1. Typha latifolia	15		OBL	Column Totals:	0	(A)	0 (B)
2. Spartina pectinata	70	yes	FACW+	Prevaler	nce Index = B/A =		
3. Carex sp.	20		FACU-OBL				
4. Convolvulus arvensis	10		UPL	Hydrophytic Veget	ation Indicators:		
5. Apocynum cannabinum	1		FAC	1. Rapid Te	st for Hydrophytic V	egetation	
6					ce Test is >50%		
7					ce Index is <3.01		
8				4. Morpholo	gical Adaptations¹ (Provide supp	orting
9					narks or on a separate sh	•	
0				Problematic	Hydrophytic Veget	ation' (Expla	iin)
	116 =	Total Cover					
Woody Vine Stratum (Plot size:)			,	ric soil and wetland	, ,,	
1				must be present,	unless disturbed or	problemati	C.
2.							
	0	= Total Cove		- Hudrophytic Vo	getation Present?	Yes X	No

D II Madeile	5	- d t		nfirm the abs			
Depth Matrix (inches) Color (moist) %	Color (moist)	edox Feature	s Type ¹	Loc ²	Toyturo	Domarks	
0-12 Color (moist) % 100	Color (moist)	<u> </u>	туре	LOC	Texture	Remarks	
12-16 2.5 Y 3/1 100					Silty clay		
2.5 1 3/1					Silty clay		
	-						
	-					-	
Type: C=Concentration, D=Depletion, RM=	Reduced Matrix,	CS=Covered	or Coate	d Sand Grai	ns. ² Location	on: PL=Pore Lining, M=Matrix	
lydric Soil Indicators					Inc	licators for Problematic Hydric Soils ³	
Histosol (A1)		Sandy Gl	eyed Mat	trix (S4)		Coast Prairie Redox (A16)	
Histic Epipedon (A2)		Sandy Re	dox (S5)	1		Dark Surface (S7)	
Black Histic (A3)		Stripped I	Matrix (Se	6)		Iron-Manganese Masses (F12)	
Hydrogen Sulfide (A4)		Loamy M	ucky Mine	eral (F1)		Very Shallow Dark Surface (TF12)	
Stratified Layers (A5)		Loamy GI	eyed Ma	trix (F2)	>	Other (Explain in Remarks)	
2 cm Muck (A10)		Depleted	Matrix (F	3)		_	
Depleted Below Dark Surface (A11)		Redox Da	ark Surfac	ce (F6)			
		Depleted	Dark Sur	face (F7)	3	Indicators of hydrophytic vocatation	
Thick Dark Surface (A12)					³ Indicators of hydrophytic vegetation		
Thick Dark Surface (A12) Sandy Mucky Mineral (S1)	_	Redox De	pression	ıs (F8)	an	d wetland hydrology must be present	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches):	ors. Soils assume	Redox De			Hydrid	d wetland hydrology must be present unless disturbed or problematic. Soil Present? Yes X Notation Manual.	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches):	ors. Soils assume	Redox De			Hydrid	unless disturbed or problematic. Soil Present? Yes X No.	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicat	ors. Soils assume	Redox De			Hydrid	unless disturbed or problematic. Soil Present? Yes X No.	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated by the served of		Redox De		of the 1987	Hydri d Corps Deline	unless disturbed or problematic. Soil Present? Yes X No	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated by the served of	red; check all that	Redox Deed hydric per s	Step 12b	of the 1987	Hydri d Corps Deline	unless disturbed or problematic. Soil Present? Yes X No eation Manual.	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated by the served of	red; check all that	Redox Deed hydric per state apply) apply) /ater-Stained	Step 12b	of the 1987	Hydri d Corps Deline	unless disturbed or problematic. Soil Present? Yes X Notation Manual. attors (minimum of two required) Surface Soil Cracks (B6)	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicate HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2)	red; check all that N A	Redox Deed hydric per state apply) /ater-Stained quatic Fauna	Step 12b Leaves (I	of the 1987 Sec B9)	Hydri d Corps Deline	unless disturbed or problematic. Soil Present? Yes X Note ation Manual. ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated statements and some statements are primary Indicators (minimum of one is required surface Water (A1) High Water Table (A2) Saturation (A3)	red; check all thatWA	Redox De ed hydric per s apply) /ater-Stained quatic Fauna rue Aquatic P	Step 12b Leaves (I) (B13) lants (B1	of the 1987 Sec B9)	Hydri d Corps Deline	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated by the second b	red; check all that	Redox De apply) /ater-Stained quatic Fauna rue Aquatic P ydrogen Sulfi	Leaves (I) (B13) lants (B1) de Odor (of the 1987 Sec B9) 4) (C1)	Hydrid Corps Deline	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicate HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is requined Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	red; check all that 	Redox De apply) /ater-Stained quatic Fauna rue Aquatic P ydrogen Sulfi xidized Rhizo	Leaves (I (B13) lants (B1de Odor (Ispheres	Sec B9) 4) (C1) on Living Ro	Hydrid Corps Deline condary Indic	ation Manual. Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated s	red; check all that	Redox De apply) /ater-Stained quatic Fauna rue Aquatic P ydrogen Sulfii xidized Rhizo resence of Re	Leaves (I (B13) lants (B1de Odor (spheres educed In	Sec B9) 4) (C1) on Living Ro on (C4)	Hydrid Corps Deline condary Indic	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated by the second s	red; check all that	apply) /ater-Stained quatic Fauna rue Aquatic P ydrogen Sulfi xidized Rhizo resence of Re ecent Iron Re	Leaves (I (B13) lants (B1) de Odor (I spheres deduced Induction in	Sec B9) 4) (C1) on Living Ro on (C4) n Tilled Soils	Corps Deline	ation Manual. Soil Present? Yes X Notes ation Manual. ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated hydrology Indicators: Primary Indicators (minimum of one is required by Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	red; check all thatWATIOPR	Redox De apply) /ater-Stained quatic Fauna rue Aquatic P ydrogen Sulfi xidized Rhizo resence of Re ecent Iron Re hin Muck Surf	Leaves (I (B13) lants (B1de Odor (I spheres educed Induction in	Sec B9) 4) (C1) on Living Ro on (C4) n Tilled Soils	Corps Deline condary Indic	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated semarks: No apparent hydric soil indicated	red; check all that A T H O P R T T R T G T T C T C C C C C C C C C C C C C C	apply) /ater-Stained quatic Fauna rue Aquatic P ydrogen Sulfi xidized Rhizo resence of Re ecent Iron Re hin Muck Surf	Leaves (I (B13) lants (B1: de Odor (spheres educed In- duction in face (C7) Data (D9	of the 1987 Sec B9) 4) (C1) on Living Ro on (C4) n Tilled Soils	Corps Deline condary Indic	ation Manual. Soil Present? Yes X Notation Manual. ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated s	red; check all that A T H O P R T T R T G T T C T C C C C C C C C C C C C C C	Redox De apply) /ater-Stained quatic Fauna rue Aquatic P ydrogen Sulfi xidized Rhizo resence of Re ecent Iron Re hin Muck Surf	Leaves (I (B13) lants (B1: de Odor (spheres educed In- duction in face (C7) Data (D9	of the 1987 Sec B9) 4) (C1) on Living Ro on (C4) n Tilled Soils	Corps Deline condary Indic	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated and the	red; check all that A T H O P R T T R T G (B8)	apply) /ater-Stained quatic Fauna rue Aquatic P ydrogen Sulfi xidized Rhizo resence of Re ecent Iron Re hin Muck Surf	Leaves (I (B13) lants (B1- de Odor (spheres educed In- duction in face (C7) Data (D9	Sec B9) 4) (C1) on Living Ro on (C4) n Tilled Soils	condary Indicates to the condary Indicates to	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated hydrology Indicators: Primary Indicators (minimum of one is required by Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (Esparsely Vegetated Concave Surface Field Observations: Surface Water Present?	red; check all that WATHORT	Redox December of Redox Decemb	Leaves (I (B13) lants (B1) de Odor (spheres educed Induction in face (C7) Data (D9) in Remai	Sec B9) 4) (C1) on Living Ro on (C4) n Tilled Soils (I) rks)	Corps Deline condary Indic	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology	
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3) Restrictive Layer: (if observed) Type: Depth (inches): Remarks: No apparent hydric soil indicated by the soil indicated b	red; check all that A TI H O R TI S7) (B8) Yes Yes	Redox December of Redox Decemb	Leaves (I (B13) lants (B1de Odor (I spheres educed Induction in duction in face (C7) Data (D9 in Remain	Sec B9) 4) (C1) on Living Ro on (C4) n Tilled Soils	Corps Deline condary Indic	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)	

Project/Site: SPCSL 2A (Tier 3)		City/	County: Lo	gan	Sampling Date:	10/26/2	2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	NVM	1 2
Investigator(s): NVM, MP			Section, To	wnship, Range: S28, T	19N, R03W		
· · · · · · · · · · · · · · · · · · ·	side ditch			Local Relief (concave		oncave	
' ' '	' 13.77" N	Long:	89	° 26' 28.78" W	Datum: NAD 83		
Soil Map Unit Name: 68A - Sable silty clay	loam, 0-2%	slopes			NWI Class	ification: PEI	MA
Are climatic/hydrologic conditions on the site	e typical for th	is time of year?	Ye	s X No (If n	no, explain in Remar	ks)	
Are Vegetation, Soil, or H	ydrology	significantly	disturbed?	Are "Normal Circu	umstances" present?	Yes X	No _
Are Vegetation , Soil , or H	ydrology	naturally prob	olematic?	(If needed, e	explain any answers	in Remarks.	.)
SUMMARY OF FINDINGS - Attach site ma	ap showing s	 ampling point l	locations, t	ransects, important fe	eatures, etc.		
Hydrophytic Vegetation Present? Yes	X No						
Hydric Soil Present? Yes	X No		Is the Sa	ampled Area within a W	/etland? Yes	X No	
Wetland Hydrology Present? Yes							
Remarks: Wetland NVM-1. PEMC. Loc	ated between	road and railroa	nd tracks.				
	_						
VEGETATION - Use scientific names of p				1=			
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test W Number of Dominan			
1	70 COVE	Opecies:	Status	That Are OBL, FAC		2	(A)
··				That Aic Obe, I Ao			_ (^)
3.				Total Number of Do	minant		
4.				Species Across All S		2	(B)
5.					_		_ ` ′
	0	= Total Cover		Percent of Dominan	t Snecies		
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FAC	•	100%	(A/B)
				,	<u> </u>		_` ′ ′
2.				Prevalence Index V	Vorksheet:		
3.				OBL species	2	x 1 = 0	
4.				FACW species	;	x 2 = 0	<u> </u>
5				FAC species		x 3 =0	
	0	= Total Cover		FACU species	:	x 4 = 0	
Herb Stratum (Plot size: r = 5')				UPL species		(5 = 0	
1. Eleocharis sp.	90	yes	OBL	Column Totals:	0	(A) 0	(B)
2. Phyla lanceolata	25	yes	OBL	Prevaler	nce Index = B/A =		
3. Polygonum sp.	5			I hadaa ahadia Maaat	ation Indicators		
4. Polygonum arenastrum	5		UPL	Hydrophytic Veget		nantation	
5 6.					st for Hydrophytic Vo ce Test is >50%	egetation	
o 7.					ce frest is >30 %		
* 8.					gical Adaptations¹ (F	Provide sunnort	tina
9.					narks or on a separate she		g
0.					: Hydrophytic Vegeta	•)
·	125	= Total Cover			, , , ,	` ' '	,
Woody Vine Stratum (Plot size:)			¹Indicators of hyd	ric soil and wetland	hvdrology	
1					unless disturbed or		
2.				mast 25 process,		p. 02.0	
	0	= Total Cove		Hydrophytic Ved	getation Present?	Yes X	No

SOIL Sampling Point: NVM 2

Depth (inches) Matrix 0-2 2.5 Y 2.5/2 2-12 2.5 Y 2.5/1 10 YR 5/8	% Cole	Re	edox Fea	tures			
0-2 2.5 Y 2.5/2 2-12 2.5 Y 2.5/1 10 YR 5/8	% Col				2		
2-12 2.5 Y 2.5/1 10 YR 5/8		or (moist)	%	Type ¹	Loc ²	Texture	Remarks
10 YR 5/8						Loam	
	70					Silty Clay Loam	Mixed soil layer
	30					clay	
12-16+ 2.5 Y 6/2	100					loamy clay	
Type: C=Concentration, D=Deple	etion, RM=Red	uced Matrix,	 CS=Cove	red or Coat	ed Sand G	rains. ² Locatio	n: PL=Pore Lining, M=Matrix
lydric Soil Indicators						Ind	icators for Problematic Hydric Soils ³ :
Histosol (A1)			Sand	y Gleyed M	atrix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)			Sand	y Redox (S	5)		Dark Surface (S7)
Black Histic (A3)				ed Matrix (Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)		_		y Mucky Mi			Very Shallow Dark Surface (TF12)
Stratified Layers (A5) Loamy Gleyed					, ,		Other (Explain in Remarks)
2 cm Muck (A10)			ted Matrix	, ,			
Depleted Below Dark Surface	e (A11)			x Dark Surf			
Thick Dark Surface (A12)	- (_	ted Dark S		2	
Sandy Mucky Mineral (S1)				x Depression			ndicators of hydrophytic vegetation
5 cm Mucky Peat or Peat (S3	3)	_		2 ор. ооо	(. 0)	and	I wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer: (if observed)							
Time							
Type:							
Type: Depth (inches):						Hydric	Soil Present? Yes X No
• •						Hydric	Soil Present? Yes X No
Depth (inches): Remarks:						Hydric	Soil Present? Yes X No
Depth (inches): Remarks: HYDROLOGY						Hydric	Soil Present? Yes X No
Depth (inches): Remarks: HYDROLOGY Vetland Hydrology Indicators:							
Depth (inches): Remarks: HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on	ne is required; o				_		ators (minimum of two required)
Depth (inches): Remarks: IYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on X Surface Water (A1)	ne is required; o	W	ater-Stai	ned Leaves	_		ators <i>(minimum of two required)</i> Surface Soil Cracks (B6)
Depth (inches): Remarks: HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2)	ne is required; d	W	ater-Stair	una (B13)	(B9)		ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Depth (inches): Remarks: RYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2) X Saturation (A3)	ne is required; d	W ArTr	ater-Stain quatic Farue Aquat	una (B13) ic Plants (B	(B9)		ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Depth (inches): Remarks: RYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	ne is required; o	W A(H;	/ater-Staii quatic Farue Aquat ydrogen S	una (B13) ic Plants (B Sulfide Odo	(B9)	Secondary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Depth (inches): Remarks: Remarks: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ne is required; d	W Ai Ti O	ater-Stair quatic Farue Aquat ydrogen S xidized R	una (B13) ic Plants (E Sulfide Odo hizosphere	(B9) i14) r (C1) s on Living	Secondary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial
Depth (inches): Remarks: RYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ne is required; d	W Ar Tr H O	ater-Stair quatic Farue Aquat ydrogen S xidized R	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced	(B9) (14) r (C1) s on Living Iron (C4)	Secondary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches): Remarks: Remarks: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ne is required; d	W Ar Tr H O	ater-Stair quatic Farue Aquat ydrogen S xidized R	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced	(B9) i14) r (C1) s on Living	Secondary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches): Remarks: RYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ne is required; d	WArTrH;OPr	ater-Stair quatic Far rue Aquat ydrogen S xidized R resence c ecent Iror	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced	(B9) r (C1) s on Living lron (C4) in Tilled Sc	Secondary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Depth (inches): Remarks: RYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)		W Ar Hr O 	dater-Stain quatic Far que Aquat ydrogen S xidized R resence c ecent Iror nin Muck	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction	(B9) r (C1) s on Living lron (C4) in Tilled Sc 7)	Secondary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Depth (inches): IMPOROLOGY Vetland Hydrology Indicators: Immary Indicators (minimum of on	magery (B7)	WArTrOPrRTIG	dater-Stain quatic Far que Aquat ydrogen s xidized R resence c ecent Iror nin Muck auge or V	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C	(B9) s14) r (C1) s on Living lron (C4) in Tilled Sc 7)	Secondary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Depth (inches): Remarks: RYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial In Sparsely Vegetated Concave	magery (B7)	WArTrOPrRTIG	dater-Stain quatic Far que Aquat ydrogen s xidized R resence c ecent Iror nin Muck auge or V	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C' Vell Data (E	(B9) s14) r (C1) s on Living lron (C4) in Tilled Sc 7)	Secondary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Depth (inches): Remarks: RYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial In Sparsely Vegetated Concave	magery (B7)	WAiTiOPiRiTiG	rater-Stain quatic Far que Aquat ydrogen S xidized R resence c ecent Iror nin Muck auge or V	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced in Reduction Surface (C' Vell Data (E lain in Rem	(B9) s14) r (C1) s on Living lron (C4) in Tilled Sc 7)	Roots Dils (C6)	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology
Depth (inches): Remarks: RYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of on X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial In	magery (B7)	W Ar	rater-Stain quatic Far que Aquat ydrogen s xidized R resence c ecent Iror nin Muck auge or V ther (Exp	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced in Reduction Surface (C' Vell Data (E lain in Rem	(B9) r (C1) s on Living lron (C4) in Tilled Sc 7) p9) arks)	Roots	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)

Project/Site: SPCSL 2A (Tier 3)		City/	County: Log	jan	Sampling Date:	10/26/2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	NVM 5
Investigator(s): NVM, MP			Section, Tow	nship, Range: S28, T1		
· · · · · · · · · · · · · · · · · · ·	ditch				convex, none): conca	ive
' ' '	' 15.40" N	Long:	89°	26' 26.29" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava silt loam	, 0-2% slopes				NWI Classificat	ion: None
Are climatic/hydrologic conditions on the site	e typical for this	time of year?	Yes	X No (If no	o, explain in Remarks)	
Are Vegetation, Soil, or H	ydrology	significantly	y disturbed?	Are "Normal Circur	mstances" present?	Yes X No
Are Vegetation , Soil , or H	ydrology	naturally pro	blematic?	(If needed, ex	xplain any answers in R	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sar	npling point	locations, tr	ansects, important fea	atures, etc.	
Hydrophytic Vegetation Present? Yes	X No					
Hydric Soil Present? Yes	X No		Is the Sa	mpled Area within a We	etland? Yes X	No
•	X No	•		•		
•						
Remarks: Wetland NVM-2A & NVM-2B.	PEMA/PFOA.	Sample point	s NVM 6 & N	VM 5 represent both we	etlands.	
L VEGETATION - Use scientific names of p	lanta					
VEGETATION - Use scientific flames of p	Absolute	Dominant	Indicator	Dominance Test Wo	rkehoot:	
Tree Stratum (Plot size: r = 30')	% Cover	Species?	Status	Number of Dominant		
1. Populus deltoides	40	yes	FAC+	That Are OBL, FACW		1 (A)
2.						
3.				Total Number of Dom	ninant	
4				Species Across All St	trata:	1 (B)
5						
	40 =	Total Cover		Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACW	/, or FAC: 1	00% (A/B)
1						
2				Prevalence Index W		
3				OBL species	x 1 =	
4 5.				FACW species FAC species	x 2 = x 3 =	
J		Total Cover		FACU species	x 4 =	
Herb Stratum (Plot size: r = 5')	-	10101 00101		UPL species	x 5 =	0
1. Carex sp.	90	yes	FACU-OBL	Column Totals:	0 (A)	0 (B)
2. Festuca arundinacea	2		FACU+	Prevalenc	ce Index = B/A =	
3. Equisetum laevigatum	5		FACW			
4. Apocynum cannabinum	5		FAC	Hydrophytic Vegeta	tion Indicators:	
5.				1. Rapid Test	t for Hydrophytic Vegeta	ation
6				X 2. Dominance		
7				<u> </u>	e Index is <3.01	
8				<u> </u>	ical Adaptations ¹ (Provid	le supporting
9				l ——	rks or on a separate sheet)	1/5
10	102 -	Total Cover		— Froblematic i	Hydrophytic Vegetation	(Explain)
N. 1.15 Oct. 1 (D) 1	102 =	Total Cover		41 11 1 61 11		
Woody Vine Stratum (Plot size:)				ic soil and wetland hydr	
1	-			must be present, u	inless disturbed or prob	iematic.
2	0	= Total Cove	er	Hydrophytic Vege	etation Present? Ve	s X No
			·1	riyaropiiytic vege	station Flesent! Te	3 <u>/ NU</u>
Remarks: (Include photo numbers here or	on a separate s	heet.)				
PH NVM - 4 NE						

D = = 4h			_				bsence of indica		
Depth (inches)	Matrix			edox Feat		2			
<u> </u>	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks	
0-9	2.5 Y 2.5/1	100	10.1/2.0/4				Silty clay loam		
9-14	2.5 Y 2.5/1	50	10 YR 6/1	50	C	M	Silty clay loam		
14-16	10 YR 6/1	100					Silty clay loam		
								,	
	oncentration, D=De	epletion, RM=F	Reduced Matrix,	CS=Cove	red or Coat	ed Sand Gr		n: PL=Pore Lining, M=Matrix	
Hydric Soil							Indi	cators for Problematic Hydric Soils ³ :	
— Histoso	` '		_		Gleyed M	` '		Coast Prairie Redox (A16)	
	pipedon (A2)		_		Redox (S	•		Dark Surface (S7)	
	listic (A3)		_		ed Matrix (Iron-Manganese Masses (F12)	
Hydrogen Sulfide (A4)					y Mucky Mi	, ,	Very Shallow Dark Surface (TF12)		
	ed Layers (A5)			_	y Gleyed M	, ,		Other (Explain in Remarks)	
	uck (A10)		_		ted Matrix (
	ed Below Dark Surf	face (A11)	_	_	x Dark Surf				
Thick E	ark Surface (A12)			Deple	ted Dark S	urface (F7)	³ Ir	dicators of hydrophytic vegetation	
Sandy	Mucky Mineral (S1))		Redo	x Depression	ons (F8)		wetland hydrology must be present,	
5 cm M	ucky Peat or Peat	(S3)						unless disturbed or problematic.	
	_ayer: (if observed	")							
	_ayer: (if observed	")							
Restrictive)					Hydric S	coil Present? Yes X No	
Restrictive)					Hydric S	Goil Present? Yes X No	
Restrictive In Type: Depth (inc)					Hydric S	Soil Present? Yes X No	
Restrictive In Type: Depth (inc	ches):)					Hydric §	Goil Present? Yes X No	
Restrictive Type: Depth (inc	ches):						Hydric S	ioil Present? Yes X No	
Restrictive Type: Depth (inc Remarks:	shes):	s:	d; check all that	apply)		s		Soil Present? Yes X No	
Type: Depth (inc.) Remarks: IYDROLOG Vetland Hy	erhes):	s:			ned Leaves	_			
Restrictive Type: Depth (inc Remarks: HYDROLOG Vetland Hy Primary India	erhes): SY drology Indicators cators (minimum of	s:	XW	/ater-Stair	ned Leaves una (B13)	_		tors (minimum of two required)	
Restrictive Type: Depth (inc Remarks: HYDROLOG Vetland Hy Primary India Surface High W	ethes): GY drology Indicators eators (minimum of	s:	XW A	/ater-Stair quatic Fa		(B9)		tors (minimum of two required) Surface Soil Cracks (B6)	
Restrictive Type: Depth (inc Remarks: IYDROLOG Vetland Hy Primary India Surface High W Saturat	ches): drology Indicators cators (minimum of e Water (A1) dater Table (A2)	s:	XW A T	/ater-Stair quatic Fair rue Aquat	una (B13)	(B9)		tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)	
Restrictive Type: Depth (inc) Remarks: HYDROLOG Vetland Hy Primary Indic Surface High W Saturat Water I	ches): drology Indicators cators (minimum of water (A1) dater Table (A2) ion (A3)	s:	X_W A T H	/ater-Stair quatic Fau rue Aquat ydrogen S	una (B13) ic Plants (B Sulfide Odo	(B9)	econdary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)	
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Restrictive In Type: Depth (incomplete Incomplete Incom	ches): drology Indicators cators (minimum of water (A1) dater Table (A2) don (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) posits (B5) dion Visible on Aeria ly Vegetated Concavations: er Present?	s: f one is require	X W A T H C C P R T G G G G S S C C C C C C C C C C C C C C	Vater-Stair quatic Fau rue Aquat ydrogen S xidized R resence o ecent Iror hin Muck auge or V ther (Exp	una (B13) ic Plants (B Sulfide Odo hizosphere if Reduced in Reduction Surface (C) Vell Data (D dain in Rem	(B9) r (C1) s on Living F lron (C4) in Tilled So 7) 99) arks)	Roots ils (C6) x x	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)	
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Project/Site: SPCSL 2A (Tier 3)		City	/County: Log	gan	Sampling Date:	10/26/2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	NVM 6
Investigator(s): NVM, MP			Section, Tov	vnship, Range: S28, T1		
· · · · · · · · · · · · · · · · · · ·	l ditch				convex, none): conc	ave
' ' '	' 17.39" N	Long	: 89	° 26' 24.70" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava silt loam	, 0-2% slopes				NWI Classifica	tion: None
Are climatic/hydrologic conditions on the sit	e typical for this	time of year?	Yes	S X No (If no	o, explain in Remarks)	
Are Vegetation , Soil , or H	lydrology	significantl	y disturbed?	Are "Normal Circur	nstances" present?	Yes X No
Are Vegetation , Soil , or H	lydrology	naturally pro	blematic?	(If needed, e	xplain any answers in F	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sa	- mpling point	locations, tr	ansects, important fea	atures, etc.	
	X No			-		
Hydric Soil Present? Yes	X No	_	Is the Sa	mpled Area within a We	etland? Yes X	No
	X No	=	.00 0			
		_				
Remarks: Wetland NVM-2A & NVM-2B.	PEMA/PFOA.	Sample point	ts NVM 6 & N	VM 5 represent both we	etlands.	
VEGETATION - Use scientific names of p	lants.					
Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Wo Number of Dominant		
1. Morus alba	20	yes	FAC	That Are OBL, FACW	/, or FAC:	3 (A)
2. Fraxinus pennsylvanica	20	yes	FACW			
3.				Total Number of Dom	ninant	
4				Species Across All St	trata:	3 (B)
5						
		Total Cover		Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size: r =	= 15')			That Are OBL, FACW	/, or FAC:1	(A/B)
1. Ulmus rubra	5	yes	FAC			
2				Prevalence Index W		
3				OBL species	x 1 =	
4				FACW species	x 2 =	
5	5 =	Total Cover		FACIL appaies	x 3 = x 4 =	
Herb Stratum (Plot size: r = 5')		Total Cover		FACU species UPL species	x 5 =	
1. Carex sp.	70	yes	FACU-OBL	Column Totals:	0 (A)	0 (B)
2. Festuca arundinacea	20		FACU+		ce Index = B/A =	(5)
3. Solidago altissima	10		FACU			
4. Ambrosia trifida	5		FAC+	Hydrophytic Vegeta	tion Indicators:	
5. Juncus torreyi	2		FACW	1. Rapid Tes	t for Hydrophytic Veget	ation
6. Equisetum laevigatum	2		FACW	X 2. Dominance	e Test is >50%	
7. Aster novae-angliae	5		FACW	3. Prevalence	e Index is <3.01	
8.				4. Morpholog	ical Adaptations¹ (Provi	de supporting
9	·				rks or on a separate sheet)	
10				Problematic I	Hydrophytic Vegetation	¹ (Explain)
	114 =	Total Cover				
Woody Vine Stratum (Plot size:)			-	c soil and wetland hydr	
1				must be present, u	inless disturbed or prob	lematic.
2						
	0	= Total Cove	er	Hydrophytic Vege	etation Present? Ye	es X No
Remarks: (Include photo numbers here or	on a separate s	sheet.)		1		

	_				bsence of indica		
Depth Matrix		edox Feat					
	or (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-8 2.5 Y 2.5/1 100					Silt Loam		
8-16 10 YR 5/2 90 2.5	5 YR 5/8	10	C	M	Silt Loam		
						-	
						-	
						-	
Type: C=Concentration, D=Depletion, RM=Red	uced Matrix, (CS=Cover	ed or Coa	ated Sand Gra	ains. ² Location	n: PL=Pore Lining, M=Matrix	
Hydric Soil Indicators					Indi	cators for Problematic Hydric Soils ³ :	
Histosol (A1)		Sandy	Gleyed N	//atrix (S4)		Coast Prairie Redox (A16)	
Histic Epipedon (A2)		Sandy	Redox (S	S5)	<u> </u>	Dark Surface (S7)	
Black Histic (A3)		Strippe	ed Matrix	(S6)		Iron-Manganese Masses (F12)	
Hydrogen Sulfide (A4)		 Loamy	/ Mucky N	lineral (F1)	Very Shallow Dark Surface (TF12)		
Stratified Layers (A5)		Loamy	Gleyed I	Matrix (F2)		Other (Explain in Remarks)	
2 cm Muck (A10)		ted Matrix	-				
X Depleted Below Dark Surface (A11)			Dark Su				
Thick Dark Surface (A12)		_		Surface (F7)	³ Indicators of hydrophytic vegetation		
Sandy Mucky Mineral (S1)			Depress			dicators of hydrophytic vegetation wetland hydrology must be present,	
5 cm Mucky Peat or Peat (S3)						unless disturbed or problematic.	
Restrictive Layer: (if observed)							
Type:							
Depth (inches):					Hydric	oil Present? Yes X No	
Bopai (monoc).							
					,	163 <u>X</u> 10	
Remarks:					1.,,	on resemble to the second seco	
					,	163 <u>-X</u> No_	
Remarks:					,	on resent.	
Remarks:						onresent. Its <u>X</u> No	
Remarks: HYDROLOGY Wetland Hydrology Indicators:	check all that	apply)		s			
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required;			ned Leave	_		ors (minimum of two required)	
Remarks: HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1)	W	ater-Stain		_		ors (minimum of two required) Surface Soil Cracks (B6)	
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2)	W	ater-Stain quatic Fau	ına (B13)	s (B9)		ors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)	
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Remarks: HYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; of the surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	W Ad Tr Hy	ater-Stain quatic Fau rue Aquati ydrogen S	ina (B13) c Plants (sulfide Od	B14) or (C1)	econdary Indica	Sors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)	
Remarks: HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	W Ac Tr O:	ater-Stain quatic Fau rue Aquati ydrogen S xidized Rh	ina (B13) c Plants (sulfide Od nizosphere	s (B9) B14) or (C1) es on Living F	econdary Indica	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)	
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Remarks: HYDROLOGY Netland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present?	WA(Tr	rater-Stain quatic Fau que Aquati ydrogen S xidized Rh resence of ecent Iron nin Muck S auge or W ther (Expla	ina (B13) c Plants (culfide Odi nizosphere f Reduced Reductio Surface (C /ell Data (ain in Rer	s (B9) B14) or (C1) es on Living F d Iron (C4) n in Tilled So C7) D9) marks) Depth (inche	econdary Indica	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?	
Remarks: HYDROLOGY Netland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present?	W	rater-Stain quatic Fau que Aquati ydrogen S xidized Rh resence of ecent Iron nin Muck S auge or W ther (Expla	una (B13) c Plants (culfide Od- nizosphero f Reduccio Reductio Surface (C /ell Data (ain in Rer	s (B9) B14) or (C1) es on Living F d Iron (C4) n in Tilled So (C7) D9) marks) Depth (inche	econdary Indica	cors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology	
Remarks: IYDROLOGY Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Vater Table Present? Saturation Present? (includes capillary fringe)	W Ad Tr Hy O: Pr Re Tr Ga O: Yes Yes Yes	rater-Stain quatic Fau que Aquati ydrogen S xidized Rh resence of ecent Iron nin Muck S auge or W ther (Expla	ina (B13) c Plants (culfide Odi nizosphero f Reduccio Reductio Surface (Cultive) fell Data (ain in Ren Cultive Cult	s (B9) B14) or (C1) es on Living F d Iron (C4) n in Tilled So C7) D9) marks) Depth (inche	econdary Indica	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?	
Remarks: HYDROLOGY Netland Hydrology Indicators: Primary Indicators (minimum of one is required; of Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present?	W Ad Tr Hy O: Pr Re Tr Ga O: Yes Yes Yes	rater-Stain quatic Fau que Aquati ydrogen S xidized Rh resence of ecent Iron nin Muck S auge or W ther (Expla	ina (B13) c Plants (culfide Odi nizosphero f Reduccio Reductio Surface (Cultive) fell Data (ain in Ren Cultive Cult	s (B9) B14) or (C1) es on Living F d Iron (C4) n in Tilled So C7) D9) marks) Depth (inche	econdary Indica	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?	

Project/Site: SPCSL 2A (Tier 3)		City/County:	Logan	Sampling Date:	10/26/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	NVM 8
Investigator(s): NVM, MP		Section,	Township, Range: S28, T		
Landform (hillslope, terrace, etc.):	Stream terrace			e, convex, none) : conc	ave
Slope (%): 0-2 Lat:	40° 4' 34.36" N	Long:	89° 26' 10.30" W	Datum: NAD 83	
Soil Map Unit Name: 68A - Sable s	ilty clay loam, 0-2% slo	pes		NWI Classifica	tion: None
Are climatic/hydrologic conditions or	n the site typical for this t	ime of year?	Yes X No (If n	o, explain in Remarks)	
Are Vegetation, Soil	, or Hydrology	significantly disturbe	ed? Are "Normal Circu	imstances" present?	Yes X No
Are Vegetation , Soil	, or Hydrology	naturally problematic?	? (If needed, e	explain any answers in l	Remarks.)
SUMMARY OF FINDINGS - Attach	site map showing sam	pling point location	s, transects, important fe	eatures, etc.	
Hydrophytic Vegetation Present?	Yes X No				
Hydric Soil Present?	Yes X No	Is the	Sampled Area within a W	/etland? Yes >	(No
Wetland Hydrology Present?	Yes X No		•	_	
Remarks: Wetland NVM-3. PEN	AA. West trackside ditch	at Culvert 162.70. Al	ong channel.		
VEGETATION - Use scientific nan	-		la		
Tree Stratum (Plot size:	Absolute) % Cover	Dominant Indicato Species? Status			
1		opecies: Otatus	That Are OBL, FAC	•	(A)
2					
3.			Total Number of Dor	minant	
4.			Species Across All S		(B)
5.			_ `		
	0 = T	Total Cover	Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size:	:)		That Are OBL, FAC	•	(A/B)
1.			,		
2.			Prevalence Index V	Vorksheet:	
3.			OBL species	x 1 :	= 0
4.			FACW species	x 2 :	= 0
5.			FAC species	x 3 :	= 0
	<u> </u>	Total Cover	FACU species	x 4 =	= 0
Herb Stratum (Plot size: r = 5	<u>5'</u>)		UPL species	x 5 =	
Phalaris arundinacea	100	yes FACW		0 (A)	(B)
2			Prevaler	ice Index = B/A =	
3.					
4			Hydrophytic Veget		h-4:
5	 .		_	st for Hydrophytic Vege ce Test is >50%	tation
6			_	ce Index is <3.01	
8.			_	gical Adaptations¹ (Provi	do supporting
9.				arks or on a separate sheet)	de supporting
0.			_	Hydrophytic Vegetation	ո¹ (Explain)
·	100 = T	Fotal Cover	_	, p ,	(-)
Woody Vine Stratum (Plot size:		otal oover	¹ Indicators of hyd	ric soil and wetland hyd	rology
1			,	unless disturbed or prol	••
2			must be present,	unicos distarbed or pro-	oicinatio.
		= Total Cover	— Hydrophytic Vec	jetation Present? Ye	es X No
			,		<u> </u>
Remarks: (Include photo numbers		leet.)			
PH 7 - NE; 8 - SE; 9 - SW; 10 - NW					

Profile Des	cription: (Describe	to the depth nee	ded to docum	ent the in	dicator or	confirm the a	bsence of indica	ators.)		
Depth	Matrix		R	edox Fea						
(inches)	Color (moist)	% Col	or (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-10	10 YR 2/1	100					Silty Loam			
10-16	10 YR 2/1	70 7.	5 YR 5/8	30	С	M	Silty clay loam			
						<u> </u>				
¹ Type: C=0	Concentration, D=Dep	pletion, RM=Red	uced Matrix,	CS=Cove	red or Coa	ated Sand Gr	ains. ² Locatio	n: PL=Pore Lining, M=Matrix		
Hydric Soil	Indicators						Indi	cators for Problematic Hydric Soils ³ :		
Histos	ol (A1)			Sand	y Gleyed N	/latrix (S4)		Coast Prairie Redox (A16)		
Histic	Epipedon (A2)			Sand	y Redox (S	S5)		Dark Surface (S7)		
Black	Histic (A3)			Stripp	ed Matrix	(S6)		Iron-Manganese Masses (F12)		
Hydrogen Sulfide (A4)				Loam	y Mucky M	lineral (F1)		Very Shallow Dark Surface (TF12)		
Stratified Layers (A5)				Loam	y Gleyed N	Matrix (F2)		Other (Explain in Remarks)		
2 cm l	Muck (A10)			Deple	ted Matrix	(F3)		_		
X Deple	ted Below Dark Surfa	ace (A11)	_	Redo	x Dark Sur	face (F6)				
Thick	Dark Surface (A12)			Deple	ted Dark S	Surface (F7)	31	ndicators of hydrophytic vegetation		
Sandy Mucky Mineral (S1)				Redo	x Depressi	ons (F8)		and wetland hydrology must be present,		
5 cm Mucky Peat or Peat (S3) unless disturbed or problemati							unless disturbed or problematic.			
Restrictive	Layer: (if observed)									
Type:										
Depth (in	nches):						Hydric	Soil Present? Yes X No		
Remarks:	<u> </u>									
ixemarks.										
HYDROLO	GY									
Wetland Hy	drology Indicators	:								
Primary Ind	icators (minimum of	one is required;	check all that	apply)		S	Secondary Indica	ators (minimum of two required)		
Surfac	ce Water (A1)				ned Leave	s (B9)		Surface Soil Cracks (B6)		
High V	Vater Table (A2)		A	quatic Fa	una (B13)		X	Drainage Patterns (B10)		
Satura	ation (A3)		T	rue Aquat	ic Plants (B14)		Dry-Season Water Table (C2)		
Water	Marks (B1)		н	ydrogen S	Sulfide Odd	or (C1)		_ Crayfish Burrows (C8)		
Sedim	ent Deposits (B2)		0	xidized R	hizosphere	es on Living I	Roots	Saturation Visible on Aerial		
Drift D	eposits (B3)		P	resence c	of Reduced	I Iron (C4)		Imagery (C9)		
Algal I	Mat or Crust (B4)		R	ecent Iror	n Reductio	n in Tilled So	oils (C6)	Stunted or Stressed Plants (D1)		
Iron D	eposits (B5)		T	hin Muck	Surface (C	7)	X	Geomorphic Position (D2)		
Inunda	ation Visible on Aeria	ıl Imagery (B7)	G	auge or V	Vell Data (D9)	X	FAC-Neutral Test (D5)		
Spars	ely Vegetated Conca	ive Surface (B8)	0	ther (Exp	lain in Ren	narks)				
Field Obse	rvations:									
Surface Wa	ter Present?		Yes	N	lo X	Depth (inche	es)	Wetland Hydrology		
Water Table	e Present?		Yes	N	lo X	Depth (inche	es)	Present?		
Saturation F	Present? (includes ca	apillary fringe)	Yes	N	lo X	Depth (inche	es)	Yes X No		
Describe Re	ecorded Data (stream	n gauge, monitoi	ring well, aeria	al photos,	previous i	nspections) ,	if available.			
D										
Remarks:										
I										

Project/Site: SPCSL 2A (Tier 3)	_	City/County: _I	₋ogan	Sampling Date:	10/26/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	NVM 16
Investigator(s): NVM, MP		Section, 7	Fownship, Range: S32,		
· · · · · · · · · · · · · · · · · · ·	side ditch			ve, convex, none) : cond	ave
' ' '	30.071" N	Long:	89° 27' 4.459" W	Datum: NAD 83	
Soil Map Unit Name: 86B - Osco silt loam,	2-5% slopes			NWI Classifica	ation: None
Are climatic/hydrologic conditions on the site	typical for this time o	f year?	res X No (If	no, explain in Remarks)	
Are Vegetation, Soil, or H	ydrology sign	ificantly disturbed	d? Are "Normal Circ	cumstances" present?	Yes X No
Are Vegetation , Soil , or H	ydrology natura	ally problematic?	(If needed,	explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ıp showing sampling	point locations	, transects, important	features, etc.	
Hydrophytic Vegetation Present? Yes	X No				
Hydric Soil Present? Yes	X No	Is the	Sampled Area within a \	Wetland? Yes	X No
Wetland Hydrology Present? Yes	X No				
-					
Remarks: Wetland NVM-4. PEMA/PFOA	West trackside ditc	h.			
VEGETATION - Use scientific names of p			D T V	At a relation and a	
Tree Stratum (Plot size: r = 30')	Absolute Domi % Cover Spec		Dominance Test V Number of Domina		
1. Populus deltoides	5 ye		That Are OBL, FAC	•	3 (A)
2.			-		- (7
3.			 Total Number of Do 	ominant	
4.			Species Across All		3 (B)
5.			_		
	5 = Total (Cover	Percent of Domina	nt Species	
Sapling/Shrub Stratum (Plot size:	<u> </u>		That Are OBL, FAC	•	100% (A/B)
1.					
2.			Prevalence Index	Worksheet:	
3.			OBL species	x 1	= 0
4			FACW species	x 2	= 0
5			FAC species	x 3	
	0 = Total 0	Cover	FACU species	x 4	
Herb Stratum (Plot size: r = 5')			UPL species	x 5	
1. Leersia oryzoides	25 ye		Column Totals:	0 (A)) <u> </u>
2. Phalaris arundinacea	25 ye		—	ence Index = B/A =	
3. Carex sp.		FACU-OB	Hydrophytic Vege	station Indicators:	
4 5.			_ ' ' ' ' ' ' ' '	est for Hydrophytic Vege	etation
6.			_	nce Test is >50%	tation
7.			_	nce Index is <3.01	
8.			-	ogical Adaptations ¹ (Prov	vide supportina
9.			- I 	marks or on a separate sheet)	3
10.			Problemati	c Hydrophytic Vegetatio	n¹ (Explain)
	70 = Total (Cover	_		
Woody Vine Stratum (Plot size:)		¹ Indicators of hy	dric soil and wetland hyd	drology
1.	 ′		-	, unless disturbed or pro	
2.				· · · · · · · · · · · · · · · · · · ·	
	0 = Tota	al Cover	Hydrophytic Ve	egetation Present? Y	es X No
Pomarke: (Include photo numbers have as	on a senarate sheet l				
Remarks: (Include photo numbers here or of PH 24 - NE. Carex sp. Assumed to be FAC					
FTT 24 - N.C. Carex sp. Assumed to be TAC	wo or weller.				

Profile Description: (Describe to the	depth needed to docu	ment the inc	dicator or	confirm the ab	bsence of indicat	ors.)	
Depth Matrix		Redox Feat	tures				
(inches) Color (moist) %	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-8 2.5 Y 2.5/1 100	5 YR 5/8	5	С	M	Silty loam		
8-16 10 YR 5/4 100	5 YR 5/8	10	С	M	Silty clay		
	_						
	_						
	_						
¹ Type: C=Concentration, D=Depletion	, RM=Reduced Matrix	x, CS=Cove	red or Co	ated Sand Gra	ains. ² Location	: PL=Pore Lining, M=Matrix	
Hydric Soil Indicators					Indic	ators for Problematic Hydric Soils ³ :	
Histosol (A1)		Sandy	Gleyed I	Matrix (S4)		Coast Prairie Redox (A16)	
Histic Epipedon (A2)	•	Sandy	Redox (S5)		Dark Surface (S7)	
Black Histic (A3)	•	Stripp	ed Matrix	(S6)		- Iron-Manganese Masses (F12)	
Hydrogen Sulfide (A4)	•	Loam	y Mucky N	Mineral (F1)		- Very Shallow Dark Surface (TF12)	
Stratified Layers (A5)	•		-	Matrix (F2)	-	Other (Explain in Remarks)	
2 cm Muck (A10)	•		ted Matrix		-	<u> </u>	
Depleted Below Dark Surface (A	11)	X Redox					
Thick Dark Surface (A12)	,			Surface (F7)	3		
Sandy Mucky Mineral (S1)	•	X Redox			³ Indicators of hydrophytic vegetation and wetland hydrology must be present,		
5 cm Mucky Peat or Peat (S3) unless disturbed or problematic.							
Restrictive Layer: (if observed)							
Type:							
Depth (inches):	,				Hydric S	oil Present? Yes X No	
Remarks:							
Remarks.							
HYDROLOGY							
Wetland Hydrology Indicators:							
Primary Indicators (minimum of one is	required; check all the	at apply)		Se	econdary Indicat	ors (minimum of two required)	
Surface Water (A1)		Water-Stair	ned Leave	es (B9)		Surface Soil Cracks (B6)	
High Water Table (A2)		Aquatic Fau	una (B13)			Drainage Patterns (B10)	
Saturation (A3)		True Aquati	ic Plants ((B14)		Dry-Season Water Table (C2)	
Water Marks (B1)		Hydrogen S	Sulfide Od	or (C1)	X	Crayfish Burrows (C8)	
Sediment Deposits (B2)	X	Oxidized RI	hizospher	es on Living R	Roots	Saturation Visible on Aerial	
Drift Deposits (B3)		Presence o		_		Imagery (C9)	
Algal Mat or Crust (B4)				on in Tilled Soi	ils (C6)	Stunted or Stressed Plants (D1)	
Iron Deposits (B5)		Thin Muck	Surface (0	C7)	<u> </u>	Geomorphic Position (D2)	
Inundation Visible on Aerial Imag		Gauge or W	•	,		FAC-Neutral Test (D5)	
Sparsely Vegetated Concave Su		Other (Expl					
Field Observations						T	
Field Observations:	V	A.1	lo V	Donth /inat-		Water de la constitución de la c	
Surface Water Present?	Yes	N		Depth (inche	· —	Wetland Hydrology Present?	
Water Table Present?	Yes		lo X	Depth (inche	· —		
Saturation Present? (includes capillary	r fringe) Yes	N	lo <u>X</u>	Depth (inche	·s)	Yes X No	
Describe Recorded Data (stream gaug	ie, monitoring well, ae	rial photos,	previous	inspections) , i	if available.		
Domayka							
Remarks:							

Applicant/Owner UPRR	Project/Site: SPCSL 2A (Tier 3)		City/County: Log	gan	Sampling Date:	10/27/2010
Landform (fillstope, Terrace, etc.) Roadside ditch Long: 89* 27*19.51* W Datum: NADB 3	Applicant/Owner: UPRR					NVM 19
Slope (%) 0-2	Investigator(s): NVM, MP		Section, Tov			
Note Continue Co					, convex, none) : conc	ave
Are Vegetation	' ' '		Long: 89	° 27' 19.51" W		
Are Vegetation	Soil Map Unit Name: 68A - Sable silty clay	loam, 0-2% slopes			NWI Classifica	tion: None
Are Vegetation	Are climatic/hydrologic conditions on the site	typical for this time o	f year? Yes	s X No (If no	o, explain in Remarks)	
Summary OF FinDings - Attach site map showing sampling point locations, transects, important features, etc.	Are Vegetation , Soil , or Hy	drology sigr	ificantly disturbed?	Are "Normal Circu	mstances" present?	Yes X No
Hydrophytic Vegetation Present? Yes X No	Are Vegetation , Soil , or Hy	drology natur	ally problematic?	(If needed, e	xplain any answers in l	Remarks.)
Hydrophytic Vegetation Present? Yes X No	SUMMARY OF FINDINGS - Attach site ma	p showing sampling	point locations, to	ransects, important fe	atures, etc.	
Vestand Hydrology Present? Yes X No						
Vestand Hydrology Present? Yes X No	Hvdric Soil Present? Yes	X No	Is the Sa	mpled Area within a W	etland? Yes	(No
Vetland NVM-5. PEMC/PFOA. Located in ditch between road and railroad tracks. Vetraction Ve	-					
VEGETATION - Use scientific names of plants. Tree Stratum (Plot size: r = 30') Absolute Species's Status (Plot size: yes FAC+) Dominant Species (Number of Dominant Species (Numb						
Dominance Test Worksheet: Number of Dominant Species Statum (Plot size: r = 30') % Cover Species Statum (Plot size: r = 30') % Cover Species Statum (Plot size: - 30') % Cover Species Statum (Plot size: - 30') % Cover Species Statum (Plot size: - 30') % Cover Species	Remarks: Wetland NVM-5. PEMC/PFOA	 Located in ditch be 	tween road and rail	road tracks.		
Dominance Test Worksheet: Number of Dominant Species Statum (Plot size: r = 30') % Cover Species Statum (Plot size: r = 30') % Cover Species Statum (Plot size: - 30') % Cover Species Statum (Plot size: - 30') % Cover Species Statum (Plot size: - 30') % Cover Species						
Dominance Test Worksheet: Number of Dominant Species Statum (Plot size: r = 30') % Cover Species Statum (Plot size: r = 30') % Cover Species Statum (Plot size: - 30') % Cover Species Statum (Plot size: - 30') % Cover Species Statum (Plot size: - 30') % Cover Species						
Number of Dominant Species	VEGETATION - Use scientific names of pl			ln : =		
1. Populus deltoides 5 yes FAC+	Tree Stratum (Plot size: r = 30')					
2.	`					2 (A)
Species Across All Strata: 2 (B)				, , ,		
Species Across All Strata: 2 (B)	3.			Total Number of Don	ninant	
Sapling/Shrub Stratum	4.					2 (B)
Sapiling/Shrub Stratum (Plot size:) That Are OBL, FACW, or FAC: 100% (A/B)	5.					
That Are OBL, FACW, or FAC: 100% (A/B)		5 = Total (Cover	Percent of Dominant	Species	
OBL species	Sapling/Shrub Stratum (Plot size:)			•	100% (A/B)
OBL species	1					
### FACW species X 2 = 0 FACW species X 3 = 0 FACU species X 4 = 0 FACU species X 5 = 0 Table species FACU species X 5 = 0 Table species Table	2			Prevalence Index W	orksheet:	
FAC species X 3 = 0 FACU species X 4 = 0 FACU species X 5 = 0 Table species FACU species X 5 = 0 Table species	3.			· ·		
Herb Stratum (Plot size: r = 5') 90 yes FACU-OBL UPL species x 4 = 0 UPL species x 5 = 0 UPL species UPL species x 5 = 0 UPL species UPL species x 5 = 0 UPL species UPL species UPL species x 5 = 0 UPL species	4			*		
Herb Stratum (Plot size: r = 5') 90 yes FACU-OBL UPL species x 5 = 0 0 (A) 0 (B) (B) 0 (A) 0 (B) (B) (B) Prevalence Index = B/A = (D) (B) (B) Prevalence Index = B/A = (D) (B)	5			*		
1. Carex sp. 90 yes FACU-OBL OBL Prevalence Index = B/A =	Hards Christians (Diet sies)	= lotal (Cover	· ·		
2. Typha latifolia 3. Teucrium canadense 4. Bidens frondosa 5 FACW 4. Bidens frondosa 5 FACW 6.		00 46	DO FACILORI			
3. Teucrium canadense 2 FACW- 4. Bidens frondosa 5 FACW Hydrophytic Vegetation Indicators: 5.						(В)
4. Bidens frondosa 5 FACW 5. 1. Rapid Test for Hydrophytic Vegetation 6. X 2. Dominance Test is >50% 7. 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 99 = Total Cover Woody Vine Stratum (Plot size:) 1. Rapid Test for Hydrophytic Vegetation X 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 2 Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)				Trevalen	CC IIIGCX - B/A -	
1. Rapid Test for Hydrophytic Vegetation 2. Dominance Test is >50% 3. Prevalence Index is ≤3.0¹ 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) 99 = Total Cover Woody Vine Stratum (Plot size:)				Hydrophytic Vegeta	tion Indicators:	
X 2. Dominance Test is >50%						tation
8. 4. Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) 9.	6.					
9. data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation¹ (Explain) Woody Vine Stratum (Plot size:) 1	7.			3. Prevalenc	e Index is <3.01	
Problematic Hydrophytic Vegetation¹ (Explain) 99	8.			4. Morpholog	gical Adaptations¹ (Provi	de supporting
Woody Vine Stratum (Plot size:)	9.			data in Rema	arks or on a separate sheet)	
Woody Vine Stratum (Plot size:) 1	10			Problematic Problematic	Hydrophytic Vegetation	1 ¹ (Explain)
must be present, unless disturbed or problematic. 2		99 = Total (Cover			
2	Woody Vine Stratum (Plot size:)		¹ Indicators of hydr	ic soil and wetland hyd	rology
0 = Total Cover Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)	1			must be present, ι	unless disturbed or prol	olematic.
Remarks: (Include photo numbers here or on a separate sheet.)	2					
		0 = Tot	al Cover	Hydrophytic Veg	etation Present? Ye	es X No
	Remarks: (Include photo numbers here or	on a separate sheet.)		1		
	PH 26 - S/SW at ditch.					

Profile Des	cription: (Describe	to the depth needed	d to docume	ent the inc	dicator or	confirm the a	bsence of indicat	tors.)	
Depth	Matrix		Re	edox Feat	ures				
(inches)	Color (moist)	% Color	(moist)	%	Type ¹	Loc²	Texture	Remarks	
0-8	2.5 Y 2.5/1	100					Clay loam		
8-16	10 YR 4/1	80 2.5	Y 6/1	5	D	M	Clay loam		
		7.5 Y	'R 5/8	10	С	M	Clay loam		
¹ Type: C=C	Concentration, D=De	pletion, RM=Reduc	ed Matrix, (CS=Cove	red or Co	ated Sand Gr	rains. ² Location	: PL=Pore Lining, M=Matrix	
Hydric Soil	Indicators						Indic	ators for Problematic Hydric Soils ³ :	
Histos	ol (A1)			Sandy	Gleyed	Matrix (S4)	<u> </u>	Coast Prairie Redox (A16)	
Histic	Epipedon (A2)			Sandy	Redox (S5)		Dark Surface (S7)	
Black	Histic (A3)			Stripp	ed Matrix	(S6)		Iron-Manganese Masses (F12)	
Hydrogen Sulfide (A4)				Loam	y Mucky I	Mineral (F1)		Very Shallow Dark Surface (TF12)	
Stratified Layers (A5)				Loam	y Gleyed	Matrix (F2)		Other (Explain in Remarks)	
2 cm N	/luck (A10)			X Deple	ted Matri	x (F3)			
Deplet	ed Below Dark Surf	ace (A11)		X Redox	c Dark Sυ	ırface (F6)			
Thick Dark Surface (A12)				Deple	ted Dark	Surface (F7)	³ Indicators of hydrophytic vegetation		
Sandy Mucky Mineral (S1)				Redox	(Depress	sions (F8)	and wetland hydrology must be present,		
5 cm N	Aucky Peat or Peat	(S3)					ĺ	unless disturbed or problematic.	
Restrictive	Layer: (if observed,)							
Type:									
Depth (in	ches):						Hydric S	oil Present? Yes X No	
Remarks:							1		
HYDROLOG	2V								
	drology Indicators	·•							
-	cators (minimum of		ack all that	ann/v)		c	Secondary Indicat	ors (minimum of two required)	
_	e Water (A1)	one is required, cire		ater-Stair	and Leave	_	becondary malcar	Surface Soil Cracks (B6)	
	Vater Table (A2)			quatic Fat				Drainage Patterns (B10)	
	ition (A3)			ue Aquati				Dry-Season Water Table (C2)	
	Marks (B1)			/drogen S				Crayfish Burrows (C8)	
	ent Deposits (B2)			-		es on Living I		Saturation Visible on Aerial	
	eposits (B3)					d Iron (C4)		Imagery (C9)	
	Mat or Crust (B4)					on in Tilled Sc	nile (C6)	Stunted or Stressed Plants (D1)	
	eposits (B5)			nin Muck			` ′	Geomorphic Position (D2)	
	ation Visible on Aeria	al Imagery (B7)		auge or W				FAC-Neutral Test (D5)	
	ely Vegetated Conca			her (Expl				- 1710 1104141 1001 (20)	
								1	
Field Obser									
	ter Present?		Yes		o_X_	Depth (inche	· —	Wetland Hydrology	
Water Table			Yes	_	0 <u>X</u>	Depth (inche	· —	Present?	
	Present? (includes c		Yes		o <u>X</u>	Depth (inche		Yes X No	
Describe Re	ecorded Data (stream	m gauge, monitoring	g well, aeria	l photos,	previous	inspections) ,	if available.		
Domoriso:									
Remarks:									

Project/Site: SPCSL 2A (Tier 3)		City	/County: Log	jan	Sampling Date	e: 10/27/2010
Applicant/Owner: UPRR				State: IL	Sampling Point	t: NVM 21
Investigator(s): NVM, MP			Section, Tow	vnship, Range: S32, 1		
	kside ditch			Local Relief (concav		concave
	3' 6.66" N	Long:	: 89°	° 27' 24.03" W	Datum: NAD 83	
Soil Map Unit Name: 68A - Sable silty clay	•				NWI Class	sification: None
Are climatic/hydrologic conditions on the site	e typical for this	s time of year?	Yes	SX No (If r	no, explain in Rema	rks)
Are Vegetation, Soil, or H	Hydrology	significantly	y disturbed?	Are "Normal Circ	umstances" present?	Yes X No
Are Vegetation, Soil, or H	Hydrology	naturally pro	blematic?	(If needed,	explain any answer	s in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sa	ampling point	locations, tr	ansects, important f	eatures, etc.	
Hydrophytic Vegetation Present? Yes	X No					
Hydric Soil Present? Yes	X No	_	Is the Sa	mpled Area within a V	Vetland? Ye	s X No
Wetland Hydrology Present? Yes	X No	_		•		
		CD DEMA/DE	OA Cample	a sint NIV/M 21 represe	anta all four wotland	In Coring of
Remarks: Wetland NVM-6A, NVM-6B, N depressions within west trackside ditch.	IVM-6C, NVIVI-0	6D. PEIVIA/PF	OA. Sample	point in vivi Z i represe	ents all tour wetland	s. Series or
depressions within west trackside ditch.						
VEGETATION - Use scientific names of p						
VEGETATION - 036 30lentine names of p	Absolute	Dominant	Indicator	Dominance Test W	Vorksheet:	
Tree Stratum (Plot size: r = 30')	% Cover	Species?	Status	Number of Dominar		
1. Populus deltoides	90	yes	FAC+	That Are OBL, FAC	W, or FAC:	2 (A)
2.						
3.	·			Total Number of Do		
4				Species Across All	Strata:	2 (B)
5						
	90 =	= Total Cover		Percent of Dominan	•	
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FAC	W, or FAC:	100% (A/B)
1. 						
2				Prevalence Index \		4 = 0
3				OBL species FACW species		$ \begin{array}{c} x 1 = & 0 \\ x 2 = & 0 \end{array} $
4 5.				FAC species		$x3 = \frac{0}{0}$
J	0 =	= Total Cover		FACU species		x = 4 = 0
Herb Stratum (Plot size: r = 5')		1010. 00. 1.		UPL species		x 5 = 0
1. Polygonum sp.	5	yes	FACW-OBL	Column Totals:	0	(A) 0 (B)
2.				Prevale	nce Index = B/A =	` ,
3.						
4.				Hydrophytic Veget	tation Indicators:	
5.					est for Hydrophytic V	/egetation
6.	·				nce Test is >50%	
7					ice Index is <3.01	
8					ogical Adaptations¹ (
9					marks or on a separate sh	•
10		= Total Cover		Problematic	c Hydrophytic Veget	ation' (Explain)
(Dist.)	5_=	= Total Cover		41 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Woody Vine Stratum (Plot size:)				dric soil and wetland	
1				must be present,	, unless disturbed or	problematic.
2	0	= Total Cove	er	Hydrophytic Ve	getation Present?	Yes X No
Remarks: (Include photo numbers here or	on a separate	sheet)				
PH 28 - NE	On a copa	311001.,				

Depth (inches)	Remarks		
0-5	Remarks		
0-5 2.5 Y 2.5/1 98 5 YR 3/4 2 C M Silty loam 5-16 2.5 Y 2.5/1 50 Silty clay loam Silty clay loam 2.5 Y 5/4 50 5 YR 3/4 5 C M Silty clay loam			
2.5 Y 5/4 50 5 YR 3/4 5 C M Silty clay loam			
Type: C=Concentration D=Depletion PM=Deduced Matrix CS=Covered or Costed Send Craice 21			
1Tuno: C=Concentration D=Deplotion PM=Deduced Matrix CS=Covered or Costed Sand Craige 21 and the DIST			
Trung: C=Concentration D=Depletion PM=Deduced Matrix CS=Covered or Costed Sand Craics 21 ===time DL=D			
1Tuno: C=Concentration D=Deplotion PM=Deduced Matrix CS=Covered or Costed Sand Craice 21			
1 Type: C-Concentration D-Depletion PM-Deduced Matrix CS-Covered or Costed Sand Crains 21			
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ² Location: PL=P	Pore Lining, M=Matrix		
Hydric Soil Indicators Indicators	or Problematic Hydric Soils ³ :		
Histosol (A1) Sandy Gleyed Matrix (S4) Coast F	Prairie Redox (A16)		
Histic Epipedon (A2) Sandy Redox (S5) Dark St	urface (S7)		
Black Histic (A3) Stripped Matrix (S6) Iron-M	langanese Masses (F12)		
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Very Sh	hallow Dark Surface (TF12)		
Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other ((Explain in Remarks)		
2 cm Muck (A10) Depleted Matrix (F3)			
Depleted Below Dark Surface (A11) Redox Dark Surface (F6)			
Thick Dark Surface (A12) Depleted Dark Surface (F7) Jundicators	of hydrophytic vegetation		
Condy Musicy Mineral (C1) V. Doday Depressions (E9)	hydrology must be present,		
5 cm Mucky Peat or Peat (S3) unless di	isturbed or problematic.		
Restrictive Layer: (if observed)	-		
Type:			
Depth (inches): Hydric Soil Prese	ent? Yes X No		
Remarks:			
Temano.			
HYDROLOGY			
Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of one is required; check all that apply)	nimum of two required)		
Surface Water (A1) Water-Stained Leaves (B9) Surface	ce Soil Cracks (B6)		
High Water Table (A2) Aquatic Fauna (B13) Draina	Drainage Patterns (B10)		
Saturation (A3) True Aquatic Plants (B14) Dry-Set	eason Water Table (C2)		
Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfis	sh Burrows (C8)		
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots Satura	ation Visible on Aerial		
Drift Deposits (B3) Presence of Reduced Iron (C4)	gery (C9)		
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Stunte	ed or Stressed Plants (D1)		
	orphic Position (D2)		
Iron Deposits (B5)Thin Muck Surface (C7)X Geom			
	Neutral Test (D5)		
	Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) FAC-N	Neutral Test (D5)		
Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Other (Explain in Remarks)	Neutral Test (D5) Wetland Hydrology		
Inundation Visible on Aerial Imagery (B7) X Sparsely Vegetated Concave Surface (B8) Gauge or Well Data (D9) Other (Explain in Remarks) Field Observations:			
Inundation Visible on Aerial Imagery (B7) X Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches)	Wetland Hydrology		
Inundation Visible on Aerial Imagery (B7) X Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No X Depth (inches) Water Table Present? Yes No X Depth (inches)	Wetland Hydrology Present?		
Inundation Visible on Aerial Imagery (B7) X Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Gauge or Well Data (D9) Other (Explain in Remarks) FAC-N Other (Explain in Remarks) Yes No X Depth (inches) Saturation Present? (includes capillary fringe) Yes No X Depth (inches)	Wetland Hydrology Present?		

Project/Site: SPCSL 2A (Tier 3)		City/County:	Logan	Sampling Date:	10/27/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	NVM 23
Investigator(s): NVM, MP		Section,	Township, Range: S32, T		
	ackside ditch			e, convex, none) : conca	ave
· · · · — — — — — — — — — — — — — — — —	° 2' 58.26" N	Long:	89° 27' 31.15" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava silt loa	ım, 0-2% slopes			NWI Classificat	ion: None
Are climatic/hydrologic conditions on the	site typical for this time	of year?	Yes X No (If n	o, explain in Remarks)	
Are Vegetation, Soil, o	r Hydrology si	gnificantly disturbed	d? Are "Normal Circu	imstances" present?	Yes X No
Are Vegetation, Soil, o	r Hydrologynat	urally problematic?	(If needed, e	explain any answers in R	Remarks.)
SUMMARY OF FINDINGS - Attach site	map showing sampli	ng point locations	s, transects, important fe	eatures, etc.	
Hydrophytic Vegetation Present? Ye	es X No				
Hydric Soil Present? Ye	es X No	Is the	Sampled Area within a W	etland? Yes X	No
Wetland Hydrology Present? Ye	es X No		·		
	TD DEMA Complete	:nt NIV/NA 22 names	anda la adla condita a da		
Remarks: Wetland NVM-7A & NVM-7	B. PEINA. Sample po	int invivi 23 represe	ents both wetlands.		
VEGETATION - Use scientific names o					
VEGETATION - 036 Scientific fiames of		minant Indicator	Dominance Test W	orksheet:	
Tree Stratum (Plot size:		ecies? Status	Number of Dominant		
1.			That Are OBL, FACV	V, or FAC:	(A)
2.			_		
3			Total Number of Dor	minant	
4			Species Across All S	Strata:	(B)
5			_		
	0 = Tota	al Cover	Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FACV	N, or FAC:	(A/B)
1			_		
2.			Prevalence Index W		•
3			OBL species	x 1 =	
4			FACW species FAC species	x 2 = x 3 =	
5		al Cover	FAC species	x 3 =	
Herb Stratum (Plot size: r = 5')	11 00001	UPL species	x 5 =	
Phalaris arundinacea	100	yes FACW+	· ·	0 (A)	0 (B)
2.				ice Index = B/A =	(-/
3.			_		-
4.			Hydrophytic Vegeta	ation Indicators:	
5.			X 1. Rapid Tes	st for Hydrophytic Vegeta	ation
6.			2. Dominano	ce Test is >50%	
7			3. Prevalence	ce Index is <3.01	
8			4. Morpholog	gical Adaptations¹ (Provid	de supporting
9			_	arks or on a separate sheet)	
0.			Problematic	Hydrophytic Vegetation	¹ (Explain)
	100 = Tota	al Cover			
Woody Vine Stratum (Plot size:)			ric soil and wetland hydr	• •
1			must be present,	unless disturbed or prob	lematic.
2			_		V N
	0 = T	otal Cover	Hydrophytic Veg	getation Present? Ye	s X No
Remarks: (Include photo numbers here	or on a separate sheet	f.)	•		
PH NVM 29 - NE (along RR ditch at north	n end of wetland).				

Profile Des	scription: (Describe	to the depth needs	ed to docum	ent the inc	dicator or	confirm the a	bsence of indicat	tors.)
Depth	Matrix		R	edox Feat	ures			•
(inches)	Color (moist)	% Color	(moist)	%	Type ¹	Loc²	Texture	Remarks
0-4	2.5 Y 2.5/1	100					Silty clay loam	
4-12	10 YR 3/1	98 7.5	YR 4/6	2+			Silty clay loam	
12-20	10 YR 3/1	50					Silty clay loam	
	2.5 Y 5/4	50 10`	YR 5/1	5	D	M	Silty clay loam	
¹ Type: C=0	Concentration, D=De	epletion, RM=Redu	ced Matrix,	CS=Cove	red or Co	ated Sand Gr	rains. ² Location	: PL=Pore Lining, M=Matrix
Hydric Soi	I Indicators						Indic	ators for Problematic Hydric Soils ³ :
Histos	sol (A1)			Sandy	Gleyed	Matrix (S4)		Coast Prairie Redox (A16)
Histic	Epipedon (A2)			Sandy	Redox (S5)		Dark Surface (S7)
Black	Histic (A3)			Strippe	ed Matrix	(S6)		Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)				Loamy	y Mucky	Mineral (F1)		Very Shallow Dark Surface (TF12)
Stratif		Loamy	y Gleyed	Matrix (F2)		Other (Explain in Remarks)		
2 cm	Muck (A10)			Deple	ted Matri	x (F3)		_
Deple	ted Below Dark Surf	ace (A11)		Redox	ι Dark Sι	ırface (F6)		
Thick	Dark Surface (A12)			Deple	ted Dark	Surface (F7)	31	dianta un af la columbia dia constattica
Sandy Mucky Mineral (S1)				X Redox	Depres	sions (F8)		dicators of hydrophytic vegetation wetland hydrology must be present,
5 cm	Mucky Peat or Peat	(S3)	_					unless disturbed or problematic.
Restrictive	Layer: (if observed,	')						
Type:		•						
Depth (in	nches) :						Hydric S	oil Present? Yes X No
Remarks:							1 ,	
Remarks.								
HYDROLO	GY							
Wetland H	ydrology Indicators	s:						
Primary Ind	licators (minimum of	one is required; ch	eck all that	apply)		S	Secondary Indicat	ors (minimum of two required)
Surfac	ce Water (A1)		W	ater-Stain	ned Leav	es (B9)		Surface Soil Cracks (B6)
High \	Nater Table (A2)		A	quatic Fau	ına (B13)		Drainage Patterns (B10)
Satura	ation (A3)		Tı	ue Aquati	ic Plants	(B14)		Dry-Season Water Table (C2)
Water	Marks (B1)		—— H	ydrogen S	Sulfide O	dor (C1)		Crayfish Burrows (C8)
Sedim	nent Deposits (B2)		<u> </u>	xidized Rh	nizosphe	res on Living I	Roots	Saturation Visible on Aerial
Drift D	Deposits (B3)		Pı	esence of	f Reduce	d Iron (C4)		Imagery (C9)
Algal	Mat or Crust (B4)		—R	ecent Iron	Reducti	on in Tilled Sc	oils (C6)	Stunted or Stressed Plants (D1)
Iron D	eposits (B5)		TI	nin Muck S	Surface (C7)	X	Geomorphic Position (D2)
	ation Visible on Aeria	al Imagery (B7)		auge or W				FAC-Neutral Test (D5)
	ely Vegetated Conca			ther <i>(Expl</i>				- , ,
Field Ohee								I
Field Obse			V	.	. v	Donth /inch	00)	Water de la constitución de la c
	ater Present?		Yes _	_ N		Depth (inche		Wetland Hydrology Present?
Water Table		anillan (frina)	Yes _	_	o <u>X</u>	Depth (inche		-
	Present? (includes c		Yes _		o <u>X</u>	Depth (inche		Yes X No
Describe R	ecorded Data (strear	m gauge, monitorin	g well, aeria	al photos,	previous	inspections),	if available.	
Remarks:								
. Comarks.								

Project/Site: SPCSL 2A (Tier 3)		City/County:	Logan	Sampling Date:	10/27/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	NVM 25
Investigator(s): NVM, MP		Section,	Township, Range: S5, T	18N, R03W	
· · · · · · · · · · · · · · · · · · ·	kside ditch			ve, convex, none) : concav	re
' ' '	' 52.34" N	Long:	89° 27' 36.41" W	Datum: NAD 83	
Soil Map Unit Name: 68A - Sable silty clay	/ loam, 0-2% slope	S		NWI Classification	on: None
Are climatic/hydrologic conditions on the site	e typical for this time	e of year?	Yes X No (If	no, explain in Remarks)	
Are Vegetation, Soil, or H	lydrology s	ignificantly disturbe	ed? Are "Normal Circ	cumstances" present? Y	es X No
Are Vegetation, Soil, or H	lydrologyna	turally problematic?	? (If needed,	, explain any answers in Re	emarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sampl	ing point locations	s, transects, important	features, etc.	
Hydrophytic Vegetation Present? Yes	X No				
Hydric Soil Present? Yes	X No	Is the	e Sampled Area within a \	Wetland? Yes X	No
Wetland Hydrology Present? Yes	X No				· —
		stucen read and rai	ilroad		
Remarks: Wetland NVM-8. PEMC. Wes	st trackside ditch be	tween road and rai	ilroad.		
VEGETATION - Use scientific names of p	lante				
VEGETATION COCCUMENT MANAGE 11 p		ominant Indicato	Dominance Test V	 Worksheet:	
Tree Stratum (Plot size:)		pecies? Status			
1			That Are OBL, FAC	CW, or FAC:	(A)
2.			_		
3			Total Number of Do		
4			Species Across All	Strata:	(B)
5		 	_		
	= Tota	al Cover	Percent of Dominal	•	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FAC	CW, or FAC:	(A/B)
1			Prevalence Index	Markahaati	
2			OBL species	worksneet: x 1 =	0
J	<u> </u>		FACW species	x 1 =	0
5.			FAC species	x 3 =	0
·	0 = Tota	al Cover	FACU species	x 4 =	0
Herb Stratum (Plot size: r = 5')			UPL species	x 5 =	0
1. Leersia oryzoides	100	yes OBL	·	0 (A)	0 (B)
2. Typha latifolia	10	OBL	Prevale	ence Index = B/A =	
3.			_		
4			Hydrophytic Vege		
5			_	est for Hydrophytic Vegetat	iion
6			_	nce Test is >50%	
7. 				nce Index is <3.01	
8			_	logical Adaptations¹ (Provide	supporting
9. 0.			_	emarks or on a separate sheet) ic Hydrophytic Vegetation¹ ((Evolain)
····	110 = Tota	al Cover	_	o Hydrophytic Togotation (LAPIGITY
Woody Vine Stratum (Plot size:	110	31 00701	1Indicators of hy	dric soil and wetland hydro	logy
1	 ′			t, unless disturbed or proble	
2				, unloss distances or process	illano.
	0 = 1	Total Cover	Hydrophytic Ve	egetation Present? Yes	_XNo
Remarks: (Include photo numbers here or PH 31 - SW (cattails in ditch).	on a separate shee	t.)			

Profile Description: (Des	scribe to the depth	needed to docun	nent the in	dicator o	confirm the a	bsence of indica	ators.)
Depth Ma	atrix	F	Redox Fea	tures			
(inches) Color (mois	st) %	Color (moist)	%	Type ¹	Loc²	Texture	Remarks
0-4 10 YR 3/1	100	7.5 YR 4/6	5	С	M	Silt loam	soil is soft and wet
4-16 10 YR 4/1	100	2.5 YR 4/6	5	С	М	Silt loam	
	<u> </u>						
	<u> </u>						
				' <u>-</u>			
¹ Type: C=Concentration,	D=Depletion, RM	=Reduced Matrix,	CS=Cove	red or Co	ated Sand Gr	rains. ² Locatio	n: PL=Pore Lining, M=Matrix
Hydric Soil Indicators						Indi	icators for Problematic Hydric Soils ³ :
Histosol (A1)			Sand	y Gleyed	Matrix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)		_	Sand	y Redox ((S5)		Dark Surface (S7)
Black Histic (A3)		_	Stripp	ed Matrix	(S6)		Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4	Loam	y Mucky	Mineral (F1)		Very Shallow Dark Surface (TF12)		
Stratified Layers (A5)	Stratified Layers (A5)				Matrix (F2)		Other (Explain in Remarks)
2 cm Muck (A10)		_	Deple	eted Matri	x (F3)		_
Depleted Below Dark	Surface (A11)	_	X Redo	x Dark Sı	urface (F6)		
Thick Dark Surface (A12)	_	Deple	eted Dark	Surface (F7)	31	ndicators of hydrophytic vegetation
Sandy Mucky Minera		Redo	x Depres	sions (F8)		wetland hydrology must be present,	
5 cm Mucky Peat or	Peat (S3)						unless disturbed or problematic.
Restrictive Layer: (if obse	erved)						
Type:							
Depth (inches):						Hydric	Soil Present? Yes X No
Remarks:							
HYDROLOGY							
	notoro:						
Wetland Hydrology Indic Primary Indicators (minimum		ired: check all that	t apply)		c	Socondary Indica	ators (minimum of two required)
Surface Water (A1)	um or one is requi			nod Loov	_	secondary maica	Surface Soil Cracks (B6)
High Water Table (A)	2)		Vater-Stai Aquatic Fa				Drainage Patterns (B10)
Saturation (A3)	2)		rue Aquat				Dry-Season Water Table (C2)
Water Marks (B1)			Tue Aquai Hydrogen S				Crayfish Burrows (C8)
Sediment Deposits (I	P3\		-		res on Living F		Saturation Visible on Aerial
Drift Deposits (B3)	D2)				ed Iron (C4)		Imagery (C9)
	24)				on in Tilled So	vila (C6)	
Algal Mat or Crust (B	94)					` ′	Stunted or Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on	Aorial Imagary (Thin Muck				Geomorphic Position (D2)
			Gauge or V Other <i>(Exp</i>			_^	FAC-Neutral Test (D5)
Sparsely Vegetated (Concave Surface	(B6)	Julei (Exp	iaiii iii Ne	illains)		
Field Observations:							
Surface Water Present?		Yes _	^	lo X	Depth (inche	es)	Wetland Hydrology
Water Table Present?		Yes _	^	lo X	Depth (inche	es)	Present?
Saturation Present? (inclu	des capillary fring	e) Yes _	<u> </u>	lo <u>X</u>	Depth (inche	es)	Yes X No
Describe Recorded Data (stream gauge, m	onitoring well, aer	ial photos,	previous	inspections),	if available.	
Demontre							
Remarks:							

Project/Site: SPCSL 2A (Tier 3)		City/C	County: L	ogan	Sampling Date:	10/27/2010	0
Applicant/Owner: UPRR				State: IL	Sampling Point:	NVM 27	
Investigator(s): NVM, MP			Section, T	ownship, Range: S6, T18			
· · · · · · · · · · · · · · · · · · ·	ckside ditch			Local Relief (concave		ncave	
· · · /	° 2' 40.00" N	Long:	8	39° 27' 46.75" W	Datum: NAD 83	E	
Soil Map Unit Name: 86B - Osco silt loa						fication: None	
Are climatic/hydrologic conditions on the s	site typical for this	s time of year?	Y	es X No (If no	o, explain in Remark	rs)	
Are Vegetation, Soil, or	Hydrology	significantly	disturbed	? Are "Normal Circui	mstances" present?	Yes X N	No _
Are Vegetation, Soil, or	Hydrology	naturally prob	lematic?	(If needed, e	xplain any answers	in Remarks.)	
SUMMARY OF FINDINGS - Attach site r	nap showing sa	ampling point lo	ocations,	transects, important fe	atures, etc.		
Hydrophytic Vegetation Present? Yes	s X No						
Hydric Soil Present? Yes	s X No	_	Is the S	Sampled Area within a We	etland? Yes	X No	
Wetland Hydrology Present? Yes	s X No	_					_
	CA/DEMC Land		: 4 4				
Remarks: Wetland NVM-9. PEMA/PS	SA/PEMC. Long	g linear wetland	in west tra	ackside ditch.			
VEGETATION - Use scientific names of	f plants						
VEGETATION - Use scientific flames of	Absolute	Dominant	Indicator	Dominance Test Wo	nrkshoot:		
Tree Stratum (Plot size:) % Cover	Species?	Status	Number of Dominant			
1.				That Are OBL, FACV	V, or FAC:	1	(A)
2.				-	_		
3.				Total Number of Don	ninant		
4.				Species Across All S	trata:	1	(B)
5.				_			
	0 =	= Total Cover		Percent of Dominant	Species		
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACV	V, or FAC:	100% (A	4/B)
1				_			
2				Prevalence Index W	orksheet:		
3				OBL species		<1 = 0	_
4				FACW species		(2 = 0	_
5.				FAC species		(3 = 0	_
Hards Otractions (Distained 51	=	= Total Cover		FACU species		4 = 0	_
Herb Stratum (Plot size: r = 5')	10	V00	EAC\\\.	UPL species		(5 = 0) (A) 0	_
Phalaris arundinacea Glecoma hederacea		yes	FACW+	Column Totals:	ce Index = B/A =	(A) 0	_ (B)
Unknown sp.	$-\frac{3}{2}$		1 700	-			_
Other unknown				Hydrophytic Vegeta	ation Indicators		
5.				_ ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	st for Hydrophytic Ve	egetation	
6.				X 2. Dominanc		rgotation.	
7.					e Index is <3.01		
8.				-	gical Adaptations¹ (P	rovide supporting	
9.				data in Rema	arks or on a separate she	et)	
10.				Problematic	Hydrophytic Vegeta	tion¹ (Explain)	
	19 =	Total Cover		_			
Woody Vine Stratum (Plot size:)			¹ Indicators of hydr	ic soil and wetland I	nydrology	
1.				must be present, u	unless disturbed or p	problematic.	
2.							
	0	= Total Cover		Hydrophytic Veg	etation Present?	Yes X No	ر
Remarks: (Include photo numbers here of	or on a senarate	sheet)					
PH 37 - NE. Willows and standing water i			Other ve	agetation included: Typh	a en & Lemna en		
THE TYMONS and Standing Water I	wouding south	or ourripic point.	. Outlot ve	ogotation moladed. Typh	a op. a Lonnia op.		

Profile Desc	ription: (Describe to	the depth ne	eded to docume	nt the in	dicator o	confirm the al	bsence of indicat	tors.)
Depth	Matrix		Red	dox Fea	tures			
(inches)	Color (moist)	% Co	olor (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-26	2.5 Y 2.5/1	95 7	.5 YR 4/6	5	С	M&PL		
			_					
¹ Type: C=C	oncentration, D=Dep	letion, RM=Re	duced Matrix, C	S=Cove	ered or Co	ated Sand Gra	ains. ² Location	: PL=Pore Lining, M=Matrix
Hydric Soil								ators for Problematic Hydric Soils ³ :
Histoso				Sand	v Gleved	Matrix (S4)		Coast Prairie Redox (A16)
_	pipedon (A2)			_	y Redox (Dark Surface (S7)
	listic (A3)			_	ed Matrix			Iron-Manganese Masses (F12)
_	en Sulfide (A4)			_		Mineral (F1)		Very Shallow Dark Surface (TF12)
Stratifie		_		Matrix (F2)		Other (Explain in Remarks)		
	uck (A10)				eted Matri			
	ed Below Dark Surface	ce (A11)	X	_		urface (F6)		
Thick E	ark Surface (A12)	, ,		_ Deple	eted Dark	Surface (F7)	3.	
Sandy	Mucky Mineral (S1)			Redo	x Depres	sions (F8)		dicators of hydrophytic vegetation wetland hydrology must be present,
5 cm N	ucky Peat or Peat (S	33)		_				unless disturbed or problematic.
Restrictive	_ayer: (if observed)							
Type:								
Depth (inc	ches):						Hydric S	oil Present? Yes X No
Remarks:							<u>l</u>	
T Comando								
HYDROLOG	iΥ							
Wetland Hy	drology Indicators:							
Primary Indic	cators (minimum of o	ne is required,	check all that a	pply)		Se	econdary Indicat	ors (minimum of two required)
Surface	e Water (A1)		Wa	iter-Stai	ned Leav	es (B9)		Surface Soil Cracks (B6)
High W	ater Table (A2)		Aqı	uatic Fa	una (B13)		Drainage Patterns (B10)
Saturat	ion (A3)		Tru	ie Aquat	tic Plants	(B14)		_Dry-Season Water Table (C2)
Water I	Marks (B1)		Hy	drogen S	Sulfide O	dor (C1)	X	Crayfish Burrows (C8)
Sedime	ent Deposits (B2)		X Ox	idized R	hizosphe	res on Living R	Roots	Saturation Visible on Aerial
Drift De	eposits (B3)		Pre	esence o	of Reduce	d Iron (C4)		Imagery (C9)
Algal M	lat or Crust (B4)		Re	cent Iror	n Reducti	on in Tilled Soi	ils (C6)	Stunted or Stressed Plants (D1)
	posits (B5)		Thi	n Muck	Surface (C7)	X	Geomorphic Position (D2)
Inunda	tion Visible on Aerial	Imagery (B7)		-	Vell Data			FAC-Neutral Test (D5)
X Sparse	ly Vegetated Concav	e Surface (B8)Oth	ner (Exp	lain in Re	marks)		
Field Obser	vations:							
Surface Wat	er Present?		Yes	_ ^	10 X	Depth (inche	s)	Wetland Hydrology
Water Table	Present?		Yes X		lo	Depth (inche	· —	Present?
Saturation P	resent? (includes cap	pillary fringe)	Yes X	<u> </u>	10	Depth (inche	s) <u>25</u>	Yes <u>X</u> No
Describe Re	corded Data (stream	gauge, monito	oring well, aerial	photos,	previous	inspections),	if available.	
Remarks:								

Project/Site: SPCSL 2A (Tier 3)		City/County:	Logan	Sampling Date:	10/27/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	NVM 29
Investigator(s): NVM, MP		Section	i, Township, Range: S6, T		
Landform (hillslope, terrace, etc.):	Roadside ditch		_	re, convex, none) : cond	ave
Slope (%): 0-2 Lat:	40° 2' 18.95" N	Long:	89° 28' 4.76" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava si				NWI Classifica	ation: None
Are climatic/hydrologic conditions on	the site typical for this	time of year?	Yes X No (If I	no, explain in Remarks)	
Are Vegetation, Soil	, or Hydrology	significantly disturb	ped? Are "Normal Circ	umstances" present?	Yes X No
Are Vegetation, Soil	, or Hydrology	naturally problemation	? (If needed,	explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach	site map showing sa	mpling point location	ns, transects, important f	eatures, etc.	
Hydrophytic Vegetation Present?	Yes X No				
Hydric Soil Present?	Yes X No	- Is th	ne Sampled Area within a V	Vetland? Yes	X No
Wetland Hydrology Present?	Yes X No	_	·	_	
Remarks: Wetland NVM-10A & N	VM-10B. PEMA. Sar	nple point NVM 29 rep	presents both wetlands.		
V50574710N II : ::					
VEGETATION - Use scientific nam	-		Dominana Taat M	Vaulaahaati	
Tree Stratum (Plot size:	Absolute) % Cover	Dominant Indicate Species? Statu			
1		oposioo. Otata	That Are OBL, FAC	•	1 (A)
2.					
3.			Total Number of Do	nminant	
4.			Species Across All		1 (B)
5.			`		
	0 =	Total Cover	Percent of Dominar	nt Species	
Sapling/Shrub Stratum (Plot size:			That Are OBL, FAC	•	100% (A/B)
1.			,	·	
2.			Prevalence Index \	Worksheet:	
3.			OBL species	x 1	= 0
4.			FACW species	x 2	= 0
5.			FAC species	x 3	= 0
	0 =	= Total Cover	FACU species	x 4	= 0
Herb Stratum (Plot size: r = 5')		UPL species	x 5 =	
1. Carex sp.	90	yes FACU-0		0 (A)) <u> </u>
2. Ajuga reptans	10	UPL	Prevale	nce Index = B/A =	
3					
4			Hydrophytic Veget		.t.ti.
5				est for Hydrophytic Vege nce Test is >50%	tation
6				ice lest is >50% ice Index is <3.01	
8.				ogical Adaptations¹ (Prov	ride supporting
9.				marks or on a separate sheet)	ide supporting
0.				c Hydrophytic Vegetation	n¹ (Explain)
·	100 =	Total Cover	— —	, , , , , , , , , , , , , , , , , , ,	(=:- -:
Woody Vine Stratum (Plot size:		10101 00101	1Indicators of hyd	dric soil and wetland hyd	trology
1			-	, unless disturbed or pro	
2			must be present,	unicas disturbed or pro	bicinatic.
		= Total Cover	— Hydrophytic Ve	getation Present? Y	es X No
			Trydrophytic vo	gottation i resent :	
Remarks: (Include photo numbers I		sheet.)			
PH 39 - SW. Carex sp. Assumed to	be FACW or wetter.				

Profile Des	scription: (Describe	to the depth neede	d to docum	ent the inc	dicator or	confirm the al	bsence of indicat	fors.)
Depth	Matrix		R	edox Feat	ures			
(inches)	Color (moist)	% Color	(moist)	%	Type ¹	Loc²	Texture	Remarks
0-8	2.5 Y 2.5/1	100	<u> </u>				Silt loam	
8-16	10 YR 2/2	50					Silt loam	
	2.5 Y 4/4	50 7.5	/R 4/6	5	С			
¹ Type: C=0	Concentration, D=De	pletion, RM=Reduc	ed Matrix,	CS=Cover	red or Co	ated Sand Gra	ains. ² Location	: PL=Pore Lining, M=Matrix
Hydric Soi	I Indicators						Indic	ators for Problematic Hydric Soils ³ :
Histos	sol (A1)			Sandy	Gleyed I	Matrix (S4)		Coast Prairie Redox (A16)
Histic	Epipedon (A2)			Sandy	Redox (S5)		Dark Surface (S7)
Black	Histic (A3)			Strippe	ed Matrix	(S6)		- Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)				Loamy	Mucky I	Mineral (F1)		Very Shallow Dark Surface (TF12)
Stratified Layers (A5)				Loamy	Gleyed	Matrix (F2)		- Other (Explain in Remarks)
2 cm	Muck (A10)			Deple	ted Matrix	(F3)		_
Deple	ted Below Dark Surfa	ace (A11)		X Redox	Dark Su	rface (F6)		
Thick	Dark Surface (A12)			Deple	ted Dark	Surface (F7)	31	disatana af budasa butia usaatati sa
Sandy Mucky Mineral (S1)				Redox	Depress	sions (F8)		dicators of hydrophytic vegetation wetland hydrology must be present,
5 cm	Mucky Peat or Peat (S3)						unless disturbed or problematic.
Restrictive	Layer: (if observed)							
Type:	, ,							
Depth (ir	nches) :						Hydric S	oil Present? Yes X No
Remarks:	· <u></u>							
ixemaiks.								
HYDROLO	GY							
Wetland H	ydrology Indicators	:						
Primary Ind	licators (minimum of	one is required; ch	eck all that	apply)		S	econdary Indicat	ors (minimum of two required)
Surfac	ce Water (A1)		W	ater-Stain	ed Leave	es (B9)		Surface Soil Cracks (B6)
High \	Water Table (A2)		A	quatic Fau	ına (B13)			Drainage Patterns (B10)
Satura	ation (A3)		Tr	ue Aquati	c Plants	(B14)		Dry-Season Water Table (C2)
Water	Marks (B1)		—— H	ydrogen S	Sulfide Oc	lor (C1)	X	Crayfish Burrows (C8)
Sedim	nent Deposits (B2)			xidized Rh	nizospher	es on Living F	Roots	Saturation Visible on Aerial
Drift D	Deposits (B3)		Pı	resence of	f Reduce	d Iron (C4)		Imagery (C9)
Algal	Mat or Crust (B4)		R	ecent Iron	Reduction	n in Tilled So	ils (C6)	Stunted or Stressed Plants (D1)
Iron D	eposits (B5)			nin Muck S	Surface (C7)	x	Geomorphic Position (D2)
	ation Visible on Aeria	I Imagery (B7)		auge or W				FAC-Neutral Test (D5)
_	ely Vegetated Conca			ther <i>(Expl</i>			-	<u> </u>
								T
Field Obse						5		
	ater Present?		Yes _	N		Depth (inche	·	Wetland Hydrology Present?
Water Tabl			Yes _	_	o <u>X</u>	Depth (inche	·	1
Saturation	Present? (includes ca	apillary fringe)	Yes _	N	o <u>X</u>	Depth (inche	es)	Yes <u>X</u> No
Describe R	ecorded Data (stream	n gauge, monitorin	g well, aeria	al photos,	previous	inspections) ,	if available.	
Remarks:								
i verilai ka.								

Project/Site: SPCSL 2A (Tier 3)		City/	County: Lo	ogan	Sampling Date:	10/27/2010	J
Applicant/Owner: UPRR				State: IL	Sampling Point:	NVM 31	
Investigator(s): NVM, MP			Section, To	ownship, Range: S6, T1			
	kside ditch				e, convex, none) : cor	ncave	
	2' 7.90" N	Long:	8	9° 28' 13.66" W	Datum: NAD 83		
Soil Map Unit Name: 705A - Buckhart silt		-				cation: None	
Are climatic/hydrologic conditions on the site	e typical for thi	s time of year?	Ye		no, explain in Remarks	s)	
Are Vegetation, Soil, or H	lydrology	significantly	disturbed?	? Are "Normal Circu	umstances" present?	Yes X N	10
Are Vegetation, Soil, or H	lydrology	naturally prob	olematic?	(If needed,	explain any answers ii	n Remarks.)	
SUMMARY OF FINDINGS - Attach site ma	ap showing sa	ampling point	locations,	transects, important fe	eatures, etc.		
Hydrophytic Vegetation Present? Yes	X No						
Hydric Soil Present? Yes	X No	_	Is the S	Sampled Area within a W	/etland? Yes	X No	
Wetland Hydrology Present? Yes	X No			·	_		-
		itah hatusan hi		tunnels North of field o			
Remarks: Wetland NVM-11. PEMC. W	est trackside d	itch between ni	gnway and	tracks. North of field ac	ccess road.		
VEGETATION - Use scientific names of p	lante						
VEGETATION - Use scientific fiames of p	Absolute	Dominant	Indicator	Dominance Test W	orksheet:		
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominan			
1.				That Are OBL, FAC	W, or FAC:		(A)
2.				-			
3.				Total Number of Do	minant		
4				Species Across All S	Strata:		(B)
5				_			
	0 :	= Total Cover		Percent of Dominan	t Species		
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FAC	W, or FAC:	(A	/B)
1							
2				Prevalence Index V			
3				OBL species		1 = 0	-
4				FACW species		2 = 0	-
5	0 :	= Total Cover		FAC species FACU species		3 = 0 4 = 0	-
Herb Stratum (Plot size: r = 5')		- Total Covel		UPL species	x :		-
1. Leersia oryzoides	30	yes	OBL	Column Totals:		A) 0	(B)
2. Typha latifolia	10	yes	OBL	_	nce Index = B/A =		- (0)
3.				-			-
4.				Hydrophytic Veget	ation Indicators:		
5.				•	st for Hydrophytic Veg	getation	
6.				2. Dominan	ce Test is >50%		
7.				3. Prevalence	ce Index is <3.01		
8.				4. Morpholo	gical Adaptations1 (Pro	ovide supporting	
9.				data in Rem	narks or on a separate sheet	t)	
0				Problemation Problemation	Hydrophytic Vegetati	on¹ (Explain)	
	40	= Total Cover					
Woody Vine Stratum (Plot size:)			¹ Indicators of hyd	ric soil and wetland hy	ydrology	
1				must be present,	unless disturbed or pr	oblematic.	
2		·		_			
	0	= Total Cove	r	Hydrophytic Veg	getation Present?	Yes X No	
				' ' ' '	=		

Depth Matr	<u> </u>	Re	edox Feat					
(inches) Color (moist)	<u></u> % (Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-16 2.5 Y 2.5/1	100							
¹ Type: C=Concentration, D=	Depletion, RM=R	educed Matrix, (CS=Cove	red or Coa	ted Sand Gra	ins. ² Location	n: PL=Pore Lining, M=Matrix	
Hydric Soil Indicators						Indi	cators for Problematic Hydric Soils ³ :	
Histosol (A1)			Sandy	y Gleyed M	latrix (S4)		Coast Prairie Redox (A16)	
Histic Epipedon (A2)			Sandy	y Redox (S	5)		Dark Surface (S7)	
Black Histic (A3)		_	Stripp	ed Matrix ((S6)		Iron-Manganese Masses (F12)	
Hydrogen Sulfide (A4)	_	Loam	y Mucky M	ineral (F1)		Very Shallow Dark Surface (TF12)		
Stratified Layers (A5)	_		y Gleyed N		X	Other (Explain in Remarks)		
2 cm Muck (A10)	_		ted Matrix			_		
Depleted Below Dark S	urface (A11)	_		x Dark Sur				
Thick Dark Surface (A1		_			surface (F7)	3.	officers of the decoder of the second	
Sandy Mucky Mineral (S1)	_	Redox	x Depressi	ons (F8)		ndicators of hydrophytic vegetation	
	_	Redox Depressions (F8)				and wetland hydrology must be present, unless disturbed or problematic.		
5 cm Mucky Peat or Pe	at (00)							
5 cm Mucky Peat or Pe								
5 cm Mucky Peat or Pe Restrictive Layer: (if observed)								
5 cm Mucky Peat or Pe Restrictive Layer: (if observed) Type:						Hydric ⁹	Soil Present? Yes X No	
5 cm Mucky Peat or Pe Restrictive Layer: (if observable) Type: Depth (inches):	red)					Hydric S	Soil Present? Yes X No	
5 cm Mucky Peat or Pe Restrictive Layer: (if observed) Type: Depth (inches):		12b of the 1987 (Corps De	lineation M	lanual.	Hydric S	Soil Present? Yes X No	
5 cm Mucky Peat or Pe Restrictive Layer: (if observed) Type: Depth (inches):	red)	12b of the 1987 (Corps Del	lineation M	lanual.	Hydric S	Soil Present? Yes X No	
5 cm Mucky Peat or Pe Restrictive Layer: (if observed) Type: Depth (inches): Remarks: Soils assumed	red)	12b of the 1987 (Corps Del	lineation M	anual.	Hydric S	Soil Present? Yes X No	
5 cm Mucky Peat or Pe Restrictive Layer: (if observed from the content of the co	red)	12b of the 1987 (Corps Del	lineation M	lanual.	Hydric 9	Soil Present? Yes X No	
5 cm Mucky Peat or Pearling Restrictive Layer: (if observing Type: Depth (inches): Remarks: Soils assumed HYDROLOGY Wetland Hydrology Indicate	red) I hydric per Step 1 ors:			lineation M			Soil Present? Yes X No	
5 cm Mucky Peat or Pearl Sector Secto	red) I hydric per Step 1 ors:	d; check all that	apply)	lineation M	Se			
5 cm Mucky Peat or Pearly Restrictive Layer: (if observed from the control of the	red) I hydric per Step 1 ors:	d; check all that	apply) 'ater-Stair		Se		tors (minimum of two required)	
5 cm Mucky Peat or Pearl Setrictive Layer: (if observing Type: Depth (inches): Remarks: Soils assumed HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1)	red) I hydric per Step 1 ors:	d; check all that W	apply) 'ater-Stair quatic Fau	ned Leaves	<u>Se</u> s (B9)		tors (minimum of two required) Surface Soil Cracks (B6)	
5 cm Mucky Peat or Pearl Setrictive Layer: (if observed Type: Depth (inches): Remarks: Soils assumed Set Soils assumed Set Soils assumed Set	red) I hydric per Step 1 ors:	d; check all that W Ad	apply) ater-Stair quatic Fau rue Aquat	ned Leaves una (B13)	Se (B9)		tors <i>(minimum of two required)</i> Surface Soil Cracks (B6) Drainage Patterns (B10)	
5 cm Mucky Peat or Pearl Servictive Layer: (if observing Type: Depth (inches): Remarks: Soils assumed HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) X Saturation (A3)	ors:	d; check all that W Ac Tr	<i>apply)</i> /ater-Stair quatic Fau rue Aquat ydrogen S	ned Leaves una (B13) ic Plants (E Sulfide Odd	Se (B9)	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)	
5 cm Mucky Peat or Pearl Restrictive Layer: (if observing Type: Depth (inches): Remarks: Soils assumed Soils assum	ors:	d; check all that W Ac Tr Ht	apply) /ater-Stair quatic Fau rue Aquat ydrogen S xidized Rl	ned Leaves una (B13) ic Plants (E Sulfide Odd	Se (B9) 314) or (C1) es on Living R	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)	
5 cm Mucky Peat or Pearl Restrictive Layer: (if observed Type: Depth (inches): Remarks: Soils assumed Soils assumed Remarks: Soils assumed Soils assumed Remarks: Soils assumed Soils assumed Remarks: Soils a	ors: of one is required	d; check all that with the distribution of the	apply) Pater-Stair Quatic Fau Tue Aquat Rydrogen S Exidized Ri Presence o	ned Leaves una (B13) iic Plants (B Sulfide Odo hizosphere of Reduced	Se (B9) 314) or (C1) es on Living R	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)	
5 cm Mucky Peat or Pearl Restrictive Layer: (if observed Type: Depth (inches): Remarks: Soils assumed Soils assumed Primary Indicators (minimum Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	ors: of one is required	d; check all that W AG Tr Hy CO Pr	apply) later-Stair quatic Fau rue Aquat ydrogen S xidized Rl resence o	ned Leaves una (B13) ic Plants (B Sulfide Odo hizosphere of Reduced n Reduction	Se (B9) B14) or (C1) es on Living R Iron (C4) in in Tilled Soil	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)	
5 cm Mucky Peat or Pearl Restrictive Layer: (if observed Type: Depth (inches): Remarks: Soils assumed HYDROLOGY Wetland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	ors: of one is required	d; check all that W Ad Tr Ht	apply) later-Stair quatic Fau rue Aquat ydrogen S xidized Ri resence o ecent Iron	ned Leaves una (B13) ic Plants (B Sulfide Odo hizosphere of Reduced n Reductior Surface (C	Se (B9) B14) or (C1) es on Living R Iron (C4) or in Tilled Soil	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
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Setrictive Layer: (if observed Type: Depth (inches): Remarks: Soils assumed Soils assu	ors: of one is required area Imagery (B7)	d; check all that W	apply) Pater-Stair Quatic Fau Tue Aquat Rydrogen S Exidized Ri Resence of Recent Iron Inin Muck S Ruge or W	ned Leaves una (B13) ic Plants (B Sulfide Odo hizosphere of Reduced n Reduction Surface (C Vell Data (I	Se (B9) B14) or (C1) es on Living R Iron (C4) in in Tilled Soil 7)	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
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5 cm Mucky Peat or Pearls Restrictive Layer: (if observations): Remarks: Soils assumed HYDROLOGY Netland Hydrology Indicate Primary Indicators (minimum Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on A X Sparsely Vegetated Co	ors: of one is required area Imagery (B7)	d; check all that W Ad Tr Hy O Rr Tr C S S S S S S S S S S S S S S S S S S	apply) Idater-Stair quatic Fau rue Aquat ydrogen S xidized RI resence o ecent Iron nin Muck S auge or W ther (Expl	ned Leaves una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reductior Surface (C Vell Data (I lain in Rem	Se (B9) B14) or (C1) es on Living R Iron (C4) in in Tilled Soil 7) D9) harks)	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)	
Scm Mucky Peat or Pears Restrictive Layer: (if observed for peech	ors: of one is required erial Imagery (B7) ncave Surface (B	d; check all that W Ad Tr Hy O: Ri Tt S S S S S S S S S S S S S S S S S S	apply) Tater-Stair quatic Fau rue Aquat ydrogen S xidized RI resence o ecent Iron nin Muck S auge or W ther (Expl	ned Leaves una (B13) ic Plants (B Sulfide Odo hizosphere of Reduction Surface (C Vell Data (I lain in Ren	Se (B9) 314) or (C1) es on Living R Iron (C4) on in Tilled Soil 7) D9) earks)	condary Indica	tors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology	

Project/Site: SPCSL 2A (Tier 3)		City/County: Log	gan	Sampling Date: 10/28/2010
Applicant/Owner: UPRR			State: IL	Sampling Point: NVM 35
Investigator(s): NVM, MP		Section, Tov	vnship, Range: S13, T1	
· · · · · · · · · · · · · · · · · · ·	side ditch	_		convex, none) : concave
' ' '	' 10.21" N	_)° 29' 5.94" W	Datum: NAD 83
Soil Map Unit Name: 712A- Spaulding silt	y clay loam, 0-2%	slopes		NWI Classification: None
Are climatic/hydrologic conditions on the site	e typical for this time	e of year? Yes	S X No (If no	, explain in Remarks)
Are Vegetation, Soil, or H	ydrology s	gnificantly disturbed?	Are "Normal Circun	nstances" present? Yes X No
Are Vegetation , Soil , or H	ydrology nat	urally problematic?	(If needed, ex	xplain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sampli	ng point locations, tr	ansects, important fea	atures, etc.
Hydrophytic Vegetation Present? Yes	X No			
Hydric Soil Present? Yes	X No	Is the Sa	mpled Area within a We	etland? Yes X No
Wetland Hydrology Present? Yes	X No		•	
Remarks: Wetland NVM-12A & NVM-12	B. PEMA/PSSA. S	ample point NVM 35 r	epresents both wetlands	S.
VECETATION Has accomplified manners of m	lanta			
VEGETATION - Use scientific names of p		and a second sec	Dominance Test Wo	wka baati
Tree Stratum (Plot size:)		ominant Indicator becies? Status	Number of Dominant	
1.	·		That Are OBL, FACW	
2.				
3.			Total Number of Dom	inant
4.			Species Across All St	rata: <u>3</u> (B)
5.				
	0 = Tota	al Cover	Percent of Dominant	Species
Sapling/Shrub Stratum (Plot size: r =	: 15')		That Are OBL, FACW	/, or FAC: 100% (A/B)
1. Salix exigua	10	yes OBL		
2. Acer saccharinum	2	FACW	Prevalence Index W	orksheet:
3			OBL species	x 1 = 0
4			FACW species	x 2 = 0
5	12 = Tota	al Cover	FACIL appaies	x 3 = 0 x 4 = 0
Herb Stratum (Plot size: r = 5')	12 = 100	ai Covei	FACU species UPL species	x 4 = 0 x 5 = 0
1. Aster simplex	40	yes FACW	Column Totals:	${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${}$ ${$
2. Carex sp.	40	yes FACU-OBL		te Index = B/A =
3. Spartina pectinata	10	FACW+	1.000.0	
4. Iris sp.	5		Hydrophytic Vegeta	tion Indicators:
5.				for Hydrophytic Vegetation
6.			X 2. Dominance	e Test is >50%
7.			3. Prevalence	e Index is <u><</u> 3.01
8.			4. Morpholog	ical Adaptations¹ (Provide supporting
9.				rks or on a separate sheet)
10			Problematic I	Hydrophytic Vegetation¹ (Explain)
	95 = Tota	al Cover		
Woody Vine Stratum (Plot size:)		•	c soil and wetland hydrology
1. Vitis riparia		yes FACW-	must be present, u	nless disturbed or problematic.
2		Tatal Oansa	I the state of the text	delle Breeze 10 V V
	2 = T	otal Cover	Hydrophytic Vege	etation Present? Yes X No
Remarks: (Include photo numbers here or	on a separate shee	t.)	•	
PH 52 - SW. Other vegetation included: Se	olidago altissima			

Depth Matrix				bsence of indica	11013.)
		k Features			
	r (moist)	% Type ¹	Loc ²	Texture	Remarks
0-8 2.5 Y 2.5/1 100				Silty loam	
8-16 2.5 Y 2.5/1 100				Silty clay loam	blocky/angular
Type: C=Concentration, D=Depletion, RM=Redu	ced Matrix CS=	Covered or Co	ated Sand Gra	ains ² Locatio	n: PL=Pore Lining, M=Matrix
Hydric Soil Indicators					icators for Problematic Hydric Soils ³ :
Histosol (A1)	;	Sandy Gleyed	Matrix (S4)		Coast Prairie Redox (A16)
Histic Epipedon (A2)		Sandy Redox	, ,		Dark Surface (S7)
Black Histic (A3)		Stripped Matri	, ,		Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)		Loamy Mucky	, ,		Very Shallow Dark Surface (TF12)
Stratified Layers (A5)		Loamy Gleyed		X	Other (Explain in Remarks)
2 cm Muck (A10)		Depleted Matr			_ ` ` `
Depleted Below Dark Surface (A11)		Redox Dark S			
Thick Dark Surface (A12)		Depleted Dark		3.	
Sandy Mucky Mineral (S1)		Redox Depres			ndicators of hydrophytic vegetation I wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)				and	unless disturbed or problematic.
Restrictive Layer: (if observed)					
Type:					
Depth (inches):				Hydric	Soil Present? Yes X No
Remarks: Soils assumed hydric per Step 12b c	of the 1987 Corp	s Delineation I	Manual		
			viariaai.		
HYDROLOGY			vialidal.		
			vandal.		
Netland Hydrology Indicators:	neck all that app			econdary Indica	ators (minimum of two required)
Vetland Hydrology Indicators:			S	econdary Indica	ators <i>(minimum of two required)</i> Surface Soil Cracks (B6)
Vetland Hydrology Indicators: Primary Indicators (minimum of one is required; ch	Water	ly)	<u>S</u> (es (B9)	econdary Indica	, ,
Netland Hydrology Indicators: Primary Indicators (minimum of one is required; ch Surface Water (A1)	Water Aquat	/y) -Stained Leav		econdary Indica	Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; ch Surface Water (A1) X High Water Table (A2)	Water Aquat	<i>ly)</i> Stained Leav ic Fauna (B13	Ses (B9)) (B14)	econdary Indica	Surface Soil Cracks (B6) Drainage Patterns (B10)
Primary Indicators (minimum of one is required; che Surface Water (A1) X High Water Table (A2) X Saturation (A3)	Water Aquat True /	ly) Stained Leav ic Fauna (B13 Aquatic Plants gen Sulfide O	Ses (B9)) (B14)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Primary Indicators (minimum of one is required; check Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1)	Water Aquat True / Hydro	ly) Stained Leav ic Fauna (B13 Aquatic Plants gen Sulfide O	es (B9)) (B14) dor (C1) vres on Living F		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Primary Indicators (minimum of one is required; check Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	Water Aquat True / Hydro Oxidiz Prese	ly) -Stained Leav ic Fauna (B13 Aquatic Plants igen Sulfide O zed Rhizosphe ince of Reduce	es (B9)) (B14) dor (C1) vres on Living F	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial
Primary Indicators (minimum of one is required; che Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	Water Aquat True / Hydro Oxidiz Prese Recer	ly) -Stained Leav ic Fauna (B13 Aquatic Plants igen Sulfide O zed Rhizosphe ince of Reduce	es (B9)) (B14) dor (C1) res on Living Red Iron (C4) on in Tilled Soi	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Primary Indicators (minimum of one is required; check Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	Water Aquat True / Hydro Oxidiz Prese Recei	r-Stained Leavic Fauna (B13 Aquatic Plants agen Sulfide O aged Rhizosphe ance of Reduce	es (B9)) (B14) dor (C1) eres on Living Fed Iron (C4) on in Tilled Soi	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Primary Indicators (minimum of one is required; check Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Water Aquat True / Hydro Oxidiz Prese Recer Thin M	ly) -Stained Leavic Fauna (B13 Aquatic Plants Igen Sulfide O zed Rhizosphe Ince of Reduce It Iron Reducti	es (B9)) (B14) dor (C1) eres on Living Fed Iron (C4) on in Tilled Soi (C7) (D9)	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Primary Indicators (minimum of one is required; che Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Water Aquat True / Hydro Oxidiz Prese Recer Thin M	ly) -Stained Leav ic Fauna (B13 Aquatic Plants igen Sulfide O zed Rhizosphe ince of Reduce it Iron Reducti Muck Surface (es (B9)) (B14) dor (C1) eres on Living Fed Iron (C4) on in Tilled Soi (C7) (D9)	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Primary Indicators (minimum of one is required; check Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8)	Water Aquat True / Hydro Oxidiz Prese Recer Thin M	ly) -Stained Leav ic Fauna (B13 Aquatic Plants igen Sulfide O zed Rhizosphe ince of Reduce it Iron Reducti Muck Surface (es (B9)) (B14) dor (C1) eres on Living Fed Iron (C4) on in Tilled Soi (C7) (D9)	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Primary Indicators (minimum of one is required; check Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present?	Water Aquat True / Hydro Oxidiz Prese Recer Thin M Gauge	r-Stained Leavic Fauna (B13 Aquatic Plants ogen Sulfide Octed Rhizosphernce of Reduction Reduction Reduction Reduction Research (Explain in Research)	es (B9)) (B14) dor (C1) eres on Living F ed Iron (C4) on in Tilled Soi (C7) (D9) emarks)	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	Water Aquat True / Hydro Oxidiz Prese Recei Thin M Gaug Other	r-Stained Leavic Fauna (B13 Aquatic Plants Igen Sulfide O Zed Rhizosphe Ince of Reducti Muck Surface (E or Well Data (Explain in Re	es (B9)) (B14) dor (C1) eres on Living Red Iron (C4) on in Tilled Soi (C7) (D9) emarks) Depth (inche	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology
Primary Indicators (minimum of one is required; check Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present?	Water Aquat True / Hydro Oxidiz Prese Recer Thin M Gaug Other Yes Yes X Yes X	ly) T-Stained Leavic Fauna (B13 Aquatic Plants ogen Sulfide Ozed Rhizosphence of Reduction Reduction Reduction Results (Explain in Results No X No No No No	es (B9)) (B14) dor (C1) eres on Living Red Iron (C4) on in Tilled Soi (C7) (D9) emarks) Depth (inche Depth (inche	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?
Primary Indicators (minimum of one is required; check Surface Water (A1) X High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Sparsely Vegetated Concave Surface (B8) Field Observations: Surface Water Present? Water Table Present? (includes capillary fringe)	Water Aquat True / Hydro Oxidiz Prese Recer Thin M Gaug Other Yes Yes X Yes X	ly) T-Stained Leavic Fauna (B13 Aquatic Plants ogen Sulfide Ozed Rhizosphence of Reduction Reduction Reduction Results (Explain in Results No X No No No No	es (B9)) (B14) dor (C1) eres on Living Red Iron (C4) on in Tilled Soi (C7) (D9) emarks) Depth (inche Depth (inche	Roots	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present?

Project/Site: SPCSL 2A (Tier 3)		City/	County: Log	gan	Sampling Date:	10/28/2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	NVM 37
Investigator(s): NVM, MP			Section, Tov	wnship, Range: S13, T		
	kside/Roadsid				, convex, none) : conc	ave
· ` '	1' 6.12" N	Long:	89	° 29' 10.98" W	Datum: NAD 83	
Soil Map Unit Name: 712A- Spaulding silt	y clay loam, 0	-2% slopes			NWI Classifica	tion: None
Are climatic/hydrologic conditions on the sit	e typical for this	s time of year?	Yes	s X No (If no	o, explain in Remarks)	
Are Vegetation, Soil, or F	Hydrology	significantly	disturbed?	Are "Normal Circu	mstances" present?	Yes X No
Are Vegetation , Soil , or H	Hydrology	naturally pro	olematic?	(If needed, e	explain any answers in l	Remarks.)
SUMMARY OF FINDINGS - Attach site m	ap showing sa	mpling point	locations, tr	ransects, important fe	atures, etc.	
Hydrophytic Vegetation Present? Yes	X No					
	X No		Is the Sa	ampled Area within a W	etland? Yes	(No
Wetland Hydrology Present? Yes	X No	_		p.ou / i.ou mum u / i	<u> </u>	
		_				
Remarks: Wetland NVM 13. PFOA. Pa	rt of wetland N	VM 14 but sepa	arated as for	ested wetland.		
VEGETATION - Use scientific names of p	olants.					
Tree Stratum (Plot size: r = 30')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Wo Number of Dominant		
1. Acer negundo	35	yes	FACW-	That Are OBL, FACV	V, or FAC:	7 (A)
2. Acer saccharinum	35	yes	FACW			
3				Total Number of Don	ninant	
4				Species Across All S	trata:	7 (B)
5.						
		= Total Cover		Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size: r =	= 15')			That Are OBL, FACV	V, or FAC:	100% (A/B)
1. Acer saccharinum	10	yes	FACW			
2. Acer negundo	10	yes	FACW-	Prevalence Index W		
3. Cornus amomum	10	yes	FACW+	OBL species	x 1 :	
4				FACW species	x 2 :	
5	30 =	= Total Cover		FAC species FACU species	x 3 :	
Herb Stratum (Plot size: r = 5')		- Total Cover		UPL species	x5=	
1. Geum canadense	20	yes	FAC	Column Totals:	0 (A)	
2. Aster sp.	5		1710		ce Index = B/A =	(5)
3. Carex sp.	20	yes	FACU-OBL			
4.				Hydrophytic Vegeta	ation Indicators:	
5.					st for Hydrophytic Vege	ation
6.				X 2. Dominano	e Test is >50%	
7.				3. Prevalenc	e Index is <3.01	
8.				4. Morpholog	gical Adaptations¹ (Provi	de supporting
9					arks or on a separate sheet)	
10				Problematic	Hydrophytic Vegetation	ı¹ (Explain)
	45 =	= Total Cover				
Woody Vine Stratum (Plot size:)			-	ic soil and wetland hyd	
1. Vitis riparia	5	yes	FACW-	must be present, i	unless disturbed or prol	olematic.
2	5	= Total Cove	<u> </u>	Hydrophytic Veg	etation Present? Ye	es_X_No
Remarks: (Include photo numbers here or	on a senarata	sheet)				
Other vegetation included: Schoenoplectus			64 - N; 65 - N	NE		

0-8 2	Matrix Color (moist) 2.5 Y 2.5/1 2.5 Y 2.5/1	100 100 7	7.5 YR 4/6 10 YR 5/2	edox Fea	Type ¹			
0-8 2	2.5 Y 2.5/1	100 100 7	7.5 YR 4/6		Type			
		100 7		5		Loc ²	Texture	Remarks
8-16	2.5 Y 2.5/1			5		 .	Silty loam	root mass
			10 YR 5/2		C	<u>M</u>	Silty loam	
				3	D	<u>M</u>	Silty loam	-
T 0-0	antrotion D-Danie		aluand Matrix	20-0			: 21ti-	DI - Dava Lining M-Matrix
lydric Soil Indi	entration, D=Deple	= HOII, RIVI=RE	educed Matrix,	US=C0V6	ered or Coa	ileu Sanu Gra		on: PL=Pore Lining, M=Matrix icators for Problematic Hydric Soils ³ :
Histosol (A				Sand	y Gleyed M	Matrix (S4)	iliu	Coast Prairie Redox (A16)
Histic Epipe	•		_		y Redox (S	` '		Dark Surface (S7)
Black Histic			_		ped Matrix	•		Iron-Manganese Masses (F12)
	• •		_					_
	Sulfide (A4)		_			lineral (F1)		Very Shallow Dark Surface (TF12)
Stratified La	-		_		ny Gleyed M			Other (Explain in Remarks)
2 cm Muck		- (0.4.4)	_		eted Matrix	• •		
	Below Dark Surfact	e (A11)	_		x Dark Sur	` '		
	Surface (A12)		_			Surface (F7)	³ l	ndicators of hydrophytic vegetation
	cky Mineral (S1)	•	_	Redo	x Depressi	ons (F8)	and	d wetland hydrology must be present,
5 cm Muck	y Peat or Peat (S3	3)						unless disturbed or problematic.
Restrictive Laye	er: (if observed)							
Type:								
Depth (inches								
Pomorko:	s):						Hydric	Soil Present? Yes X No
Remarks:	s): 						Hydric	Soil Present? Yes X No
emarks.							Hydric	Soil Present? Yes X No
							Hydric	Soil Present? Yes X No
YDROLOGY							Hydric	Soil Present? Yes X No
IYDROLOGY Vetland Hydrol	logy Indicators:							
YDROLOGY Vetland Hydrol rimary Indicator	logy Indicators:	ne is required						ators (minimum of two required)
YDROLOGY /etland Hydrol- rimary IndicatorSurface Wa	logy Indicators: ors (minimum of on ater (A1)	ne is required	W	ater-Stai	ned Leaver			ators <i>(minimum of two required)</i> Surface Soil Cracks (B6)
Vetland Hydrol rimary Indicator Surface Wa X High Water	logy Indicators: ors (minimum of on ater (A1) or Table (A2)	ne is required	W A	ater-Stai	una (B13)	s (B9)		ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Vetland Hydrol Primary Indicator Surface Wa X High Water X Saturation	logy Indicators: ors (minimum of ora ater (A1) r Table (A2) (A3)	ne is required	W A T	/ater-Stai quatic Fa rue Aqua	una (B13) tic Plants (l	B14)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Vetland Hydrol Verimary Indicator Surface Wa X High Water X Saturation of Water Mark	logy Indicators: ors (minimum of ore ater (A1) r Table (A2) (A3) ks (B1)	ne is required	W A H	/ater-Stai quatic Fa rue Aqua ydrogen	iuna (B13) tic Plants (I Sulfide Odd	B14) Dr (C1)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Vetland Hydrol rimary Indicator Surface Wa X High Water X Saturation Water Mark Sediment D	logy Indicators: ors (minimum of one ater (A1) or Table (A2) (A3) ks (B1) Deposits (B2)	ne is required	W T H	/ater-Stai quatic Fa rue Aqua ydrogen xidized R	una (B13) tic Plants (I Sulfide Odo Rhizosphere	s (B9) B14) or (C1) es on Living R	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial
Vetland Hydrol Primary Indicator Surface Wa X High Water X Saturation of Water Mark Sediment D Drift Depos	logy Indicators: ors (minimum of order (A1) or Table (A2) (A3) ks (B1) Deposits (B2) sits (B3)	ne is required	W A T H O	dater-Stai quatic Fa rue Aqua ydrogen xidized Fa resence o	una (B13) tic Plants (I Sulfide Odo Rhizosphere of Reduced	s (B9) B14) or (C1) es on Living R	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Vetland Hydrol Vetland Hydrol Vetland Hydrol Vetland Water Water X High Water X Saturation of Water Mark Sediment D Drift Depos	logy Indicators: ors (minimum of one ater (A1) or Table (A2) (A3) ks (B1) Deposits (B2)	ne is required	W A T H O	dater-Stai quatic Fa rue Aqua ydrogen xidized Fa resence o	una (B13) tic Plants (I Sulfide Odo Rhizosphere of Reduced	s (B9) B14) or (C1) es on Living R	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial
Vetland Hydrol Primary Indicator Surface Wa X High Water X Saturation of Water Mark Sediment D Drift Depos	logy Indicators: ors (minimum of ore ater (A1) or Table (A2) or (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)	ne is required	W A T H O P	dater-Stai quatic Fa rue Aqua ydrogen xidized F resence decent Iro	una (B13) tic Plants (I Sulfide Odo Rhizosphere of Reduced	s (B9) B14) or (C1) es on Living R I Iron (C4) n in Tilled Soil	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Primary Indicator Surface Wa X High Water X Saturation Water Mark Sediment D Drift Depos Algal Mat o	logy Indicators: ors (minimum of ore ater (A1) or Table (A2) or (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4)		W A T H O P R T	dater-Stai quatic Fa rue Aqua ydrogen xidized Fa resence of ecent Iro nin Muck	una (B13) tic Plants (I Sulfide Odo Rhizosphere of Reduced n Reduction	s (B9) B14) or (C1) es on Living R I Iron (C4) n in Tilled Soil	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
YDROLOGY Vetland Hydrol rimary Indicator Surface Wa X High Water X Saturation Water Mark Sediment D Drift Depos Algal Mat o Iron Depos Inundation	Iogy Indicators: ors (minimum of one ater (A1) or Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5)	lmagery (B7)	W A T O P R T	vater-Stai quatic Fa rue Aqua ydrogen xidized F resence o ecent Iro nin Muck auge or \	una (B13) tic Plants (I Sulfide Odo Rhizosphere of Reduced n Reduction Surface (C	s (B9) B14) or (C1) es on Living R I Iron (C4) in in Tilled Soil E7)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Primary Indicator Surface Water X High Water X Saturation Water Mark Sediment D Drift Depos Algal Mat o Iron Deposi Inundation Sparsely Ve	logy Indicators: ars (minimum of one ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial I	lmagery (B7)	W A T O P R T	vater-Stai quatic Fa rue Aqua ydrogen xidized F resence o ecent Iro nin Muck auge or \	una (B13) tic Plants (I Sulfide Odo Rhizosphere of Reduced n Reduction Surface (C Well Data (I	s (B9) B14) or (C1) es on Living R I Iron (C4) in in Tilled Soil E7)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrol Primary Indicator Surface Wa X High Water X Saturation of Water Mark Sediment D Drift Depos Algal Mat of Iron Deposi Inundation Sparsely Vol	logy Indicators: ars (minimum of or ater (A1) r Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial I degetated Concave	lmagery (B7)	W A T O P R T	rater-Stai quatic Fa rue Aqua ydrogen xidized Fa resence of ecent Iro nin Muck auge or N	una (B13) tic Plants (I Sulfide Odd Rhizosphere of Reduced In Reduction Surface (C Well Data (I	s (B9) B14) or (C1) es on Living R I Iron (C4) in in Tilled Soil E7)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
HYDROLOGY Vetland Hydrol Primary Indicator Surface Wa X High Water X Saturation of Water Mark Sediment D Drift Depos Algal Mat of Iron Deposi	logy Indicators: ors (minimum of order (A1) or Table (A2) (A3) ks (B1) Deposits (B2) sits (B3) or Crust (B4) sits (B5) Visible on Aerial I degetated Concave fons:	lmagery (B7)	WATHORTGOYes	rater-Stai quatic Fa rue Aqua ydrogen xidized F resence o ecent Iro nin Muck auge or \ ther (Exp	una (B13) tic Plants (I Sulfide Odd Rhizosphere of Reduced in Reduction Surface (C Well Data (I olain in Ren	s (B9) B14) or (C1) es on Living R I Iron (C4) in in Tilled Soil E7) D9) marks)	econdary Indica	ators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)

Project/Site: SPCSL 2A (Tier 3)		City/	County: Lo	ogan	Sampling Date:	10/28/2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	NVM 39
Investigator(s): NVM, MP			Section, To	wnship, Range: S13,	T18N, R04W	
	kside/Roadsid				ve, convex, none) : con	cave
	1' 2.67" N	Long:	89	9° 29' 14.12" W	Datum: NAD 83	
Soil Map Unit Name: 712A- Spaulding silt	y clay loam, 0)-2% slopes			NWI Classific	cation: None
Are climatic/hydrologic conditions on the site	e typical for thi	s time of year?	Ye	es X No (If	no, explain in Remarks)
Are Vegetation, Soil, or H	ydrology	significantly	y disturbed?	Are "Normal Circ	cumstances" present?	Yes X No
Are Vegetation, Soil, or H	ydrology	naturally pro	blematic?	(If needed,	explain any answers in	Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing sa	ampling point	locations, t	transects, important t	features, etc.	
Hydrophytic Vegetation Present? Yes	X No					
Hydric Soil Present? Yes	X No	_	Is the Sa	ampled Area within a \	Wetland? Yes	X No
Wetland Hydrology Present? Yes	X No	_		•	_	
	24 Broad der	erossion within	ditch hatwar	on railroad and highwa	.,	
Remarks: Wetland NVM-14. PEMA/PF0	JA. Dibau u c p	Jression within t	allen betwee	en faiii0au anu nignwa	y.	
VEGETATION - Use scientific names of p	lants.					
VEGETATION COCCUMENT MANAGE 11 P	Absolute	Dominant	Indicator	Dominance Test V	Vorksheet:	
Tree Stratum (Plot size: r = 30')	% Cover	Species?	Status	Number of Domina		
1. Ulmus rubra	3		FAC	That Are OBL, FAC	CW, or FAC:	3 (A)
2. Populus deltoides	20	yes	FAC+		-	
3. Acer saccharinum	5		FACW	Total Number of Do		
4				Species Across All	Strata:	4 (B)
5				.		
	28=	= Total Cover		Percent of Dominar	•	
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FAC	CW, or FAC:	75% (A/B)
1						
2				Prevalence Index		•
3				OBL species	x 1	
 				FACW species	x 2	
5	12 :	= Total Cover		FAC species FACU species	x 3	
Herb Stratum (Plot size: r = 5')		- Total Covc.		UPL species	^	
1. Festuca sp.	50	yes	FACU	Column Totals:	0 (4	
2. Juncus torreyi	25	yes	FACW		ence Index = B/A =	.,,
3. Equisetum laevigatum	5		FACW			
4. Panicum rigidulum	10		FACW	Hydrophytic Vege	tation Indicators:	
5. Eleocharis sp.	25	yes	FACW-OBL	1. Rapid Te	est for Hydrophytic Veg	etation
6.				· ——	nce Test is >50%	
7					nce Index is <3.01	
8					ogical Adaptations¹ (Pro	
9					marks or on a separate sheet	
10				Problemati	c Hydrophytic Vegetation	on¹ (Explain)
,	115 =	= Total Cover				
Woody Vine Stratum (Plot size:)			-	dric soil and wetland hy	
1. Vitis riparia	2	yes	FACW	must be present	, unless disturbed or pro	oblematic.
2	2	= Total Cove	er	Hydrophytic Ve	getation Present?	Yes X No
Remarks: (Include photo numbers here or PH 66 - NE	on a separate	sheet.)				

							bsence of indica	
Depth	Matrix		R	edox Fea				
(inches)	Color (moist)	% (Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10 YR 2/1	100	7.5 YR 4/6	3	С	M	Silty loam	
4-10	10 YR 5/4	50	7.5 YR 5/6	50	С	M	Silty clay loam	
10-16	10 YR 5/4	30	7.5 YR 5/6	50	С	M	Silty clay loam	
			10 YR 5/1	10	D	M	Silty clay loam	
Type: C=C	oncentration, D=De	epletion, RM=F	Reduced Matrix,	CS=Cove	red or Coat	ted Sand Gr	ains. ² Locatio	n: PL=Pore Lining, M=Matrix
lydric Soil	Indicators						Indi	cators for Problematic Hydric Soils ³ :
Histoso	l (A1)			Sand	y Gleyed M	atrix (S4)		Coast Prairie Redox (A16)
Histic E	pipedon (A2)			Sand	y Redox (S	5)		Dark Surface (S7)
Black H	listic (A3)			Stripp	ed Matrix (S6)		Iron-Manganese Masses (F12)
Hydrog	en Sulfide (A4)			Loam	y Mucky Mi	ineral (F1)		Very Shallow Dark Surface (TF12)
	ed Layers (A5)				y Gleyed M	` '		Other (Explain in Remarks)
	uck (A10)			_	ted Matrix		-	<u>-</u> ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
	ed Below Dark Surf	face (A11)			x Dark Surf			
	ark Surface (A12)	,	_		ted Dark S		2	
	Mucky Mineral (S1)	_		x Depression			ndicators of hydrophytic vegetation
	ucky Peat or Peat		_		K D oprocon), io (i o)	and	wetland hydrology must be present, unless disturbed or problematic.
5 cm M	,							
		')						
Restrictive	_ayer: (if observed	")						
Restrictive	_ayer: (if observed	")					Hydric	Soil Present? Yes X No
Restrictive I Type: Depth (inc	_ayer: (if observed)					Hydric	Soil Present? Yes X No
Restrictive	_ayer: (if observed)					Hydric	Soil Present? Yes X No
Restrictive Type: Depth (inc	_ayer: (if observed)					Hydric	Soil Present? Yes X No
Type:	_ayer: (if observed)					Hydric	Soil Present? Yes X No
Type: Depth (inc.) Remarks:	_ayer: (if observed						Hydric	Soil Present? Yes X No
Restrictive Type: Depth (inc Remarks:	_ayer: (if observed	s:	rd; check all that	apply)		S		Soil Present? Yes X No
Type: Depth (inc.) Remarks: IYDROLOG Vetland Hy	Layer: (if observed, shes):	s:			ned Leaves	_		
Restrictive Type: Depth (inc Remarks: IYDROLOG Vetland Hy Primary India Surface	Layer: (if observed, shes): SY drology Indicators (minimum of	s:	v	/ater-Stair	ned Leaves una (B13)	_		ntors (minimum of two required)
Pestrictive Type: Depth (included) Type: Depth (included) Permarks: PyproLog Vetland Hydrimary India Surface X High W	ches): GY drology Indicators eators (minimum of	s:	V	/ater-Stair quatic Fa		(B9)		ntors (minimum of two required) Surface Soil Cracks (B6)
Restrictive Type: Depth (inc.) Remarks: IYDROLOG Vetland Hy rimary India Surface X High W X Satural	ches): drology Indicators eators (minimum of e Water (A1) later Table (A2)	s:	W A T	/ater-Stair quatic Far rue Aquat	una (B13)	(B9) 314)		stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Restrictive Type: Depth (inc) Remarks: IYDROLOG Vetland Hy rimary Indic Surface X High W X Saturat Water I	ches): drology Indicators (minimum of water (A1) (A2) (A3)	s:	W A H	/ater-Stair quatic Far rue Aquat ydrogen S	una (B13) ic Plants (B Sulfide Odo	(B9) 314)	econdary Indica	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Restrictive Type: Depth (inc Remarks: IYDROLOG Vetland Hy rimary India Surface X High W X Saturat Water I Sedime	ches): drology Indicators cators (minimum of water (A1) cater Table (A2) cion (A3) Marks (B1)	s:	W T H	/ater-Stair quatic Far rue Aquat ydrogen S xidized R	una (B13) ic Plants (B Sulfide Odo	(B9) (14) r (C1) s on Living F	econdary Indica	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Restrictive Type: Depth (inc Remarks: IYDROLOG Vetland Hy rimary India Surface X High W X Saturat Water I Sedime Drift De	ches): drology Indicators eators (minimum of e Water (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	s:	W T H C	/ater-Stain quatic Fan rue Aquat ydrogen S xidized R	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced	(B9) (14) r (C1) s on Living F	econdary Indica	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Pestrictive In Type: Depth (income semarks: PDROLOG Vetland Hyrrimary Indicome surface X High W X Satural Water In Sedime Drift Department of the Algal M	ches): drology Indicators eators (minimum of water (A1) dater Table (A2) don (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4)	s:	W A T H C P R	/ater-Stain quatic Far rue Aquat ydrogen S xidized R resence c ecent Iror	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction	(B9) s14) r (C1) s on Living F lron (C4) in Tilled So	Roots	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Restrictive Type: Depth (inc Remarks: IYDROLOG Vetland Hy rimary India Surface X High W X Satural Water I Sedime Drift De Algal M Iron De	ches): Cy drology Indicators extors (minimum of extors (A1) fater Table (A2) ion (A3) Marks (B1) ent Deposits (B2) exposits (B3) fat or Crust (B4) exposits (B5)	s: f one is require	W T H C P R T	/ater-Stain quatic Fan rue Aquat ydrogen S xidized R resence c ecent Iror hin Muck	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C'	(B9) s14) r (C1) s on Living F Iron (C4) in Tilled So 7)	Roots	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Pestrictive Type: Depth (included) Permarks: PydroLog Vetland Hydrimary India Surface X High W X Saturat Water I Sedime Drift De Algal M Iron De Inunda	ches): drology Indicators eators (minimum of water (A1) dater Table (A2) don (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4)	s: fone is require	— W — A — T — H — C — P — R — T — T	vater-Stain quatic Fan rue Aquat ydrogen S xidized R resence c ecent Iror hin Muck auge or V	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction	(B9) 314) r (C1) s on Living F Iron (C4) in Tilled So 7)	Roots	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Restrictive Type:	ches): drology Indicators cators (minimum of e Water (A1) fater Table (A2) fon (A3) Marks (B1) ent Deposits (B2) eposits (B3) lat or Crust (B4) posits (B5) tion Visible on Aerial ly Vegetated Conca	s: fone is require	— W — A — T — H — C — P — R — T — T	vater-Stain quatic Fan rue Aquat ydrogen S xidized R resence c ecent Iror hin Muck auge or V	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced n Reduction Surface (C' Vell Data (E	(B9) 314) r (C1) s on Living F Iron (C4) in Tilled So 7)	Roots	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Restrictive In Type: Depth (income Remarks: IYDROLOG Vetland Hydromary India Surface X High W X Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse	ches): drology Indicators cators (minimum of water (A1) dater Table (A2) don (A3) Marks (B1) ent Deposits (B2) eposits (B3) dat or Crust (B4) posits (B5) dion Visible on Aeria ly Vegetated Concavations:	s: fone is require	— W — A — T — H — C — P — R — T — T	Vater-Stain quatic Fan rue Aquat ydrogen S xidized R resence c ecent Iror hin Muck auge or V	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced in Reduction Surface (C' Vell Data (E lain in Rem	(B9) 314) r (C1) s on Living F Iron (C4) in Tilled So 7)	Roots	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Restrictive In Type: Depth (incomplete Incomplete Incom	ches): drology Indicators eators (minimum of exter (A1) eater Table (A2) ent Deposits (B3) eat or Crust (B4) posits (B5) etion Visible on Aerially Vegetated Concavations: er Present?	s: fone is require	— W — A — T — H — C — P — R — T — G 38) — C Yes _	Vater-Stain quatic Fan rue Aquat ydrogen S xidized R resence c ecent Iror hin Muck auge or V ther (Exp.	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced in Reduction Surface (C' Vell Data (E lain in Rem	(B9) (B14) r (C1) s on Living F Iron (C4) in Tilled So (7) (99) arks) Depth (incher	Rootsx	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Restrictive Type: Depth (inc Remarks: HYDROLOG Netland Hyd Primary Indic Surface X High W X Saturat Water I Sedime Drift De Algal M Iron De Inunda Sparse Field Obser Surface Water Table	ches): drology Indicators eators (minimum of exter (A1) eater Table (A2) ent Deposits (B3) eat or Crust (B4) posits (B5) etion Visible on Aerially Vegetated Concavations: er Present?	s: fone is require al Imagery (B7 ave Surface (B	YesYesYesYesYesYesYesYesYesYesYesYesYesYesYesYesYesYesYesYesYes	Vater-Stain quatic Far rue Aquat ydrogen S xidized R resence c ecent Iror hin Muck auge or V ther (Exp.	una (B13) ic Plants (E Sulfide Odo hizosphere of Reduced in Reduction Surface (C' Vell Data (E lain in Rem	(B9) s14) r (C1) s on Living F lron (C4) n in Tilled So 7) 09) arks)	Roots ills (C6) x es) es) 12	stors (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology

Project/Site: SPCSL 2A (Tier 3)		City/County:	Logan	Sampling Date:	11/18/2010
Applicant/Owner: UPRR			State: IL	Sampling Point:	NVM 75
Investigator(s): NVM, TA		Section,	Township, Range: S26, T		
· · · · · · · · · · · · · · · · · · ·	ckside ditch			e, convex, none) : conca	ive
	' 59' 3.91" N	Long:	89° 31' 9.66" W	Datum: NAD 83	
Soil Map Unit Name: 43A - Ipava silt Ioa	m, 0-2% slopes			NWI Classificat	ion: None
Are climatic/hydrologic conditions on the s	ite typical for this time	e of year?	Yes X No (If no	o, explain in Remarks)	
Are Vegetation, Soil, or	Hydrology s	ignificantly disturbe	d? Are "Normal Circu	mstances" present?	Yes X No
Are Vegetation , Soil , or	Hydrology na	turally problematic?	(If needed, e	explain any answers in R	Remarks.)
SUMMARY OF FINDINGS - Attach site r	nap showing sampl	ing point locations	s, transects, important fe	atures, etc.	
Hydrophytic Vegetation Present? Yes	s X No				
Hydric Soil Present? Yes	X No	Is the	Sampled Area within a W	etland? Yes X	No
Wetland Hydrology Present? Yes	x No		•		
Remarks: Wetland NVM-32A & NVM-3	32B. PEMA. Both we	etlands represented	by sample point. Wetland	Is located in east tracksi	de ditch.
VEGETATION III i till					
VEGETATION - Use scientific names of	-		Daminanas Taat W		
Tree Stratum (Plot size:)		ominant Indicato pecies? Status			
1.	70 3373 1 31	occido.	That Are OBL, FACV	•	3 (A)
2.			_		
3.			Total Number of Don	ninant	
4.			Species Across All S		3 (B)
5.			_ `		
	0 = Tota	al Cover	 Percent of Dominant 	Snecies	
Sapling/Shrub Stratum (Plot size:)		That Are OBL, FACV	•	00% (A/B)
1.			ŕ	·	(,,,
2.			Prevalence Index W	orksheet:	
3.			OBL species	x 1 =	: 0
4.			FACW species	x 2 =	0
5.			FAC species	x 3 =	0
	0 = Tot	al Cover	FACU species	x 4 =	0
Herb Stratum (Plot size: r = 5')	1		UPL species	x 5 =	0
1. Carex sp.	40	yes FACU-OF		0 (A)	0 (B)
2. Juncus dudleyi	20	yes FAC	Prevalen	ice Index = B/A =	
3. Bidens sp.	5		_		
4. Rumex altissimus		FACW-	_ ' ' ' '		
5. Leersia oryzoides	30	yes OBL	_	st for Hydrophytic Vegeta	ation
6			X 2. Dominano		
7			_	ce Index is <3.01	
8			— I ——	gical Adaptations¹ (Provid	ie supporting
9. 0.			_	arks or on a separate sheet) Hydrophytic Vegetation ¹	¹ (Evnlain)
u		al Cover	i Tobicinatio	Trydrophlytic vegetation	(Explain)
Woody Vine Stratum (Dlat size)		ai Covei	1Indicators of buds	ria aail and watland hydr	rology.
Woody Vine Stratum (Plot size:	<i>'</i>		-	ric soil and wetland hydrounless disturbed or prob	
1			must be present, t	illess disturbed of prob	lemanc.
2.	0 = 7	Fotal Cover	Hydronhytic Veg	etation Present? Ye	s X No
		Total Covel	nyurophytic veg	etation Fresent: Te	s X No
Remarks: (Include photo numbers here of		et.)			
Carex sp is considered FAC or wetter. Pl	H 65 - N; 66 - S.				

Profile Des	cription: (Describe	to the depth needed	d to docum	ent the i	indicator c	or confirm	the ab	sence of indica	ators.)	
Depth	Matrix		R	edox Fe	atures					
(inches)	Color (moist)	% Color	(moist)	%	Туре	¹ Lo	oc ²	Texture		Remarks
0-4	10 YR 3/2	100	,				,	Loamy clay	crumbly/slightly	moist
4-14	10 YR 4/2	70 10 Y	R 6/8	30	С		M	clay	soil moist	
		Gley	1 6N	10			,		'	
			,				,		'	
			,				,		'	
			,				,		'	
			,				,		'	
¹Type: C=C	Concentration, D=De	pletion, RM=Reduc	ed Matrix,	CS=Cov	ered or C	oated Sa	and Gra	ains. ² Locatio	n: PL=Pore Lini	ng, M=Matrix
Hydric Soil	Indicators							Ind	icators for Probler	matic Hydric Soils ³ :
Histos	ol (A1)			San	dy Gleyed	d Matrix (S4)		Coast Prairie Re	dox (A16)
Histic	Epipedon (A2)		_	San	dy Redox	(S5)			Dark Surface (S	⁷)
Black	Histic (A3)		_	Strip	oped Matri	ix (S6)			Iron-Manganese	Masses (F12)
Hydro	gen Sulfide (A4)			Loa	my Mucky	Mineral	(F1)		Very Shallow Da	ark Surface (TF12)
Stratifi	ed Layers (A5)		_	Loa	my Gleyed	d Matrix ((F2)		Other (Explain i	n Remarks)
2 cm N	/luck (A10)		_	X Dep	leted Matr	rix (F3)				
Deplet	ed Below Dark Surf	ace (A11)		Red	lox Dark S	Surface (F	- 6)			
Thick I	Dark Surface (A12)			 Dep	leted Dark	k Surface	(F7)	3,	ndicators of hydro	-h. tissstatis.
Sandy	Mucky Mineral (S1))		Red	lox Depres	ssions (F	8)			gy must be present,
5 cm N	Mucky Peat or Peat	(S3)							unless disturbed	
Restrictive	Layer: (if observed,)								
Type:										
Depth (in	ches):							Hydric	Soil Present?	Yes X No
Remarks:	-									
rtemarko.										
HYDROLO	GY									
Wetland Hy	drology Indicators	5 :								
Primary Indi	cators (minimum of	one is required; che	eck all that	apply)			Se	econdary Indica	ators <i>(minimum o</i>	f two required)
Surfac	e Water (A1)		V	Vater-Sta	ained Leav	ves (B9)			Surface Soil C	racks (B6)
High V	Vater Table (A2)		A	quatic F	auna (B13	3)			Drainage Patte	erns (B10)
X Satura	tion (A3)		T	rue Aqu	atic Plants	s (B14)			Dry-Season W	ater Table (C2)
Water	Marks (B1)		H	lydrogen	Sulfide C	Odor (C1)			Crayfish Burro	ws (C8)
Sedim	ent Deposits (B2)		c	xidized	Rhizosphe	eres on L	iving R	toots	Saturation Visi	ble on Aerial
Drift D	eposits (B3)		P	resence	of Reduc	ed Iron (C4)		Imagery (C9)
Algal N	Mat or Crust (B4)		R	ecent Ir	on Reduct	tion in Til	led Soi	ls (C6)	Stunted or Stre	essed Plants (D1)
Iron D	eposits (B5)		Т	hin Muc	k Surface	(C7)		X	Geomorphic P	osition (D2)
Inunda	ation Visible on Aeria	al Imagery (B7)	<u> </u>	auge or	Well Data	a (D9)		X	FAC-Neutral T	est (D5)
Sparse	ely Vegetated Conca	ave Surface (B8)	c	ther (Ex	plain in R	emarks)				
Field Obse	rvations:									
	ter Present?		Yes		No X	Denth	(inche	s)	Most	and Hydrology
Water Table			Yes		No X	•	(inche	· —		Present?
	Present? (includes c	anillary fringe)	Yes		No X	•	(inche	· —	\dashv ,	res X No
			_	_				<u> </u>		<u> </u>
Describe Re	ecorded Data (strear	m gauge, monitoring	y well, aeri	al photo:	s, previous	s inspect	<i>ions)</i> , i	t available.		
Remarks:										

Project/Site: SPCSL 2A (Tier 3)		City/	County: Lo	ogan	Sampling Date	e: 11/18/2	2010
Applicant/Owner: UPRR				State: IL	Sampling Point	t: NVM	76
Investigator(s): NVM, TA			Section, To	wnship, Range: S26, T	18N, R04W		
	nage			Local Relief (concave	_	concave	
' ' '	59' 3.43" N	Long:	89	9° 31' 10.14" W	Datum: NAD 83		
Soil Map Unit Name: 68A - Sable silty cla		-			NWI Class	sification: Non	ie
Are climatic/hydrologic conditions on the si	te typical for the	is time of year?	Ye	es X No (If n	o, explain in Rema	rks)	
Are Vegetation, Soil, or l	-lydrology	significantly	disturbed?	' Are "Normal Circu	imstances" present?	Yes X	No
Are Vegetation, Soil, or	-lydrology	naturally prob	olematic?	(If needed, e	explain any answer	s in Remarks.))
SUMMARY OF FINDINGS - Attach site m	ap showing s	ampling point	locations, t	transects, important fe	eatures, etc.		
Hydrophytic Vegetation Present? Yes	X No						
Hydric Soil Present? Yes	X No	<u> </u>	Is the Sa	ampled Area within a W	etland? Ye	s X No	
Wetland Hydrology Present? Yes	X No	_					
Remarks: Wetland NVM-33. PEMA/PS	CA Located in		ditab at Cul	hvort 170 40			
Remarks: Wetland NVM-33. PEMA/PS	SA. Localed II	i east trackside	ulich al Cul	ivert 170.40.			
VEGETATION - Use scientific names of	nlants						
12021711011 000 0010111110 11111100 01	Absolute	Dominant	Indicator	Dominance Test W	orksheet:		
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominan			
1.				That Are OBL, FACV	N, or FAC:	3	(A)
2.							
3				Total Number of Dor			
4				Species Across All S	Strata:	3	(B)
5							
	0	= Total Cover		Percent of Dominant	•		
Sapling/Shrub Stratum (Plot size:)		= 1 O 1 1	That Are OBL, FACV	N, or FAC:	100%	(A/B)
1. Acer negundo		yes	FACW-	Daniel de la deserva	V		
Populus deltoides 3.	20	yes	FAC+	Prevalence Index V OBL species	vorksneet:	x 1 = 0	
4.				FACW species		x = 0 $x = 0$	—
5.				FAC species		x3 = 0	_
	40	= Total Cover		FACU species		x 4 = 0	
Herb Stratum (Plot size: r = 5')				UPL species		x 5 = 0	
1. Phalaris arundinacea	100	yes	FACW+	Column Totals:	0	(A) 0	(B)
2.				Prevalen	ice Index = B/A =		<u> </u>
3.							
4				Hydrophytic Vegeta			
5				· ——	st for Hydrophytic V	/egetation	
6.				X 2. Dominano			
7				· ——	ce Index is <3.01	(D	•
9.		-		· -	gical Adaptations ¹ (arks or on a separate sh		ing
0.		-		· ——	Hydrophytic Veget	•	i
	100	= Total Cover)	, ,	
Woody Vine Stratum (Plot size:)			¹ Indicators of hydr	ric soil and wetland	l hydrology	
1				-	unless disturbed or		
2.				The state of the s		p	
	0	= Total Cove		Hydrophytic Veg	etation Present?	Yes X	No
Demontos (Inglisdo placta minala de la cira	v on o occurre.			1			
Remarks: (Include photo numbers here of PH 676 - W; 686 - E	он а ѕерагате	311661.)					
1 11 07 0 - VV, 000 - L							

	cription: (Describe to	the depth needed				onfirm the ab	sence of indica	ntors.)	
Depth (inches)	Matrix			edox Feat					
(inches)	Color (moist)	% Color	(moist)	%	Type ¹	Loc ²	Texture	Remarks	
'Type: C=C	oncentration, D=Dep	letion, RM=Reduc	ed Matrix, (CS=Cover	ed or Coa	ted Sand Gra	ins. ² Locatio	n: PL=Pore Lining, M=Matrix	
Hydric Soil	Indicators						Indi	cators for Problematic Hydric Soils ³ :	
Histose	ol (A1)				Gleyed M			Coast Prairie Redox (A16)	
Histic I	Epipedon (A2)		_		Redox (S			Dark Surface (S7)	
Black I	Histic (A3)		_	Strippe	ed Matrix (S6)		Iron-Manganese Masses (F12)	
	gen Sulfide (A4)		_		-	ineral (F1)		Very Shallow Dark Surface (TF12)	
	Stratified Layers (A5) 2 cm Muck (A10)				/ Gleyed M		X	Other (Explain in Remarks)	
	, ,		_		ted Matrix	` '			
	ed Below Dark Surfa	ce (A11)	_		Dark Surf	, ,			
	Dark Surface (A12)		_			urface (F7)	³	ndicators of hydrophytic vegetation	
	Mucky Mineral (S1)	201	_	Redox	Depression	ons (F8)	and		
5 cm iv	flucky Peat or Peat (S	53)						unless disturbed or problematic.	
Restrictive	Layer: (if observed)								
Type:									
Depth (in	ches):						Hydric	Soil Present? Yes X No_	
Remarks:	Soils assumed hyd	ric per Step 12b o	f the 1987	Corps Del	ineation M	anual.			
HYDROLOG	ev.								
	drology Indicators:								
•	cators (minimum of c	ne is required: che	eck all that	apply)		Se	econdary Indica	ators (minimum of two required)	
	e Water (A1)			/ater-Stain	ed Leaves		, , , , , , , , , , , , , , , , , , , ,	Surface Soil Cracks (B6)	
	/ater Table (A2)			quatic Fau		(20)	X	Drainage Patterns (B10)	
	tion (A3)			rue Aquati	• •	314)		Dry-Season Water Table (C2)	
	Marks (B1)			ydrogen S				Crayfish Burrows (C8)	
Sedim	ent Deposits (B2)		 o	xidized Rh	nizosphere	s on Living R	toots	Saturation Visible on Aerial	
	eposits (B3)		Pı	resence of	f Reduced	Iron (C4)		Imagery (C9)	
Algal N	Mat or Crust (B4)		R	ecent Iron	Reduction	in Tilled Soi	ls (C6)	Stunted or Stressed Plants (D1)	
Iron De	eposits (B5)		TI	hin Muck S	Surface (C	7)	X	Geomorphic Position (D2)	
Inunda	tion Visible on Aerial	Imagery (B7)	G	auge or W	/ell Data ([09)	X	FAC-Neutral Test (D5)	
Sparse	ely Vegetated Concav	ve Surface (B8)	o	ther (Expl	ain in Rem	arks)		_	
Field Obser	vations:								
Surface Wat			Yes	N	o X	Depth (inche	s)	Wetland Hydrology	
Water Table	Present?		Yes	N	o X	Depth (inche	s)	Present?	
Saturation P	resent? (includes ca	oillary fringe)	Yes	N	o X	Depth (inche	s)	Yes X No	
Describe Re	corded Data (stream	gauge, monitoring	well, aeria	al photos, _l	previous ir	nspections) , i	f available.		
Remarks:									

Project/Site: SPCSL 2A (Tier 3)		City/C	county: San	gamon	Sampling Dat	e: 5/6 /	/2011
Applicant/Owner: UPRR				State: IL	Sampling Poir	nt: TP	A 38
Investigator(s): TPA, KT			Section, Tow	nship, Range: S11, T	16N, R05W		
· · · · · · · · · · · · · · · · · · ·	kside ditch			Local Relief (concave	, convex, none) :	concave	
' ' '	0' 54.99" N	Long:	89	° 37' 4.48" W	Datum: NAD 83		
Soil Map Unit Name: 17A - Keomah silt lo	am, 0-2% slopes				NWI Clas	ssification: N	one
Are climatic/hydrologic conditions on the site	e typical for this tin	ne of year?	Yes	No X (If no	o, explain in Rema	arks)	
Are Vegetation, Soil, or H	ydrology	significantly	disturbed?	Are "Normal Circu	mstances" present?	? Yes	X No
Are Vegetation, Soil, or H	ydrologyn	aturally probl	ematic?	(If needed, e	explain any answe	rs in Remark	rs.)
SUMMARY OF FINDINGS - Attach site ma	ap showing samp	oling point lo	ocations, tra	ansects, important fe	atures, etc.		
Hydrophytic Vegetation Present? Yes	X No						
Hydric Soil Present? Yes	X No		Is the Sai	mpled Area within a W	etland? Ye	es X No)
Wetland Hydrology Present? Yes	X No						
•	DEMA Wetter	Anril on room	rd.				
Remarks: Wetland TPA-JJ1 & TPA-JJ2.	PEIVIA. Wellest	April on recor	u.				
VEGETATION - Use scientific names of p	lants.						
,		Dominant	Indicator	Dominance Test Wo	orksheet:		
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant	Species		
1				That Are OBL, FACV	V, or FAC:	2	(A)
2							
3				Total Number of Don			4-1
4				Species Across All S	trata:	2	(B)
5	0 = To	otal Cover					
Oralia a (Olassia Otastasa (Olataira)	= 10	otal Cover		Percent of Dominant	•	1000/	(
Sapling/Shrub Stratum (Plot size:)			That Are OBL, FACV	v, or FAC:	100%	(A/B)
2				Prevalence Index W	lorksheet:		
3				OBL species	orkaneet.	x 1 =	0
4.				FACW species			0
5.				FAC species			0
	0 = To	tal Cover		FACU species			0
Herb Stratum (Plot size: r = 5')				UPL species		x 5 =	0
Equisetum fluviatile	20	yes	OBL	Column Totals:	0	(A)	0 (B)
2. Senecio aureus	5		FACW	Prevalen	ce Index = B/A =		
3. Equisetum laevigatum	70	yes	FACW				
4. Equisetum arvense	5		FAC	Hydrophytic Vegeta			
5.				<u> </u>	st for Hydrophytic	Vegetation	
6				X 2. Dominano			
7					e Index is <3.01	(D	
8					gical Adaptations ¹ arks or on a separate s		orting
9					Hydrophytic Vege		in)
	100 = To	otal Cover			, a. op, a.o . og.	tation (Expla	,
Woody Vine Stratum (Plot size:		7tai 0010i		¹ Indicators of hydr	ic soil and wetlan	d hydrology	
1	 /			must be present, i			c
2				made be present, t	arricos diotarbea e	Probleman	
	0 =	Total Cover		Hydrophytic Veg	etation Present?	Yes X	No
				7. 4. 7			
Remarks: (Include photo numbers here or	оп a separate she	eet.)					

SOIL Sampling Point: TPA 38

Profile Des	scription: (Describe to the	depth needed to do	cument th	e indicator	or confirm the a	absence of indica	ntors.)
Depth	Matrix		Redox	Features			
(inches)	Color (moist) %	Color (moist) %	Туре	e ¹ Loc ²	Texture	Remarks
				<u> </u>			
¹ Type: C=0	Concentration, D=Depletion	n, RM=Reduced Ma	trix, CS=C	overed or C	Coated Sand G	rains. ² Locatio	n: PL=Pore Lining, M=Matrix
	I Indicators						cators for Problematic Hydric Soils ³ :
_	sol (A1)		S	andy Gleve	d Matrix (S4)	mai	Coast Prairie Redox (A16)
	Epipedon (A2)			andy Redox	` '		Dark Surface (S7)
	Histic (A3)			tripped Mati			Iron-Manganese Masses (F12)
	gen Sulfide (A4)				y Mineral (F1)		Very Shallow Dark Surface (TF12)
	ied Layers (A5)			-	d Matrix (F2)	x	Other (Explain in Remarks)
	Muck (A10)			epleted Mat			
	ted Below Dark Surface (A	.11)			Surface (F6)		
	Dark Surface (A12)	,			k Surface (F7)	2	
	Mucky Mineral (S1)			edox Depre		- 11	ndicators of hydrophytic vegetation wetland hydrology must be present,
	Mucky Peat or Peat (S3)				()	anu	unless disturbed or problematic.
						1	
_	Layer: (if observed)						
Type:	achoo):					111.2	Sell Breeze (2) Very V
Depth (ir							Soil Present? Yes X No
Remarks:	No pit dug due to inunda	ition. Soils assume	d hydric pe	er Step 12b	of the 1987 Co	orps Delineation	Manual.
HYDROLO	GY						
	ydrology Indicators:						
	icators (minimum of one is	required; check all	that apply	·)	9	Secondary Indica	tors (minimum of two required)
	ce Water (A1)			Stained Lea	-	,	Surface Soil Cracks (B6)
High \	Nater Table (A2)		 C Aquatio	: Fauna (B1	3)		Drainage Patterns (B10)
X Satura	ation (A3)			quatic Plant	•		Dry-Season Water Table (C2)
—— Water	Marks (B1)		— Hydrog	en Sulfide (Odor (C1)		Crayfish Burrows (C8)
Sedim	nent Deposits (B2)		Oxidize	ed Rhizosph	eres on Living	Roots	Saturation Visible on Aerial
Drift D	Deposits (B3)		Presen	ce of Reduc	ced Iron (C4)		Imagery (C9)
Algal	Mat or Crust (B4)		Recent	Iron Reduc	tion in Tilled So	oils (C6)	Stunted or Stressed Plants (D1)
Iron D	eposits (B5)		Thin M	uck Surface	(C7)	X	Geomorphic Position (D2)
Inunda	ation Visible on Aerial Imag	gery (B7)	— Gauge	or Well Dat	a (D9)		FAC-Neutral Test (D5)
Spars	ely Vegetated Concave Su	rface (B8)	Other (Explain in F	Remarks)		_
Field Obse	rvations:						T
	ater Present?	Ye	s X	No	Depth (inch	es) 2	Wetland Hydrology
Water Table		Ye		No X	Depth (inch	· -	Present?
	Present? (includes capillar)			No	. .	· -	Yes X No
				too proviou	· · · · · ·		<u> </u>
Describe R	ecorded Data (stream gaug	ye, monitoring well,	аснан рпо	ios, previou	is irispections)	, ii avallable.	
Remarks:							
1							

Project/Site: SPCSL 2A (Tier 3)		City/County: Sar	ngamon	Sampling Date	e: <u>5/6/20</u>	011
Applicant/Owner: UPRR			State: IL	Sampling Point	t: TPA	39
Investigator(s): TPA, KT		Section, Tov	vnship, Range: S11, T	16N, R05W		
· · · · · · · · · · · · · · · · · · ·	side ditch		Local Relief (concave	e, convex, none) : <u>c</u>	concave	
'	57.19" N	<u> </u>	° 37' 1.65" W	Datum: NAD 83		
Soil Map Unit Name: 685B - Middletown sil	t loam, 2-5% slopes			NWI Class	sification: Nor	1е
Are climatic/hydrologic conditions on the site	typical for this time of	f year? Yes	. No X (If n	o, explain in Rema	rks)	
Are Vegetation, Soil, or Hy	drology sign	ificantly disturbed?	Are "Normal Circu	imstances" present?	Yes X	No
Are Vegetation, Soil, or Hy	drologynatura	ally problematic?	(If needed, e	explain any answer	s in Remarks.,)
SUMMARY OF FINDINGS - Attach site map	showing sampling	point locations, tr	ansects, important fe	eatures, etc.		
Hydrophytic Vegetation Present? Yes	X No					
Hydric Soil Present? Yes	X No	Is the Sa	mpled Area within a W	etland? Ye	s X No	
Wetland Hydrology Present? Yes	X No					
Remarks: Wetland TPA-KK1 & TPA-KK2.	PEMA/PEMC Wet	test Anril on record	At north end of wetlar	nd turns into 1 ft wi	de 1 inch dec	'n
non-wetland channel.	FLIMATEINIC. Well	test April on record.	At north end of wettar	iu, turns into i it wi	ue, i ilicii uee	ş h
Tion wedand diamen.						
VEGETATION - Use scientific names of pla	ants.					
	Absolute Domi	nant Indicator	Dominance Test W	orksheet:		
Tree Stratum (Plot size: r = 30')	% Cover Spec	ies? Status	Number of Dominan	t Species		
1. Salix exigua	5 ye	s OBL	That Are OBL, FAC	N, or FAC:	1	(A)
2						
3			Total Number of Dor			4-1
4			Species Across All S	Strata:	1	(B)
5	5 = Total (
Onelia y (Oharda Ohardaya (Diadaina	= Total (Jover	Percent of Dominant	•	1000/	(- (-)
Sapling/Shrub Stratum (Plot size:			That Are OBL, FAC	v, or FAC:	100%	_(A/B)
1			Prevalence Index V	Vorkshoot:		
3			OBL species		x 1 = 0	
4			FACW species		x 2 = 0	
5.			FAC species		x 3 = 0	
	0 = Total (Cover	FACU species		x 4 = 0	
Herb Stratum (Plot size: r = 5')			UPL species		x 5 = 0	
1. Carex sp.	5	FACW-OBL	Column Totals:	0	(A) 0	(B)
2. Unknown sp.	10		Prevaler	ice Index = B/A =		
3. Equisetum laevigatum	70 ye	es FACW				
4			Hydrophytic Vegeta			
5				st for Hydrophytic V	egetation/	
6			X 2. Dominano			
7				ce Index is <3.01		
8				gical Adaptations¹ (ing
9				arks or on a separate sh	•	
10			Problematic	Hydrophytic Veget	alion (Explain))
W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	85 = Total 0	Jover	4			
Woody Vine Stratum (Plot size:)		-	ric soil and wetland		
1			must be present,	unless disturbed or	problematic.	
2	0 = Tota	al Cover	Hydrophytic Vec	etation Present?	Yes X	No
		ui 0010i	Tryanophytic rog		100 <u>X</u>	
Remarks: (Include photo numbers here or o	n a separate sheet.)					

SOIL Sampling Point: TPA 39

Profile Desc	cription: (Describe t	o the depth need	ded to docum	ent the	indicator	or con	firm the ab	sence of indica	ators.)
Depth	Matrix		R	edox Fe	eatures				
(inches)	Color (moist)	% Col	or (moist)	%	Тур	oe ¹	Loc²	Texture	Remarks
0-8	10 YR 3/1	100						Sandy loam	
					_				
¹ Type: C=C	oncentration, D=Dep	oletion, RM=Red	uced Matrix,	CS=Co	vered or (Coated	l Sand Gra	ins. ² Locatio	n: PL=Pore Lining, M=Matrix
Hydric Soil	•								cators for Problematic Hydric Soils ³ :
Histoso				Sar	ndy Gleye	ed Matr	ix (S4)		Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redo		(0 .)		Dark Surface (S7)
	Histic (A3)		_		pped Mat		;)		Iron-Manganese Masses (F12)
	jen Sulfide (A4)		_		ımy Muck				Very Shallow Dark Surface (TF12)
	ed Layers (A5)		_		ımy Gleye	-		X	Other (Explain in Remarks)
	luck (A10)		_		oleted Ma				
	ed Below Dark Surfa	ce (A11)	_		dox Dark				
	Dark Surface (A12)	,	_		oleted Da			2	
	Mucky Mineral (S1)		_		dox Depre				ndicators of hydrophytic vegetation wetland hydrology must be present,
·	lucky Peat or Peat (S3)	_		•		,	and	unless disturbed or problematic.
Restrictive	Layer: (if observed)								
Type:	_ (0.200.100/								
Depth (inc	ches):							Hvdric	Soil Present? Yes X No
	· -	aundation Caila	assumed by	dria nar	Cton 10h	o of the	1007 Com	·	
Remarks:	er table at 8 inches,			and per	Step 120	o or trie	1967 COI	ps Delineation	Manual. Sample at boundary
	ion table at a money,								
HYDROLOG	SY								
Wetland Hy	drology Indicators:								
Primary Indi	cators (minimum of c	one is required; o	check all that	apply)			Se	econdary Indica	tors (minimum of two required)
X Surface	e Water (A1)		V	Vater-St	ained Lea	- aves (E	39)		Surface Soil Cracks (B6)
X High W	/ater Table (A2)		A	quatic F	auna (B1	13)			Drainage Patterns (B10)
X Satura	tion (A3)		т	rue Aqu	atic Plan	its (B14	1)		Dry-Season Water Table (C2)
Water	Marks (B1)		<u> </u>	lydroger	n Sulfide	Odor (C1)		Crayfish Burrows (C8)
Sedime	ent Deposits (B2)			xidized	Rhizosph	heres c	n Living R	oots	Saturation Visible on Aerial
Drift De	eposits (B3)		—— P	resence	of Redu	iced Irc	on (C4)		Imagery (C9)
Algal M	lat or Crust (B4)		F	ecent Ir	on Reduc	ction in	Tilled Soil	ls (C6)	Stunted or Stressed Plants (D1)
Iron De	eposits (B5)		—т	hin Muc	k Surface	e (C7)		Х	Geomorphic Position (D2)
Inunda	tion Visible on Aerial	I Imagery (B7)		auge o	r Well Da	ita (D9))	Х	FAC-Neutral Test (D5)
Sparse	ly Vegetated Concar	ve Surface (B8)		ther (E	xplain in F	Remari	ks)		_
Field Obser	vations:								
Surface Wat	er Present?		Yes	X	No	De	pth (inches	s) 2	Wetland Hydrology
Water Table	Present?		Yes	Χ	No	De	pth (inches	s) 8	Present?
Saturation P	resent? (includes ca	pillary fringe)	Yes _	X	No	_ De	pth (inches	s) 0	Yes X No
Describe Re	corded Data (stream	gauge, monitor	ing well, aeri	al photo	s, previou	us insp	ections) , i	f available.	
Remarks:									

Project/Site: SPCSL 2A (Tier 3)		City/County:	Sangamon	Sampling Date:	10/19/2010
Applicant/Owner: UPRR		<u> </u>	State: IL	Sampling Point:	TPA 177.80
Investigator(s): TPA, KR		Section	Township, Range: S25, T	17N, R05W	
Landform (hillslope, terrace, etc.): Adjace	ent to channel		Local Relief (concave	e, convex, none) : conca	ave
Slope (%): 0-2 Lat: 39° 53'	50.06" N	Long:	89° 36' 0.85" W	Datum: NAD 83	
Soil Map Unit Name: 86B - Osco silt loam,	2-5% slopes			NWI Classificat	tion: None
Are climatic/hydrologic conditions on the site	typical for this time	e of year?	Yes X No (If no	o, explain in Remarks)	
Are Vegetation , Soil , or Hy	drology s	ignificantly disturb	ed? Are "Normal Circu	mstances" present?	Yes X No
Are Vegetation , Soil , or Hy	drology na	turally problematic	? (If needed, e	explain any answers in F	Remarks.)
SUMMARY OF FINDINGS - Attach site map					,
Hydrophytic Vegetation Present? Yes		g p	,, -		
		lo th	o Sampled Area within a M	otland? Vac V	No
^		15 111	e Sampled Area within a W	etland? Yes X	No
Wetland Hydrology Present? Yes _	X No				
Remarks: Wetland TPA-177.80A & TPA-1	77.80B. PEMC/P	FOA. Wetlands a	re connected and drain eas	t. Waters with PFOA w	etland
fringe. PEMC wetland near highway. Waters	s is 15-ft wide cha	nnel, moderately ir	ncised with forested uplands	on both sides.	
VEGETATION - Use scientific names of pla	ants.				
Tree Stratum (Plot size: r = 30')		ominant Indicat pecies? Status			
1. Populus deltoides	20	yes FAC-	+ That Are OBL, FACV	V, or FAC:	4 (A)
2. Morus alba	3	FAC	. 		
3. Rhamnus frangula	3	FAC-	Total Number of Don	ninant	
4. Celtis occidentalis	5	FAC	- Species Across All S	trata:	4 (B)
5. Ulmus americana	2	FACV	V		
	33 = Tot	al Cover	Percent of Dominant	Species	
Sapling/Shrub Stratum (Plot size: r =	15')		That Are OBL, FACV	V, or FAC: 1	100% (A/B)
1. Salix exigua	10	yes OBL			
2. Rhamnus frangula	2	FAC-	Prevalence Index W	orksheet:	
3			OBL species	x 1 =	= 0
4			FACW species	x 2 =	=0
5			FAC species	x 3 =	
	12 = Tot	al Cover	FACU species	x 4 =	
Herb Stratum (Plot size: r = 5')			UPL species	x 5 =	
1. Typha latifolia	80	yes OBL	. 	0 (A)	(B)
2. Phragmites australis		yes FACW	/+ Prevalen	ce Index = B/A =	
3			Hydrophytic Vegeta	tion Indicators	
5.			' ' ' ' '	st for Hydrophytic Veget	ation
6.			X 2. Dominand		ation
7.				e Index is <3.01	
8.				gical Adaptations¹ (Provid	de supportina
9.			_ 	arks or on a separate sheet)	ac capperang
10.			— I ——	Hydrophytic Vegetation	¹ (Explain)
	100 = Tot	al Cover	_	, , , ,	
Woody Vine Stratum (Plot size: r = 15'			¹ Indicators of hydr	ric soil and wetland hydr	rology
1				unless disturbed or prob	
2.					
	0 = 7	Total Cover	Hydrophytic Veg	etation Present? Ye	es X No
Remarks: (Include photo numbers here or o	n a separate shee	et.)			
Inundated throughout. Other vegetation inclu	ided: <i>Acer saccha</i>	rinum. Could not	access Culvert 181.90.		

SOIL Sampling Point: TPA 177.80

Profile Des	cription: (Describe to th	he depth needed	to docun	ent the	indicator o	or confii	rm the abs	sence of indica	tors.)
Depth	Matrix		R	edox F	eatures				
(inches)	Color (moist)	% Color (n	noist)	%	Туре	e^1	Loc ²	Texture	Remarks
					<u> </u>				
		<u> </u>							
,									
¹ Type: C=C	oncentration, D=Deplet	ion, RM=Reduced	d Matrix,	CS=C	overed or C	Coated S	Sand Grair	ns. ² Location	n: PL=Pore Lining, M=Matrix
Hydric Soil	Indicators							Indi	cators for Problematic Hydric Soils ³ :
Histoso				Sa	ndy Gleye	d Matrix	(S4)		Coast Prairie Redox (A16)
	Epipedon (A2)		_		ndy Redox		(-)		Dark Surface (S7)
	Histic (A3)		_		ripped Matr				
	gen Sulfide (A4)		_		amy Mucky		al (F1)		Very Shallow Dark Surface (TF12)
	ed Layers (A5)		_		amy Gleye	-		X	Other (Explain in Remarks)
	luck (A10)		_		pleted Mat				
Deplet	ed Below Dark Surface	(A11)	_	Re	dox Dark S	Surface	(F6)		
Thick [Dark Surface (A12)		_	De	pleted Dar	rk Surfac	ce (F7)	3,,	ndicators of hydrophytic vegetation
Sandy	Mucky Mineral (S1)			Re	dox Depre	essions ((F8)		wetland hydrology must be present,
5 cm N	lucky Peat or Peat (S3)		_						unless disturbed or problematic.
Restrictive	Layer: (if observed)								
Type:	Layer: (" obocrvca)								
Depth (in	ches):							Hydric	Soil Present? Yes X No
		:	l 4 4	1 (2-11		lui Ot -		
Remarks: Manual.	No soil pit dug due to	inundation throug	nout wet	iand. S	Soils assun	nea nya	iric per Ste	ep 12b of the 1	987 Corps Delineation
Mariaai.									
HYDROLOG	SY.								
Wetland Hy	drology Indicators:								
Primary Indi	cators (minimum of one	is required; chec	k all that	apply)			Sec	condary Indica	tors (minimum of two required)
Surfac	e Water (A1)		V	Vater-S	tained Lea	ves (B9	9)		Surface Soil Cracks (B6)
High W	/ater Table (A2)			quatic	Fauna (B1	3)		Х	Drainage Patterns (B10)
Satura	tion (A3)		T	rue Aq	uatic Plant	ts (B14)			Dry-Season Water Table (C2)
X Water Marks (B1)			Hydrogen Sulfide Odor (C1)			1)		Crayfish Burrows (C8)	
Sediment Deposits (B2)			Oxidized Rhizospheres on Living Roots				ots	_Saturation Visible on Aerial	
Drift Deposits (B3)			Presence of Reduced Iron (C4)				Imagery (C9)		
Algal Mat or Crust (B4)			Recent Iron Reduction in Tilled Soils (C6)				(C6)	Stunted or Stressed Plants (D1)	
Iron Deposits (B5)			Thin Muck Surface (C7) X				Geomorphic Position (D2)		
Inundation Visible on Aerial Imagery (B7)			Gauge or Well Data (D9)				FAC-Neutral Test (D5)		
Sparse	ly Vegetated Concave	Surface (B8)		Other (E	Explain in R	Remarks	5)		
Field Obser	vations:								
Surface Wat	er Present?		Yes	Χ	No	Dept	th (inches)) 6	Wetland Hydrology
Water Table	Present?		Yes		No X	Dept	th (inches))	Present?
			Yes	Х	No	Dept	th <i>(inches)</i>	0	Yes X No
Describe Re	corded Data (stream ga	auge, monitoring v	vell, aeri	al phot	os, previou	ıs inspe	ctions) , if	available.	
Remarks: C	hannel is 3-ft wide and	6 inches deep. A	ppears t	o flow	east.				

US Army Corps of Engineers Midwest Region - Version 2.0

Wetland Plant Species Lists

Wetland DP-A	Wetlands DP-B1 and DP-B2	Wetland DP-C
Phalaris arundinacea	 2 - Eleocharis erythropoda 4 - Spartina pectinata	0 - Echinochloa crus-galli
C = 0/0 = 0.00 $I = (0.00)(\sqrt{0}) = 0.00$	C = 13/3 = 4.33 I = (4.33)(√3) = 7.50	C = 0/1 = 0.00 $I = (0.00)(\sqrt{1}) = 0.00$
Wetland DP-D	Wetland DP-E	Wetland DP-F
4 - Spartina pectinata 4 - Juncus torreyi 4 - Juncus dudleyi 5 - Sorghastrum nutans C = 17/4 = 4.25	Phalaris arundinacea C = 0/0 = 0.00	Phalaris arundinacea C = 0/0 = 0.00
I = (4.25)(v4) = 8.50	$I = (0.00)(\sqrt{0}) = 0.00$	I = (0.00)(v0) = 0.00
Wetland DP-G	Wetland DP-H	Wetland DP-I
Urtica dioica Conium maculatum 1 - Polygonum scandens 5 - Aster ericoides	1 - Salix exigua Phalaris arundinacea 2 - Vitis riparia 4 - Scirpus atrovirens 2 - Polygonum hydropiper	 1 - Typha latifolia Ranunculus sp. 0 - Echinochloa crus-galli Polygonum sp. 5 - Lemna minor
C = 6/2 = 3.00 $I = (3.00)(\sqrt{2}) = 4.24$	C = 9/2 = 4.50 I = (4.50)(v4) = 9.00	5 - Schoenoplectus tabernaemontani C = 11/4 = 2.75 I = (2.75)(v4) = 5.50
Wetland DP-J	Wetland DP-K	Wetland DP-L
Carex sp. 4 - Physalis viginiana 0 - Asclepias syriaca 0 - Ambrosia trifida 3 - Celtis occidentalis	 3 - Celtis occidentalis 9 - Asimina triloba Phalaris arundinacea Conium maculatum 7 - Solidago missouriensis Carex sp. 	Conium maculatum 5 - Schoenoplectus tabernaemontani 0 - Echinochloa crus-galli 7 - Solidago missouriensis 4 - Leersia oryzoides 1 - Typha glauca Carex sp. 3 - Equisetum hyemale
C = 7/4 = 1.75 I = (1.75)(V4) = 3.50	C = 19/3 = 6.33 I = (6.33)(v3) = 10.96	C = 20/6 = 3.33 I = (3.33)(V6) = 8.16
Wetland DP-M	Wetland DP-N	Wetland DP-O
Phalaris arundinacea Carex sp. 0 - Ambrosia trifida	0 - Acer saccharinum 4 - Salix nigra Phalaris arundinacea	 4 - Spartina pectinata Pastinaca sativa Polygonum sp. 0 - Cyperus esculentus 2 - Cyperus odoratus 3 - Equisetum hyemale
C = 0/1 = 0.00	C = 4/2 = 2.00	C = 9/4 = 2.25
$I = (0.00)(\sqrt{1}) = 0.00$	$I = (2.00)(\sqrt{2}) = 2.83$	I = (2.25)(v4) = 4.50

Taxa without C values were not included in the calculations (C value not applicable (non-native species) or species classification not determined.

Wetland DP-P	Wetlands DP-Q1 and DP-Q2	Wetland DP-R
2 - Eleocharis erythropoda	4 - Scirpus atrovirens	Phalaris arundinacea
Carex sp.	Carex sp.	1 - Typha latifolia
Poa pratensis	Poa pratensis	0 - Ambrosia trifida
	1 - Typha latifolia	Polygonum sp.
		0 - Echinochloa crus-galli
		Conium maculatum
C = 2/1 = 2.00	C = 5/2 = 2.50	C = 1/3 = 0.33
$I = (2.00)(\sqrt{1}) = 2.00$	$I = (2.50)(\sqrt{2}) = 3.53$	$I = (0.33)(\sqrt{3}) = 0.57$
Wetland DP-S	Wetland DP-T	Wetland DP-U
4 - Spartina pectinata	4 - Spartina pectinata	Carex sp.
Carex sp.	0 - Ambrosia trifida	Phalaris arundinacea
4 - Apocynum cannabinum	2 - Toxicodendron radicans	Cyperus sp.
3 - Symphyotrichum lanceolatum	Carex sp.	2 - Rumex altissimus
3 - Equisetum hyemale	curex sp.	2 Namex divisionas
Polygonum sp.		
C = 14/4 = 3.50	C = 6/3 = 2.00	C = 2/1 = 2.00
$I = (3.50)(\sqrt{4}) = 7.00$	$I = (2.00)(\sqrt{3}) = 3.46$	$I = (2.00)(\sqrt{1}) = 2.00$
	(2.00)(10)	(2.00)(12)
Wetlands DP-V1 and DP-V2	Wetland DP-EE	Wetland DP-FF
Setaria glauca	Eleocharis sp.	Phalaris arundinacea
Phalaris arundinacea	4 - Spartina pectinata	7 - Solidago missouriensis
2 - Rumex altissimus	Capsella bursa-pastoris	Carex sp.
0 - Ambrosia trifida	Cyperus sp.	·
C = 2/2 = 1.00	C = 4/1 = 4.00	C = 7/1 = 7.00
$I = (1.00)(\sqrt{2}) = 1.41$	$I = (4.00)(\sqrt{1}) = 4.00$	$I = (7.00)(\sqrt{1}) = 7.00$
Wetland CT-F	Wetland KS-S	Wetland KS-T
Phalaris arundinacea	1 - Typha latifolia	Phalaris arundinacea
4 - Spartina pectinata	,, ,	
C = 4/1 = 4.00	C = 1/1 = 1.00	C = 0/0 = 0.00
$I = (4.00)(\sqrt{1}) = 4.00$	I = (1.00)(V1) = 1.00	$I = (0.00)(\sqrt{0}) = 0.00$
Wetland KS-48	Wetland KS-49A and KS-49B	Wetland KS-50
Scirpus sp.	0 - Acer saccharinum	4 - Salix nigra
0 - Echinochloa crus-galli	4 - Salix nigra	8 - Salix bebbiana
0 - Ambrosia trifida	1 - Salix exigua	4 - Leersia oryzoides
	Phalaris arundinacea	1 - Typha latifolia
		Carex sp.
C = 0/2 = 0.00	C = 5/3 = 1.67	C = 17/4 = 4.25
$I = (0.00)(\sqrt{2}) = 0.00$	I = (1.67)(√3) = 2.89	I = (4.25)(v4) = 8.50
Wetland KS-51	Wetland KS-52	Wetland KS-53
3 - Ulmus americana	4 - Salix nigra	3 - Ulmus americana
Carex sp.	5 - Schoenoplectus tabernaemontani	4 - Salix nigra
4 - Leersia oryzoides	4 - Leersia oryzoides	4 - Apocynum cannabinum
ĺ	2 - Carex vulpinoidea	Carex sp.
	·	5 - Cephalanthus occidentalis
C = 7/2 = 3.50	C = 15/4 = 3.75	C = 16/4 = 4.00
I = (3.50)(√2) = 4.95	I = (3.75)(√4) = 7.50	$I = (4.00)(\sqrt{4}) = 8.00$

Taxa without C values were not included in the calculations (C value not applicable (non-native species) or species classification not determined.

Wetland KS-54	Wetland KS-55	Wetland KS-56
4 - Salix nigra	3 - Ulmus americana	3 - Ulmus americana
Phalaris arundinacea	2 - Populus deltoides	0 - Acer saccharinum
	1 - Salix exigua	3 - Ulmus americana
C = 4/1 = 4.00	C = 6/3 = 2.00	C = 6/3 = 2.00
$I = (4.00)(\sqrt{1}) = 4.00$	$I = (2.00)(\sqrt{3}) = 3.46$	$I = (2.00)(\sqrt{3}) = 3.46$
` ` ` `	, ,,	
Wetlands KS MP_1A - KS MP_1D	Wetlands KS-57A and KS-57B	Wetland KS-58
Conium maculatum	1 - Typha angustifolia	4 - Salix nigra
10 - Morus rubra Phalaris arundinacea		Phalaris arundinacea
Rumex crispus		
5 - Verbena urticifolia		
C = 15/2 = 7.50	C = 1/1 = 1.00	C = 4/1 = 4.00
$I = (7.50)(\sqrt{2}) = 10.61$	$I = (1.00)(\sqrt{1}) = 1.00$	$I = (4.00)(\sqrt{1}) = 4.00$
- (7.30)(42) - 13.01	- (1.00)(V1) - 1.00	- (4.00)(41) - 4.00
Wetland KS-59	Wetland KS-60	Wetland KS-67
1 - Typha latifolia	2 - Populus deltoides	0 - Acer saccharinum
Phalaris arundinacea	Eleocharis sp.	Polygonum sp.
0 - Acer saccharinum		
1 - Salix exigua		
2 - Equisetum laevigatum		
C = 4/4 = 1.00	C = 2/1 = 2.00	C = 0/1 = 0.00
$I = (1.00)(\sqrt{4}) = 2.00$	$I = (2.00)(\sqrt{1}) = 2.00$	I = (0.00)(V1) = 0.00
Wetlands KS-68A and KS-68B	Wetland MP-4	Wetland MP-5
0 - Acer saccharinum	2 - Populus deltoides	Polygonum sp.
2 - Populus deltoides	Phalaris arundinacea	7 - Carex grayi
10 - Morus rubra	4 - Solidago gigantea	Chenopodium album
3 - Celtis occidentalis	Carex sp.	2 - Toxicodendron radicans
Carya sp.	2 - Rumex altissimus	2 - Vitis riparia
Phalaris arundinacea		
2 - Toxicodendron radicans		_
C = 17/5 = 3.40	C = 8/3 = 2.67	C = 11/3 = 3.67
I = (3.40)(√5) = 7.60	$I = (2.67)(\sqrt{3}) = 4.62$	I = (3.67)(√3) = 6.36
Wetlands MP-6A and MP-6B	Wetlands MP-3A, MP-3B, MP-3C	Wetlands MP-19A and MP-19B
2 - Populus deltoides	1 - Salix exigua	1 - Typha latifolia
0 - Acer saccharinum	Phalaris arundinacea	4 - Spartina pectinata
Polygonum sp.	1 - Galium aparine	Carex sp.
	4 - Solidago gigantea	Convolvulus arvensis
		4 - Apocynum cannabinum
C = 2/2 = 1.00	C = 6/3 = 2.00	C = 9/3 = 3.00
$I = (1.00)(\sqrt{2}) = 1.41$	I = (2.00)(v3) = 3.46	I = (3.00)(v3) = 5.20
Wetland NVM-1		
Eleocharis sp.		
Licochians sp.		
6 - Linnia lanceolata		
6 - Lippia lanceolata Polyaonum sp.		
Polygonum sp.		
1 · · · · · · · · · · · · · · · · · · ·		
Polygonum sp.		

Taxa without C values were not included in the calculations (C value not applicable (non-native species) or species classification not determined.

Wetlands NVM-2A and NVM-2B	Wetland NVM-3	Wetland NVM-4
2 - Populus deltoides	Phalaris arundinacea	2 - Populus deltoides
Carex sp.	Thaians aranamacea	4 - Leersia oryzoides
Festuca arundinacea		Phalaris arundinacea
2 - Equisetum laevigatum		Carex sp.
		Curex sp.
4 - Apocynum cannabinum		
Morus alba		
5 - Fraxinus pennsylvanica		
4 - Ulmus rubra		
1 - Solidago altissima		
0 - Ambrosia trifida		
4 - Juncus torreyi		
4 - Aster novae-angliae		
C = 26/9 = 2.89	C = 0/0 = 0.00	C = 6/2 = 3.00
I = (2.89)(√9) = 8.67	$I = (0.00)(\sqrt{0}) = 0.00$	$I = (3.00)(\sqrt{2}) = 4.24$
Wetland NVM-5	Wetlands NVM-6A through NVM-6D	Wetlands NVM-7A and NVM-7B
2 - Populus deltoides	2 - Populus deltoides	Phalaris arundinacea
Carex sp.	Polygonum sp.	
1 - Typha latifolia		
3 - Teucrium canadense		
1 - Bidens frondosa		
C = 7/4 = 1.75	C = 2/1 = 2.00	C = 0/0 = 0.00
I = (1.75)(v4) = 3.50	$I = (2.00)(\sqrt{1}) = 2.00$	$I = (0.00)(\sqrt{0}) = 0.00$
		(, , , , , , , , , , , , , , , , , , ,
Wetland NVM-8	Wetland NVM-9	Wetlands NVM-10A and NVM-10B
4 - Leersia oryzoides	Phalaris arundinacea	Carex sp.
1 - Typha latifolia	Glecoma hederacea	Ajuga reptans
''	1 - Typha sp.	
	5 - Lemna sp.	
	1 - Salix exigua	
C = 5/2 = 2.50	C = 7/3 = 2.33	C = 0/0 = 0.00
$I = (2.50)(\sqrt{2}) = 3.53$	$I = (2.33)(\sqrt{3}) = 4.03$	$I = (0.00)(\sqrt{0}) = 0.00$
- (2.30)(42) - 3.33	1 - (2.33)(43) - 4.03	- (0.00)(00) - 0.00
Wetland NVM-11	Wetlands NVM-12A and NVM-12B	Wetland NVM-13
4 - Leersia oryzoides	1 - Salix exigua	0 - Acer negundo
1 - Typha latifolia	0 - Acer saccharinum	0 - Acer saccharinum
,,, , , , , ,	3 - Aster simplex	6 - Cornus amomum
	Carex sp.	1 - Geum canadense
	4 - Spartina pectinata	Aster sp.
	Iris sp.	Carex sp.
	·	4 - Schenoplectus fluviatilis
	2 - Vitis riparia	4 - Schenopiectus jiuviutilis
F - F /2 - 2 F0	1 - Solidago altissima	E = 11/F = 2.20
C = 5/2 = 2.50	C = 11/6 = 1.83	C = 11/5 = 2.20
I = (2.50)(v2) = 3.53	I = (1.83)(V6) = 4.48	I = (2.20)(√5) = 4.92

Wetland NVM-14	Wetlands NVM-32A and NVM-32B	Wetland NVM-33
4 - Ulmus rubra	Carex sp.	0 - Acer negundo
2 - Populus deltoides	4 - Juncus dudleyi	2 - Populus deltoides
0 - Acer saccharinum	Bidens sp.	Phalaris arundinacea
Festuca sp.	2 - Rumex altissimus	
4 - Juncus torreyi	4 - Leersia oryzoides	
2 - Equisetum laevigatum		
5 - Panicum rididulum		
<i>Eleocharis</i> sp.		
2 - Vitis riparia		
C = 19/7 = 2.71	C = 10/3 = 3.33	C = 2/2 = 1.00
I = (2.71)(√7) = 7.17	I = (3.33)(√3) = 5.77	$I = (1.00)(\sqrt{2}) = 1.41$
Wetlands TPA-JJ1 and TPA-JJ2	Wetlands TPA-KK1 and TPA-KK2	Wetlands TPA-177.80A, TPA-177.80B
7 - Equisetum fluviatile	1 - Salix exigua	2 - Populus deltoides
7 - Senecio aureus	Carex sp.	Morus alba
2 - Equisetum laevigatum	2 - Equisetum laevigatum	Rhamnus frangula
0 - Equisetum arvense		3 - Celtis occidentalis
		3 - Ulmus americana
		1 - Salix exigua
		1 - Typha latifolia
		1 - Phragmites australis
		0 - Acer saccharinum
C = 16/4 = 4.00	C = 3/2 = 1.50	C = 11/7 = 1.57
$I = (4.00)(\sqrt{4}) = 8.00$	$I = (1.50)(\sqrt{2}) = 2.12$	$I = (1.57)(\sqrt{7}) = 4.15$

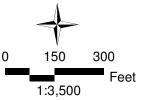
Figures Study Area Map Wetland Delineation Maps





Sample Point

Structure



Athol Siding Springfield Subdivision Logan County, Illinois

Wetland Delineation Map

Figure 2B

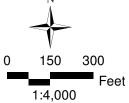




Track Alignment



Structure



Elkhart Siding Springfield Subdivision

Logan County, Illinois

Wetland Delineation Map

Figure 2A

Sample Point

Structure

Wetland Delineation Map

Figure 2B

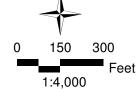
Feet

1:4,000



Structure

Sample Point



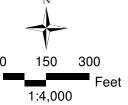
Elkhart Siding Springfield Subdivision Logan County, Illinois

Wetland Delineation Map

Figure 2C



Sample Point Structure

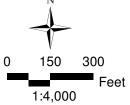


Elkhart Siding Springfield Subdivision Logan County, Illinois

Wetland Delineation Map

Figure 2D

Sample Point Structure



Logan County, Illinois

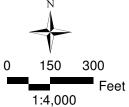
Wetland Delineation Map

Figure 2G



Sample Point

Structure



Elkhart Siding Springfield Subdivision Logan County, Illinois

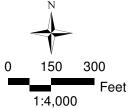
Wetland Delineation Map

Figure 2H



Track Alignment Sample Point

Structure



Elkhart Siding Springfield Subdivision

Logan County, Illinois

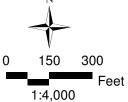
Wetland Delineation Map

Figure 2K



Sample Point

Structure



Elkhart Siding Springfield Subdivision Logan County, Illinois

Wetland Delineation Map

Figure 2L

Sample Point

Structure

Wetland Delineation Map

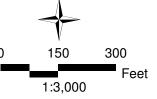
Figure 2M

Feet

1:4,000

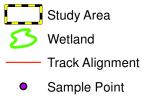
Wetland Track Alignment

Sample Point Structure

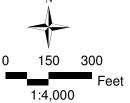


Culvert 179.08
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map Figure 2

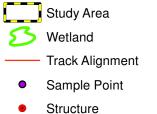


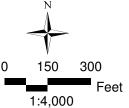
Structure



Ridgley Siding
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map Figure 2B

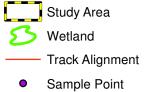




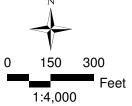
UPRR High Speed Rail Ridgley Siding Springfield Subdivision Sangamon County, Illinois

Wetland Delineation Map Figure 2D

OLSSON



Sample PointStructure

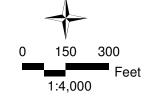


UPRR High Speed Rail
Auburn Siding
Springfield Subdivision
Sangamon County, Illinois

Wetland Delineation Map Figure 2A



Sample Point Structure



Auburn Siding Springfield Subdivision

Sangamon County, Illinois

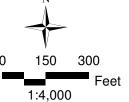
Wetland Delineation Map

Figure 2C



Sample Point

Structure



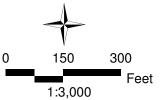
Wetland Delineation Map

Figure 2D



Structure

Sample Point



Bridge 201.60 Springfield Subdivision

Sangamon County, Illinois

Wetland Delineation Map Figure 2