Appendix C

Wetland **Delineation Report**

WETLAND DELINEATION REPORT

Union Pacific Railroad Company Springfield Subdivision, SPCSL 2A (HSR) Tier 2 (MP 203 to MP 230)

MACOUPIN AND SANGAMON COUNTIES STATE OF ILLINOIS

PREPARED FOR:

UNION PACIFIC RAILROAD COMPANY
&
ILLINOIS DEPARTMENT OF TRANSPORTATION

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DATE PREPARED: MARCH 5, 2012

OLSSON PROJECT NO. 010-1855

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I. INTRODUCTION

Olsson Associates (Olsson) was retained by the Union Pacific Railroad Company (UPRR) to conduct a wetland delineation for the Tier 2 project alignment located between Mile Posts (MP) 203 and MP 230 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 2, wetland delineations were conducted in October 2010, November 2010, December 2010, May 2011, and June 2011, for the following locations:

- Girard Siding and Track Construction (MP 205.75 to 214.52), including associated turnouts and structures.
- Carlinville Siding (MP 223.20 to 226.74), including associated turnouts and structures.
- Structures at MP 203.07, 218.20, 218.35, 219.70, 221.89, 227.45, 228.15, 228.25, 228.40, and 229.90.

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. 2002. Digital Raster Graphic Mosaic, Macoupin County, Illinois.
- 2. USDA-FSA-APFO National Aerial Imagery Program (NAIP). 2010. Macoupin County, 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 Macoupin County, Illinois (Digital Soils Data).
- 5. USDA-NRCS. 2010. Soil Data Mart. Map Unit Descriptions. Macoupin County, Illinois.
- 6. USDA-NRCS. 2010. Hydric Soils List for Macoupin County, 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, May 2011, and June 2011, 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 Magellan 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</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.

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

III. SUMMARY OF FINDINGS

The wetland delineation for Tier 2 identified 80 wetland areas totaling approximately 28 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 2 Study Area.

	Cowardin	Size	FQA ²		
Wetland ID	Classification ¹	(Acres)	Mean C	FQI	Figure Reference
KS_47A	PFO1A/PEMC	0.138	2.00	2.83	Girard Siding (Fig 2A & 2B)
KS_47B	PFO1A/PEMC	0.028	2.00	2.83	Girard Siding (Fig 2B)
KS_46A	PFO1A	0.032	2.90	9.17	Girard Siding (Fig 2B)
KS_46B	PEMC	0.076	2.90	9.17	Girard Siding (Fig 2B)
KR_43	PEMC	2.113	3.00	4.00	Girard Siding (Fig 2D & 2E)
KS_45	PFO/PEMC	0.716	2.25	4.50	Girard Siding (Fig 2D & 2E)
KS_44	PEMA	0.014	0.00	0.00	Girard Siding (Fig 2E)
MP-4	PEMC	0.044	2.67	4.62	Girard Siding (Fig 2E)

	Cowardin	Size	FQA	\mathbf{A}^2	
Wetland ID	Classification ¹	(Acres)	Mean C	FQI	Figure Reference
KR_40	PFO1A/PEMA	0.040	1.00	1.73	Girard Siding (Fig 2E)
KR 39	PFO1A	0.074	1.75	3.50	Girard Siding (Fig 2F)
KR 42	PFO1A/PFOC/PUB	2.969	1.00	1.41	Girard Siding (Fig 2F)
KR 38	PFO1A/PEMC	1.914	2.00	3.46	Girard Siding (Fig 2F)
KR 41	PEMA	0.034	0.00	0.00	Girard Siding (Fig 2F)
KR 33	PEMA/PEMC	1.308	0.00	0.00	Girard Siding (Fig 2G & 2H)
KR 34	PEMA/PEMC	0.048	3.00	4.24	Girard Siding (Fig 2G)
KR 35	PFO1A/PEMA	0.140	2.00	2.83	Girard Siding (Fig 2G)
KR 36	PFO1A/PSSA/PEMA	0.988	1.00	1.41	Girard Siding (Fig 2G & 2H)
KR 37	PFO1A	0.196	1.67	2.89	Girard Siding (Fig 2H)
KR 30	PFO1A/PEMA	0.041	1.67	2.89	Girard Siding (Fig 2H)
KR 29	PSSC/PUB	0.871	4.00	6.93	Girard Siding (Fig 2I)
KR 31	PEMA	1.197	4.00	4.00	Girard Siding (Fig 2I)
KR 32	PFO1A/PEMA	0.145	0.00	0.00	Girard Siding (Fig 2I)
KR 26	PFO1A/PFOC/PEMF	1.217	0.00	0.00	Girard Siding (Fig 2I & 2J)
KR 27	PEMA	0.047	0.00	0.00	Girard Siding (Fig 2J)
KR 28	PEMC	0.012	1.00	1.41	Girard Siding (Fig 2J)
KR 16	PFO1A/PEMA	0.968	0.00	0.00	Girard Siding (Fig 2J & 2K)
KR 17	PFO1A/PEMA	0.395	0.00	0.00	Girard Siding (Fig 2J & 2K)
NVM 17A	PEMA	0.041	2.75	5.50	Girard Siding (Fig 2K)
NVM 17B	PEMA	0.057	2.75	5.50	Girard Siding (Fig 2K)
NVM 17C	PEMA	0.012	2.75	5.50	Girard Siding (Fig 2K)
NVM 16	PEMA	0.010	5.67	9.82	Girard Siding (Fig 2K)
KR 15	PFO1A/PEMC	1.888	2.60	5.81	Girard Siding (Fig 2K & 2L)
KR 24	PEMC/PEMF	1.225	2.33	4.04	Girard Siding (Fig 2K & 2L)
KR 18	PFO1A/PSSA/ PEMC	1.466	4.08	14.13	Girard Siding (Fig 2K)
KR 19	PFO1A/PFOC/ PEMC	1.711	3.56	10.68	Girard Siding (Fig 2K)
DP V	PEMC	0.128	1.00	1.00	Girard Siding (Fig 2K)
KR 20	PEMF	0.143	1.00	1.00	Girard Siding (Fig 2K)
KR 21	PEMC/PEMF	0.863	1.00	1.41	Girard Siding (Fig 2K)
KR 22	PSSC	0.039	0.00	0.00	Girard Siding (Fig 2K)
KR 23	PEMA	0.328	1.60	3.58	Girard Siding (Fig 2K & 2L)
MP-2	PFO1A	0.096	2.00	3.46	Girard Siding (Fig 2L)
KR 12	PFO1A/PEMA	0.342	4.50	9.00	Girard Siding (Fig 2L)
KR 13	PEMC	0.441	4.00	5.66	Girard Siding (Fig 2L)
KR 11	PFO1A/PEMA	0.108	2.75	5.50	Girard Siding (Fig 2L)
KR 14	PEMA	0.048	0.00	0.00	Girard Siding (Fig 2L)
KR 8	PFO1A/PEMA	0.036	1.33	2.30	Girard Siding (Fig 2M)
KR 7	PFO1A/PEMC	0.378	1.80	4.02	Girard Siding (Fig 2M)
KR 6	PFO1A/PEMC	0.228	1.50	3.00	Girard Siding (Fig 2M)
KS 69A	PEMF	0.027	2.33	4.04	Culvert 218.35 (Fig 2)
KS 69B	PEMF	0.019	2.33	4.04	Culvert 218.35 (Fig 2)
KS 70A	PEMF	0.085	4.00	4.00	Culvert 219.70 (Fig 2)
KS 70B	PEMF	0.030	4.00	4.00	Culvert 219.70 (Fig 2)
KS 70C	PEMF	0.037	4.00	4.00	Culvert 219.70 (Fig 2)
KR 25A	PEMF	0.050	3.50	4.95	Culvert 221.89 (Fig 2)
KR 25B	PEMF	0.012	3.50	4.95	Culvert 221.89 (Fig 2)
KS U	PEMA	0.012	0.00	0.00	Carlinville Siding (Fig 2B)
KS_0 KS_V1	PEMA	0.200	0.33	0.57	Carlinville Siding (Fig 2D)
KS_V1	PSS/PEMA	0.002	4.50	6.36	Carlinville Siding (Fig 2C & 2D)
KS_X1	PEMA	0.220	0.33	0.57	Carlinville Siding (Fig 2D)
KS_V2 KS_W1	PEMA	0.220	0.00	0.00	Carlinville Siding (Fig 2D)
NO_VV I	FLIVIA	0.120	0.00	0.00	Cariffyllie Siulfig (Fig 2D)

	Cowardin	Size	FQA ²		
Wetland ID	Classification ¹	(Acres)	Mean C	FQI	Figure Reference
KS_X2	PSS/PEMA	0.056	4.50	6.36	Carlinville Siding (Fig 2C)
KS_W2	PEMA	0.185	0.00	0.00	Carlinville Siding (Fig 2D)
KS_V3	PEMA	0.051	0.33	0.57	Carlinville Siding (Fig 2D)
KS_W3	PEMA	0.006	0.00	0.00	Carlinville Siding (Fig 2D)
KS_V4	PEMA	0.289	0.33	0.57	Carlinville Siding (Fig 2D)
KS_W4	PEMA	0.001	0.00	0.00	Carlinville Siding (Fig 2C)
KS_V5	PEMA	0.380	0.33	0.57	Carlinville Siding (Fig 2C & 2D)
KS_V6	PEMA	0.099	0.33	0.57	Carlinville Siding (Fig 2C)
KS_V7	PEMA	0.160	0.33	0.57	Carlinville Siding (Fig 2C)
KS_W5	PEMA	0.041	0.00	0.00	Carlinville Siding (Fig 2C)
KS_Y6	PEMA	0.006	4.00	4.00	Carlinville Siding (Fig 2E)
KS_Y5	PEMA	0.013	4.00	4.00	Carlinville Siding (Fig 2E)
KS_Y4	PEMA	0.015	4.00	4.00	Carlinville Siding (Fig 2E)
KS_Y3	PEMA	0.031	4.00	4.00	Carlinville Siding (Fig 2E & 2F)
KS_Z4	PEMA	0.020	3.00	3.00	Carlinville Siding (Fig 2E)
KS_Z3	PFO1A	0.083	3.00	3.00	Carlinville Siding (Fig 2F)
KS_Z2	PFO1A	0.016	3.00	3.00	Carlinville Siding (Fig 2F)
KS_Z1	PFO1A	0.073	3.00	3.00	Carlinville Siding (Fig 2F)
KS_Y2	PFO/PEMA	0.012	4.00	4.00	Carlinville Siding (Fig 2F)
KS_Y1	PEMA	0.037	4.00	4.00	Carlinville Siding (Fig 2F)
Total		28.073			

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

PFO1A = Palustrine Forested Broad-Leaved Deciduous Temporarily Flooded

PUB = Palustrine Unconsolidated Bottom

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

Wetland Determination Data Forms

Project/Site: SPCSL 2A (Tier 2)		City/County	Macoupi	in Sampling Date: 11/4/2010				
Applicant/Owner: UPRR				State: IL Sampling Point: 6-ct				
Investigator(s): CT, KT, MP		Section, To	wnship, Rai	nge: S7, T11N, R6W				
Landform (hillslope, terrace, etc.): TRACKSIDE		ı	ocal relief	(concave, convex, none):	CONCAVE			
			796664		Datum: DD (NAD) 83)		
Soil Map Unit Name: 50A VIRDEN SILT LOAM,	0-2% SLOPES	:		NWI classific	cation: NONE			
Are climatic / hydrologic conditions on the site typical	for this time of yea	r? Yes	No _	(If no, explain in R	lemarks.)			
Are Vegetation, Soil, or Hydrology	significantly of	disturbed?	Are *	Normal Circumstances" p	present? YesX_	No		
Are Vegetation, Soil, or Hydrology	naturally prob	blematic?	(If ne	eded, explain any answe	ers in Remarks.)			
SUMMARY OF FINDINGS - Attach site r	map showing	samplin	g point le	ocations, transects	, important fea	tures, etc.		
Hydrophytic Vegetation Present? Yes X	No							
Hydric Soil Present? Yes	No X		e Sampled		~			
	No_X	with	in a Wetlan	id? Yes	No_X			
Remarks:	ND IN THE EIE		I AND D)	HOWEVED DUE TO	THE INCODMA	TION		
THIS WAS DETERMINED TO BE A WETLAND.	ND IN THE FIE	LD (VVE I)	LAND b),	HOWEVER, DUE TO	THE INFORMA	TION		
VEGETATION – Use scientific names of pl	ants.							
Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?		Dominance Test work				
1. Ulmus americana	5	yes	fac	Number of Dominant S That Are OBL, FACW,		(A)		
2.								
3.				Total Number of Domin Species Across All Stra	2	(B)		
4				Percent of Dominant S	nasias			
5				That Are OBL, FACW,		(A/B)		
Sapling/Shrub Stratum (Plot size: r=15'	5	= Total Cov	er er	Prevalence Index wor	kshoot.			
1 Lonicera canadensis	_ <i>,</i> 15	yes	facu		Multiply	bv:		
2.				OBL species				
3.				FACW species				
4.				FAC species	x 3 =			
5				FACU species	x 4 =			
r=5'	<u>15</u>	= Total Cov	er	UPL species	x 5 =			
Herb Stratum (Plot size: r=5' 1. Phalaris arundinacea	70	yes	facw+	Column Totals:	(A)	(B)		
Solidago canadensis	15	<u>ycs</u>	facu	Prevalence Index	c = B/A =			
Ambrosia trifida	15		fac+	Hydrophytic Vegetation	on Indicators:			
4				1 - Rapid Test for I	Hydrophytic Vegetal	tion		
5				X 2 - Dominance Tes	st is >50%			
6				3 - Prevalence Inde	ex is ≤3.0 ¹			
7				4 - Morphological /	Adaptations ¹ (Provid	e supporting		
8				l .	s or on a separate s			
9				Problematic Hydro	pnytic vegetation (explain)		
10				¹ Indicators of hydric soi	il and wetland hydro	loav must		
Woody Vine Stratum (Plot size:		= Total Cov	er	be present, unless distr				
1				Hydrophytic				
2				Vegetation Present? Ye	s_X No	_		
Remarks: (Include photo numbers here or on a sep-		= Total Cov	er	<u> </u>				
100-1831	a.de onoet.j							

SOIL Sampling Point: 6-ct

Profile Desc	ription: (Describe	to the dep	th needed to docur	nent the	indicator	or confir	rm the absence of indicators.)
Depth	Matrix		Redo	x Feature	es		
(inches)	Color (moist)	%	Color (moist)	%_	_Type ¹	_Loc ²	
0-9	10YR 2/2	70	NONE	N/A		-	BLOCKY
0-9	10YR 4/3	30	NONE	N/A	-	-	BLOCKY
9-19	10YR 4/2	100	10YR 5/8	2-3	RM	М	BLOCKY
1							2
Hydric Soil		pletion, RM	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
			Conduction	21 d M	-t-' (O.1)		-
Histosol					atrix (S4)		Coast Prairie Redox (A16)
	pipedon (A2)			Redox (S			Dark Surface (S7)
ı —	istic (A3) en Sulfide (A4)			d Matrix (ರಾ) ineral (F1)		Iron-Manganese Masses (F12) Very Shallow Dark Surface (TF12)
	d Layers (A5)			-	latrix (F2)		Other (Explain in Remarks)
_	ick (A10)			d Matrix			Other (Explain in Remarks)
ı —	d Below Dark Surfa	co (A11)		Dark Surf			
	ark Surface (A12)	ce (ATT)			ace (F6) urface (F7	`	³ Indicators of hydrophytic vegetation and
ı —	flucky Mineral (S1)		X Redox I			,	wetland hydrology must be present,
	icky Peat or Peat (S	23)		pehiessi) (I-O)		unless disturbed or problematic.
	Layer (if observed						diless disturbed of problematic.
	ONE OBSERVED						
	ches): >17						Hydric Soil Present? Yes NoX_
Remarks:							
MATRIX V	ALUE FAILS, CH	ROMA OF		3% OF	DISHNE		RELY WITHIN THE UPPER 12" OF THE SOIL. CENTRATIONS. THEREFORE SOIL NOT
HYDROLO	GY						
	drology Indicators	:					
			red; check all that ag	oply)			Secondary Indicators (minimum of two required)
	Water (A1)		Water-Sta		ves (B9)		Surface Soil Cracks (B6)
	ater Table (A2)		Aquatic Fa				Drainage Patterns (B10)
Saturation	, ,		True Aqua	,	,		Dry-Season Water Table (C2)
			Hydrogen				Crayfish Burrows (C8)
	larks (B1)		Oxidized F			ina Doct	
1 —	nt Deposits (B2)		_				
l —	posits (B3)		Presence				Stunted or Stressed Plants (D1)
	at or Crust (B4)		Recent Iro			d Soils (C	
	posits (B5)		Thin Muck				FAC-Neutral Test (D5)
—	on Visible on Aerial Vegetated Concav				, ,		
Field Obser		re Surface (Other (LX)	Jiaiii III IV	elliaiks)		
Surface Wat		Vas	No X Depth (in	shoot: 0			
					19	-	
Water Table Present? Yes No X Depth (inches): >19 Saturation Present? Yes No X Depth (inches): >19 Wetland Hydrology Present? Yes No X							
(includes car	pillary fringe)		onitoring well, aerial				
Remarks:							

Project/Site: SPCSL 2A (Tier 2)	c	ity/Count	unty: Macoupin Sampling Date: 11/4/2010						
Applicant/Owner: UPRR				State: IL Sampling Point: 8-ct					
Investigator(s): CT, KT, MP	s	ection, T	ownship, Rar	nge: S7, T11N, R6W					
Landform (hillslope, terrace, etc.): TRACKSIDE			Local relief	(concave, convex, none):	CONCAVE				
			9.797042		Datum: DD (NA	ND 83)			
Soil Map Unit Name: 50A VIRDEN SILT LOAM, 0-29	% SLOPES			NWI classific	ation: NONE				
Are climatic / hydrologic conditions on the site typical for th	nis time of year	r? Yes _	X No	(If no, explain in R	emarks.)				
Are Vegetation, Soil, or Hydrology	significantly d	isturbed?	Are *	Normal Circumstances" p	resent? Yes _X	No			
Are Vegetation, Soil, or Hydrology	naturally prob	lematic?	(If ne	eded, explain any answer	rs in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing	samplii	ng point le	ocations, transects	, important fe	atures, etc.			
Hydrophytic Vegetation Present? Yes 1	No_X								
Hydric Soil Present? Yes 1	No X		he Sampled		🗸				
Wetland Hydrology Present? Yes 1	No _X	wit	hin a Wetlan	d? Yes	No_X				
Remarks: THIS WAS DETERMINED TO BE A WETLAND I	IN THE FIEL	D (WE	TLAND B),	HOWEVER, DUE TO	THE INFORM	ATION			
IDENTIFIED, THIS IS NOT A WETLAND. Culver	t 213.30 eas	st of san	nple point.						
VEGETATION - Use scientific names of plants	S.								
Tree Stratum (Plot size: r=30'	Absolute % Cover		nt Indicator	Dominance Test works					
1. Maclura pomifera	15	yes	facu	Number of Dominant Sp That Are OBL, FACW, of		(A)			
2				Total Number of Domina	ant				
3				Species Across All Stra	ita: 3	(B)			
4				Percent of Dominant Sp		(4.470)			
	4 -	Total Co	over	That Are OBL, FACW, o	or FAC: 00	(A/B)			
Sapling/Shrub Stratum (Plot size: r=15')				Prevalence Index work					
1. Lonicera canadensis				Total % Cover of:					
2				OBL species					
3				FACW species FAC species					
4 5				FACU species					
		Total Co	over	UPL species					
Herb Stratum (Plot size: r=5')		1010.		Column Totals:					
1									
2Ambrosia trifida	70		fac+	Prevalence Index Hydrophytic Vegetatio					
·			- 1001	1 - Rapid Test for H		ation			
4 5				2 - Dominance Tes					
6				3 - Prevalence Inde					
7				4 - Morphological A	Adaptations1 (Provi	ide supporting			
8.				data in Remarks	s or on a separate	sheet)			
9.				Problematic Hydrop	phytic Vegetation	(Explain)			
10				¹ Indicators of budgie soil	l and wetland had	releas must			
Woody Vine Stratum (Plot size:)	<u>70 </u>	Total Co	over	¹ Indicators of hydric soil be present, unless distu	irbed or problema	tic.			
1				Hydrophytic					
2				Vegetation Present? Yes	s No	×			
		Total Co	over	riesentr 165	· NO				
Remarks: (Include photo numbers here or on a separate	sheet.)								

SOIL Sampling Point: 8-Ct

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the i	ndicator or	confirm	the absence	of indicators.)
Depth	Matrix			ox Feature		. 2		
(inches)	Color (moist) 10YR4/3	400	Color (moist)	%	_Type ¹ _	Loc ²	Texture	Remarks
0-8		100	NONE	_ N/A			crumbly	very dry clay
8-17	10YR3/3	100	NONE	_ <u>N/A</u>	· :		crumbly	
	oncentration, D=Dep	letion, RM	=Reduced Matrix, N	IS=Masked	Sand Grain	S.		: PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indicators	for Problematic Hydric Soils ³ :
Histosol	(A1)			Gleyed Ma			_	Prairie Redox (A16)
	pipedon (A2)			Redox (S5	-			Surface (S7)
Black Hi	1 /			d Matrix (S			_	anganese Masses (F12)
	n Sulfide (A4)			Mucky Mir				Shallow Dark Surface (TF12)
2 cm Mu	Layers (A5)			Gleyed Ma ed Matrix (I			Other	(Explain in Remarks)
_	Below Dark Surfac	e (A11)		Dark Surfa				
	ark Surface (A12)	c (<11)		ed Dark Su	. ,		3Indicators	of hydrophytic vegetation and
_	lucky Mineral (S1)			Depression	4 2			d hydrology must be present,
5 cm Mu	cky Peat or Peat (S	3)	_		, ,			disturbed or problematic.
Restrictive I	ayer (if observed)	:						
Type: NC	NE OBSERVED							
Depth (inc	ches): >17						Hydric Soil	Present? Yes No _X
Remarks:								
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary India	ators (minimum of	one is requi	red; check all that a	pply)			Seconda	ary Indicators (minimum of two required)
Surface	Water (A1)		Water-St	ained Leav	es (B9)		Surf	face Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic F	auna (B13)		Drai	inage Patterns (B10)
Saturation	on (A3)		True Aqu	atic Plants	(B14)		Dry-	Season Water Table (C2)
Water M	arks (B1)		Hydroger	Sulfide O	dor (C1)		Cray	yfish Burrows (C8)
Sedimer	t Deposits (B2)		Oxidized	Rhizosphe	res on Living	Roots (C3) Satu	uration Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)		Presence	of Reduce	ed Iron (C4)		Stur	nted or Stressed Plants (D1)
Algal Ma	t or Crust (B4)		Recent Ir	on Reducti	on in Tilled S	ioils (C6)) Geo	emorphic Position (D2)
Iron Dep	osits (B5)		Thin Muc	k Surface ((C7)		FAC	C-Neutral Test (D5)
Inundation	on Visible on Aerial	lmagery (B	7) Gauge or	Well Data	(D9)			
Sparsely	Vegetated Concav	e Surface (B8) Other (Ex	plain in Re	emarks)			
Field Obser				_				
Surface Wate	er Present?	'es	No Depth (i	nches): 0				
Water Table	Present? Y	'es	No Depth (in	nches): <u>>1</u>	7			
Saturation Present? Yes No X Depth (inches): >17 Wetland Hydrology Present? Yes No X							y Present? Yes No _X	
	corded Data (stream	gauge, mo	onitoring well, aerial	photos, pr	evious inspe	ctions), i	f available:	
Damedia								
Remarks:								

Project/Site: SPCSL 2A (Tier 2)		City/County: Macoupin Sampling Date: 11/3/2010					
Applicant/Owner: UPRR		State: IL Sampling Point: 18-ct					
Investigator(s): CT		Sectio	n, Tov	vnship, Rar	nge: NE 1/4, S16. T12N, R6W		
Landform (hillslope, terrace, etc.): TOPOGRAPHIC LO	WC	Local relief (concave, convex, none): NONE					
		Long:	-89.7	766333	Datum: DD (NAD83)		
Soil Map Unit Name: 43A IPAVA SILT LOAM, 0-2%					NWI classification: NONE		
Are climatic / hydrologic conditions on the site typical for t	this time of year	ar? Ye	es_X				
Are Vegetation, Soil, or Hydrology					Normal Circumstances" present? YesX No		
Are Vegetation, Soil, or Hydrology	_naturally pro	blema	tic?	(If ne	eded, explain any answers in Remarks.)		
				g point lo	ocations, transects, important features, etc.		
Hydrophytic Vegetation Present? Yes X	No						
	No		ls the	e Sampled			
	No		withi	n a Wetlan	d? Yes X No		
Remarks:							
WETLAND ct-g-day 3. PEMA. Part of Wetland BLUEGRASS AND A FESCUE SP. THERE IS A							
VEGETATION - Use scientific names of plant	ts.						
Tree Stratum (Plot size:)	Absolute % Causes			Indicator	Dominance Test worksheet:		
1)	% Cover				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)		
2					Total Number of Dominant		
3					Species Across All Strata: 2 (B)		
4		_			Percent of Dominant Species		
5					That Are OBL, FACW, or FAC: 100 (A/B)		
Sapling/Shrub Stratum (Plot size:)		= Tota	al Cov	er	Prevalence Index worksheet:		
1					Total % Cover of:Multiply by:		
2.					OBL species x 1 =		
3.					FACW species x 2 =		
4.					FAC species x 3 =		
5		_			FACU species x 4 =		
r_6'		= Tota	al Cov	er	UPL species x 5 =		
Herb Stratum (Plot size: r=5' 1. Spartina pectinata	60			foou	Column Totals: (A) (B)		
Ambrocia trifida	$-\frac{60}{10}$	yes		facw+	Prevalence Index = B/A =		
Carex sp.	$-\frac{10}{20}$	yes		fac+	Hydrophytic Vegetation Indicators:		
Polygonum bicorne	$-\frac{20}{10}$			facw+	1 - Rapid Test for Hydrophytic Vegetation		
]"		_		14011	× 2 - Dominance Test is >50%		
5					3 - Prevalence Index is ≤3.0¹		
6 7					4 - Morphological Adaptations ¹ (Provide supporting		
8					data in Remarks or on a separate sheet)		
9					Problematic Hydrophytic Vegetation ¹ (Explain)		
10					4		
Woody Vine Stratum (Plot size:)	100	= Tota	al Cov	er	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
1					Hydrophytic		
2					Vegetation Present? Yes X No		
		= Tota	al Cov	er	rieseller tes NO		
Remarks: (Include photo numbers here or on a separat	e sheet.)						
Carex sp. is likely FAC, FACW, or OBL.							

Sampling Point:	18-ct	
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SOIL								Sampling Point: 18-ct
Profile Desc	cription: (Descri	be to the dep	th needed to docu	ment the	indicator	or confir	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	_Loc ²	Texture	Remarks
0-19	10 YR 2/2	100	5YR 5/8	<1	. <u>D</u>	<u>M</u>		smooth
l								
¹Type: C=C	oncentration. D=D	epletion. RM:	=Reduced Matrix, M	S=Masked	d Sand Gr	ains.	² Location	n: PL=Pore Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Soils ³ :
Histosol	(A1)		Sandy	Gleyed Ma	atrix (S4)		Coast	Prairie Redox (A16)
Histic E	pipedon (A2)			Redox (S			Dark 8	Surface (S7)
1 —	istic (A3)			d Matrix (S				Manganese Masses (F12)
1	en Sulfide (A4)				neral (F1)			Shallow Dark Surface (TF12)
	d Layers (A5)			Gleyed M			Other	(Explain in Remarks)
1 —	uck (A10) d Below Dark Surl	inco (A11)		ed Matrix (Dark Surfa				
	ark Surface (A12)	ace (ATT)			urface (F7)	1	3Indicators	s of hydrophytic vegetation and
_	Mucky Mineral (S1)		Depressio		,		d hydrology must be present,
	ucky Peat or Peat			,				s disturbed or problematic.
	Layer (if observe							
Type: NO	OT OBSERVED	1						
Depth (in	ches): >19						Hydric Soil	Present? Yes X No No
Remarks:								
HYDROLO	GY							
Wetland Hy	drology Indicato	rs:						
Primary India	cators (minimum o	of one is requi	red; check all that a	oply)			Seconda	ary Indicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Leav	res (B9)		Sur	face Soil Cracks (B6)
High Wa	ater Table (A2)		Aquatic Fa	auna (B13	3)		Dra	inage Patterns (B10)
Saturati	on (A3)		True Aqua	atic Plants	(B14)		Dry	-Season Water Table (C2)
Water N	farks (B1)		Hydrogen	Sulfide O	dor (C1)		X Cra	yfish Burrows (C8)
Sedime	nt Deposits (B2)		Oxidized I	Rhizosphe	eres on Liv	ing Roots	(C3) Sat	uration Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Presence	of Reduce	ed Iron (C4	4)	Stu	nted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reduct	ion in Tille	d Soils (C	6) <u>X</u> Geo	omorphic Position (D2)
Iron Dep	posits (B5)		Thin Muck	Surface	(C7)		FAC	C-Neutral Test (D5)
Inundati	on Visible on Aeri	al Imagery (B	7) Gauge or	Well Data	(D9)			
Sparsely	y Vegetated Conc	ave Surface (B8) Other (Ex	plain in Re	emarks)			
Field Obser	vations:							
Surface Wat	er Present?		No Depth (in			_		
Water Table	Present?	Yes	No Depth (in	ches): <u>>1</u>	19	_		
Saturation P	resent?	Yes	No Depth (in	ches): <u>>1</u>	19	Wet	land Hydrolog	y Present? Yes X No
	pillary fringe)	am gauge To	onitoring well assist	nhotos s	revieue iro			
Describe Re	Colued Data (Sife	am yauye, mo	onitoring well, aerial	priotos, pr	evious iris	pections),	, ii avallable.	
Domortic:								
Remarks:	IST SOILS							
VERY MOI	IST SUILS							

Project/Site: SPCSL 2A (Tier 2)	(City/County: Macoupin Sampling Date: 11/3/2010						
Applicant/Owner: UPRR			State: IL Sampling Point: 20-ct					
Investigator(s): CT	;	Section, Township, Range: S16. T12N, R6W						
Landform (hillslope, terrace, etc.): DITCI	1			Lo	ocal relief ((concave, convex, none): NONE		
Slope (%): 0-1 Lat: 39.48953	9		Long:	-89.7	67118	Datum: DD (NAD 83	,)	
Soil Map Unit Name: 43A IPAVA SILT	LOAM, 0-2%	% SLOPES				NWI classification: NONE		
Are climatic / hydrologic conditions on the	site typical for	this time of yea	ar? Ye	es _X	No	(If no, explain in Remarks.)		
Are Vegetation, Soil, or Hy	ydrology	_ significantly	disturb	ed?	Are "l	Normal Circumstances" present? Yes _X I	No	
Are Vegetation, Soil, or H	ydrology	_ naturally pro	blemat	tic?	(If ne	eded, explain any answers in Remarks.)		
SUMMARY OF FINDINGS - Att	ach site ma	ap showing	sam	pling	point lo	ocations, transects, important feature	es, etc.	
Hydrophytic Vegetation Present?	YesX	No	\Box					
Hydric Soil Present?	Yes X	No		Is the	Sampled			
Wetland Hydrology Present?		No		withir	n a Wetlan	nd? Yes X No		
Remarks:	. =	. =====						
THIS AREA IS SIMILAR TO SP18 WETLAND KR_43. Originally mar					A DRAIN	IAGE DITCH ALONG THE TRACK. WITH	IN	
VEGETATION – Use scientific na	mes of plar	nts.						
To a Otrata and (Dist sings		Absolute			Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size:		% Cover				Number of Dominant Species That Are OBL, FACW, or FAC: 1	(A)	
2.								
3						Total Number of Dominant Species Across All Strata: 1	(B)	
4						Percent of Dominant Species		
5						That Are OBL, FACW, or FAC: 100	(A/B)	
Sapling/Shrub Stratum (Plot size:)		= Tota	al Cove	er	Prevalence Index worksheet:		
1						Total % Cover of: Multiply by:	_	
2						OBL species x 1 =	_	
3						FACW species x 2 =	_	
4						FAC species x 3 =		
5			_			FACU species x 4 =		
Herb Stratum (Plot size: r=5'	\		= Tota	al Cove	er	UPL species x 5 =		
1 Spartina pectinata		80	yes	1	facw+	Column Totals: (A)	(B)	
Ambrosia trifida		10			fac+	Prevalence Index = B/A =	_	
3. Polygonum bicorne		10			facw+	Hydrophytic Vegetation Indicators:		
4.						1 - Rapid Test for Hydrophytic Vegetation		
5						X 2 - Dominance Test is >50%		
6						3 - Prevalence Index is ≤3.0¹		
7						 4 - Morphological Adaptations¹ (Provide su data in Remarks or on a separate sheet 	pporting	
8						Problematic Hydrophytic Vegetation¹ (Expl		
9						Problematic Hydrophytic vegetation (Expl	alli)	
10						¹ Indicators of hydric soil and wetland hydrology	must	
Woody Vine Stratum (Plot size:)	100	= Tota	al Cove	er	be present, unless disturbed or problematic.		
1						Hydrophytic		
2						Vegetation Present? Yes X No		
5			= Tota	al Cove	er	169 NO		
Remarks: (Include photo numbers here	or on a separa	ate sheet.)						
hsr_ct_nov12010_0679_068								

US Army Corps of Engineers

Sampling	Point:	20-ct
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SOIL

	-	e to the dep	th needed to docu			or confirm	n the absence	of indicators	5.)	
Depth (inches)	Color (moist)	%	Color (moist)	x Feature %	Type ¹	Loc²	Texture		Remarks	
0-20	10 YR 2/2	80	5YR 5/8	~2	D	M	TOXIGIO	smooth	Remarks	
	10YR 3/4	20	5YR 5/8	<1				smooth		
	10111 0/1		0111070			·		- CITICOLIT		
¹Type: C=Co	oncentration. D=De	epletion. RM	=Reduced Matrix, M	S=Maske	d Sand G	rains.	² Location	PL=Pore Li	ning, M=Matri	×.
Hydric Soil		pproducti, rum	riodadoa madiiq m	o maono	a cana c	CIII IO			atic Hydric S	
Histosol	(A1)		Sandy	Gleyed M	atrix (S4)		Coast	Prairie Redox	(A16)	
Histic Ep	pipedon (A2)		Sandy	Redox (S	5)		Dark S	urface (S7)		
Black Hi	. ,			d Matrix (,		_	anganese Ma		
	n Sulfide (A4)				neral (F1)				Surface (TF12	2)
	Layers (A5)				atrix (F2)		Other (Explain in Re	emarks)	
_	ick (A10) d Below Dark Surfa	ce (A11)	_ = = = = = = = = = = = = = = = = = = =	ed Matrix (Dark Surf						
	ark Surface (A12)	100 (111)			urface (F7)	3Indicators	of hydrophyt	ic vegetation	and
_	lucky Mineral (S1)			Depression		,			nust be preser	
5 cm Mu	icky Peat or Peat (S3)					unless	disturbed or	problematic.	
	ayer (if observed	i):								
	OT OBSERVED						Hydric Soil	Procent?	YesX	No
Depth (inc	ches): >20		_				Hydric Soil	Presentr	res	NO
Remarks:							•			
HYDROLO	GY									
Wetland Hyd	drology Indicator	s:								
Primary India	cators (minimum of	one is requi	red; check all that ap	oply)			Seconda	ry Indicators	(minimum of	wo required)
Surface	Water (A1)		Water-Sta	ined Leav	/es (B9)		Surf	ace Soil Crad	ks (B6)	
High Wa	iter Table (A2)		Aquatic Fa	auna (B13	3)		Drai	nage Pattern	s (B10)	
Saturatio	, ,		True Aqua					Season Wate		
Water M	arks (B1)		Hydrogen	Sulfide O	dor (C1)		Cray	fish Burrows	(C8)	
_	nt Deposits (B2)		_			ving Roots	—		on Aerial Ima	
	oosits (B3)		Presence			,			ed Plants (D1)
	at or Crust (B4)		_			ed Soils (C6	_	morphic Posi	. ,	
	osits (B5)		Thin Muck				FAC	-Neutral Test	t (D5)	
l —	on Visible on Aeria		. — -							
Field Obser	Vegetated Conca	ve Surface (B8) Other (Ex	piain in R	emarks)					
Surface Water		Vas	NoX Depth (in	abas): 0						
Water Table			No Depth (in		20	-				
			No Depth (in			— 			v X	N.
Saturation Projection (includes cap		Yes	No Depth (in	cnes): 2	20	weti	and Hydrology	Present?	res	No
		m gauge, m	onitoring well, aerial	photos, p	revious in	spections),	if available:			
Remarks:										

Project/Site: SPCSL 2A (Tier 2)	(City/Co	unty: Macou	oin	Sampling Date:	10/28/2010
Applicant/Owner: UPRR				State: IL	Sampling Point:	DP38
		Section	n, Township, R	ange: S5, T11N, R6W		
Landform (hillslope, terrace, etc.): POND			Local relie	f (concave, convex, none):	CONCAVE	
Slope (%): 0-2 Lat: 39.421305		Long: _	-89.791674		Datum: DD (N.	AD 83)
Soil Map Unit Name: 536 DUMPS, MINE				NWI classific	ation: PUBGx	
Are climatic / hydrologic conditions on the site typical for	or this time of yea	ar? Ye	s_XNo	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology	significantly	disturbe	ed? Are	"Normal Circumstances" p	oresent? Yes _	No
Are Vegetation, Soil, or Hydrology	naturally pro	blemati	ic? (If n	eeded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS - Attach site m	nap showing	samp	pling point	locations, transects	, important f	eatures, etc.
Hydrophytic Vegetation Present? Yes X	No	$\overline{}$				
Hydric Soil Present? Yes	No		ls the Sample	d Area		
Wetland Hydrology Present? Yes X	No	,	within a Wetla	ind? Yes_X	No	_
Remarks:						
WETLAND DP_U. PFOA/PEMC. 6' FRINGE					represent the	same
wetland with different vegetative characteristic	cs. Wetland D	OP_U i	is part of We	tland KR_19.		
VEGETATION - Use scientific names of pla	ants.					
Tree Stratum (Plot size: r=30')	Absolute % Cover		nant Indicator	Dominance Test work	sheet:	
1. Acer negundo	% Cover 65	yes	ies? Status facw	Number of Dominant S		(4)
Salix amygdaloides		yes	facw	That Are OBL, FACW,	SI PAG.	(A)
3 Celtis occidentalis	$\frac{20}{5}$		fac	Total Number of Domin		(5)
4. Populus deltoides			fac	Species Across All Stra	ta: <u>+</u>	(B)
				Percent of Dominant Sp		
5	95	- Total	l Cover	That Are OBL, FACW,	or FAC: 100	(A/B)
Sapling/Shrub Stratum (Plot size:		- Total	Cover	Prevalence Index wor	ksheet:	
1				Total % Cover of:	Multip	ly by:
2.				OBL species	x 1 =	
3.				FACW species	x 2 =	
4.				FAC species	x 3 =	
5.				FACU species	x 4 =	
		= Total	l Cover	UPL species	x 5 =	
Herb Stratum (Plot size: 5				Column Totals:	(A)	(B)
1. Lemna minor	35	yes	<u>obl</u>			
2. Elymus virginicus	10	_yes_	<u>facw</u>	Prevalence Index		
3				Hydrophytic Vegetation		
4				1 - Rapid Test for H		tation
5				Z Donninance res		
6				3 - Prevalence Inde		
7				4 - Morphological A	Adaptations' (Pro s or on a separate	vide supporting
8				Problematic Hydro		
9					onythe regetation	(Explain)
10				¹ Indicators of hydric soi	l and wetland hvo	drology must
Woody Vine Stratum (Plot size:)		= Total	l Cover	be present, unless distu		
1				Hydrophytic		
2.				Vegetation	~	
			l Cover	Present? Yes	s_X No_	
Remarks: (Include photo numbers here or on a sepa	rate sheet.)			-		
96-NE, 95-N, 94-NW, 100-S-NORTH END OF	PUBG AND F	PFOA.				

SOIL Sampling Point: DP38

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth Matrix	Redox Features							
(inches) Color (moist) %	Color (moist) % Type ¹ L	oc ² Texture Remarks						
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains	² Location: PL=Pore Lining, M=Matrix.						
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :						
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)						
Histic Epipedon (A2)	Sandy Gleyed Matrix (34)	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)	3Indicators of hydrophytic vegetation and						
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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						
1 1 /	_							
Remarks: No soil pit dug due to inundation. Assur								
HYDROLOGY								
Wetland Hydrology Indicators:	d: check all that apply)	Secondary Indicators (minimum of two required)						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)		Surface Soil Cracks (B6)Drainage Patterns (B10)						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) 						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 Faunch (B14)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9)						
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living I	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)						
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Wetland Hydrology Indicators: Primary 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 (B8) Field Observations: Surface Water Present? Water Table Present? Yes X Notes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living II Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solution Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): SURFACE itoring well, aerial photos, previous inspect	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sills (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No tions), if available:						
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) 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 (B6) Field Observations: Surface Water Present? Yes X Now Water Table Present? Yes Now Now Yes X Now (includes capillary fringe) Describe Recorded Data (stream gauge, money)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living II Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solution Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): SURFACE itoring well, aerial photos, previous inspect	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sills (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No tions), if available:						
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Project/Site: SPCSL 2A (Tier 2)		c	ity/Cou	inty: <u>N</u>	1acoupir	<u>n</u>	Sampling	Date: 10/29	9/2010
Applicant/Owner: UPRR						State: IL	Sampling	Point: DP3	9
Investigator(s): DP, DM		s	Section, Township, Range: S5, T11N, R6W						
Landform (hillslope, terrace, etc.): PONE)			_ Loc	al relief (concave, convex, none)	: CONCA	VE	
Slope (%): 0-2 Lat: 39.42144	.9	L	.ong:8	89.791	1610		_ Datum: _D	D (NAD 83	3)
Soil Map Unit Name: 536 DUMPS, MIN						NWI classific	cation: <u>PU</u>	BGx	
Are climatic / hydrologic conditions on the	site typical for thi	s time of year	r? Yes	_ x	_ No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hy	ydrologys	significantly d	listurbe	d?	Are *N	Normal Circumstances"	present? Y	res_X	No
Are Vegetation, Soil, or Hy	ydrology r	naturally prob	lematic	?	(If nee	eded, explain any answe	ers in Rema	rks.)	
SUMMARY OF FINDINGS - Att	ach site map	showing	samp	ling p	ooint lo	cations, transects	s, import	ant featur	es, etc.
Hydrophytic Vegetation Present?	Yes N	lo							
Hydric Soil Present?	Yes X	lo			ampled	_			
Wetland Hydrology Present?	YesX_ N	lo	w	vithin a	Wetland	d? Yes	No_		
Remarks:	D00 DD00	LICDAO ICD	40		- 4 41		.	-4-45	
WETLAND DP_V. PEMC. SP's D	1P38, DP39 and	I KK12, KK	ri3 rep	oreser	it the sa	ame wetiand with diff	erent vege	etative area	as.
VEGETATION – Use scientific na	ames of plants								
Tree Stratum (Plot size:)	Absolute % Cover	Domin			Dominance Test work			
1						Number of Dominant S That Are OBL, FACW,	or FAC:	1	(A)
2.						Total Number of Domir			- ` ′
3						Species Across All Stra	ata:	1	_ (B)
4						Percent of Dominant S			
5						That Are OBL, FACW,		100	(A/B)
Sapling/Shrub Stratum (Plot size:	`	=	= Total	Cover		Prevalence Index wo	rksheet:		
1						Total % Cover of:		Multiply by:	
2.						OBL species			
3.						FACW species	x 2	-	
4.						FAC species	x 3	=	_
5						FACU species	x 4	=	_
r-5'		=	= Total	Cover		UPL species	x 5	=	_
Herb Stratum (Plot size: r=5' 1. Phragmites australis)	100	yes	fa	cw	Column Totals:	(A)		(B)
				ia		Prevalence Index	x = B/A =		
3.					— I	Hydrophytic Vegetati			
4.						1 - Rapid Test for	Hydrophytic	Vegetation	
5						Z 2 - Dominance Te			
6						3 - Prevalence Ind	lex is ≤3.0¹		
7.						4 - Morphological			
8						data in Remark			
9						Problematic Hydro	pnytic vege	etation (Exp	lain)
10						¹ Indicators of hydric so	al and wetla	nd hydrology	must
Woody Vine Stratum (Plot size:)	100=	= Total	Cover		be present, unless dist			riiust
1						Hydrophytic			
2						Vegetation	X	No	
			= Total	Cover		Present? Ye		No	
Remarks: (Include photo numbers here		,							
PHOTO 97-MARKS END OF WET PHOTO 98-SE END OF WETLAND						3C 30 40 ET WIDE	DEOA B	T EDINIOE	
FILOTO 90-SE END OF WEILAND	v, ۲۵01098	7-IN- COINTI	IINUAI	ION	OF PUB)G-3U-4U 「1. WIDE,	FFUA-B/	I FRINGE	

US Army Corps of Engineers

SOIL Sampling Point: DP39

l		o the depth needed to docu		or confirm t	the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	% Color (moist)	ox Features % Type ¹	_Loc ²	Texture	Remarks
(III COTO)	Ocioi (moist)	70 00101 (1110101)	70 1100		TOATO	Normania
¹Type: C=Cor	ncentration D=Denk	etion, RM=Reduced Matrix, N	IS=Macked Sand Gro	aine -	² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil In		ellott, Rivi-Reduced Matrix, N	io-iviaskeu Saliu Gla	all is.		for Problematic Hydric Soils ³ :
Histosol (Sandy	Gleyed Matrix (S4)			Prairie Redox (A16)
1 —	pedon (A2)		Redox (S5)		_	Surface (S7)
Black His			d Matrix (S6)			anganese Masses (F12)
_	Sulfide (A4)		Mucky Mineral (F1)			Shallow Dark Surface (TF12)
	Layers (A5)		Gleyed Matrix (F2)			(Explain in Remarks)
2 cm Muc			ed Matrix (F3)			(Explain III Comand)
_	Below Dark Surface		Dark Surface (F6)			
	k Surface (A12)		ed Dark Surface (F7))	3Indicators	of hydrophytic vegetation and
Sandy Mu	ucky Mineral (S1)	Redox	Depressions (F8)		wetland	d hydrology must be present,
5 cm Muc	ky Peat or Peat (S3))			unless	disturbed or problematic.
Restrictive La	ayer (if observed):					
Type:						~
	hes):				Hydric Soil	Present? Yes X No No
Remarks:						
	ue to inundation	Assumed hydric per Ste	12h of the 1987	Corne Dali	neation Ma	nual
Tito pit dag at	ac to manaation.	7.03diffed flydfie per Oto	7 120 01 110 1307	Ooips Doi	ilication ivia	indai.
HYDROLOG	ev .					
	rology Indicators:					
		e is required; check all that a	nnlu\		Secondo	ary Indicators (minimum of two required)
1						ary Indicators (minimum of two required)
X Surface V	, ,		ained Leaves (B9)			face Soil Cracks (B6)
1	er Table (A2)		auna (B13)		_	inage Patterns (B10)
Saturation			atic Plants (B14)		_ ,	Season Water Table (C2)
Water Ma	. ,		Sulfide Odor (C1)			yfish Burrows (C8)
_	Deposits (B2)		Rhizospheres on Livi	_		uration Visible on Aerial Imagery (C9)
Drift Depo	osits (B3)	Presence	of Reduced Iron (C4	4)	Stur	nted or Stressed Plants (D1)
	or Crust (B4)	Recent Ir	on Reduction in Tilled	d Soils (C6)	Geo	morphic Position (D2)
Iron Depo	osits (B5)	Thin Muc	k Surface (C7)		FAC	-Neutral Test (D5)
Inundation	n Visible on Aerial In	nagery (B7) Gauge or	Well Data (D9)			
Sparsely	Vegetated Concave	Surface (B8) Other (Ex	plain in Remarks)			
Field Observa	ations:					
Surface Water	r Present? Ye	s X No Depth (i	nches): 2-3	_		
Water Table P	Present? Ye	s No _X_ Depth (i	nches):			
Saturation Pre		s X No Depth (i		Wetlar	nd Hydrolog	y Present? Yes X No
(includes capi		5 110 Beptin (i	101100).	_ *******	ia riyarolog	, r. resenti. 1 res 110
		gauge, monitoring well, aeria	photos, previous ins	pections), if	available:	
Remarks:						
	IS A FORMER PI	T USED FOR WATER S	TORAGE FOR ST	EAM FNG	INE.	
1						

Project/Site: SPCSL 2A (Tier 2)				City/Cou	unty: N	/lacoupi	n	Sampling D)ate: 10/29	3/2010
Applicant/Owner: UPRR State: IL										
Investigator(s): DP, DM				Section, Township, Range: S5, T11N, R6W						
Landform (hillslope, terrace, etc.): POND)				Loc	cal relief (concave, convex, none):	CONCAV	Έ	
Slope (%): 0-2 Lat: 39.42378				Long: _	89.78	9738		Datum: DE) (NAD 83	3)
Soil Map Unit Name: 536 DUMPS, MIN	ΙE						NWI classific	ation: NON	IE	
Are climatic / hydrologic conditions on the	site typica	al for this	time of yea	ar? Yes	s_ X	No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hy	drology _	s	ignificantly	disturbe	ed?	Are "I	Normal Circumstances" p	resent? Ye	s_ X	No
Are Vegetation, Soil, or Hy	drology _	n	aturally pro	blematic	c?	(If ne	eded, explain any answe	rs in Remark	rs.)	
SUMMARY OF FINDINGS - Atta	ach site	map	showing	samp	oling	point lo	ocations, transects	, importa	nt featur	es, etc.
Hydrophytic Vegetation Present?	Yes	N	0							
Hydric Soil Present?			o			Sampled				
Wetland Hydrology Present?	Yes	N			within	a Wetlan	d? Yes	No_		
Remarks: WETLAND DP_W. PFO1A/PSSA/	DEMC	SD KD	11 DD40.	-42 all	ranra	cont car	ne wetland			
WEILAND DF_W. FFOTA/F35A/	FEIVIC.	SF KK	11, DF40	-42 all	repre	seni sai	ne welland.			
WEGETATION		-11-								
VEGETATION – Use scientific na	mes of	plants.								
Tree Stratum (Plot size: r=30')		Absolute % Cover			dicator Status	Dominance Test work			
1 Acer saccharinum			30	yes		icw	Number of Dominant Sp That Are OBL, FACW, of		ļ	(A)
2. Salix nigra			15	yes	ol	ol				- ` '
3							Total Number of Domin Species Across All Stra		;	(B)
4							D			_ `
5							Percent of Dominant Sp That Are OBL, FACW,		0	(A/B)
r-1	5'		45	= Total	Cover		Daniel and the daniel			
Sapling/Shrub Stratum (Plot size: r=15	,)	15		fo	_	Prevalence Index work		Audimbolos	
			40		<u>fa</u>	cu	Total % Cover of: OBL species			
Maclura pomifera Acer saccharinum			35	yes yes		cw	FACW species			
4.				<u>y</u> 00	id		FAC species			
5							FACU species			
0.			90	= Total	Cover			x 5 =		
Herb Stratum (Plot size: 5)						Column Totals:			
1. Typha latifolia			5	yes	<u> </u>	bl				_ `
2							Prevalence Index			
3							Hydrophytic Vegetation			
4							1 - Rapid Test for H		√egetation	
5										
6						——	3 - Prevalence Inde		(Dravida av	
7						——	data in Remarks			
8							Problematic Hydro	phytic Veget	ation1 (Expl	ain)
9										
10			5				¹ Indicators of hydric soi			must
Woody Vine Stratum (Plot size:		_)	-	- rotal	Cover		be present, unless distu	urbed or prob	olematic.	
1							Hydrophytic			
2							Vegetation	. Y .		
				= Total	Cover		Present? Yes	s_X	мо	
Remarks: (Include photo numbers here	or on a se	parate s	sheet.)							
101-S-SHOWING WETLAND										
102 AND 103-SOIL										

SOIL								Sampling Point: DP40	_		
Profile Desc	ription: (Describe	to the de	pth needed to docum	nent the	indicator	or confire	n the absence	of indicators.)			
Depth	Matrix			x Feature							
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	_Loc ²	Texture	Remarks	_		
0-3	2.5YR 2.5/1	100					SiL	Lots of organic material.	_		
3-16	2.5YR 2.5/1	100					SiL		_		
17-18	10YR 5/1	50			<u>D</u>		SiC		_		
	10YR 4/1	35			<u>D</u>		SiC				
	10YR 4/6	15			<u> </u>	<u>M</u>			_		
18-22	2.5YR 5/1	80	10YR 5/1	15	D	M					
			7.5YR 4/6	5	С	М					
¹ Type: C=Co	oncentration, D=Dep	pletion, RM	M=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.		: PL=Pore Lining, M=Matrix.			
Hydric Soil	Indicators:						Indicators	for Problematic Hydric Soils ³ :			
Histosol (A1) Sand			Sandy C	Sleyed M	atrix (S4)		Coast	Prairie Redox (A16)			
Histic Ep	pipedon (A2)		Sandy F	Redox (S	5)		Dark Surface (S7)				
Black Hi	. ,			Matrix (Iron-Manganese Masses (F12)			
_ , ,	n Sulfide (A4)				ineral (F1)		_ ′	Shallow Dark Surface (TF12)			
_	Layers (A5)			,	latrix (F2)		Other	(Explain in Remarks)			
_	ick (A10)			d Matrix							
<u> </u>	d Below Dark Surfac	ce (A11)			ace (F6)						
_	ark Surface (A12)				urface (F7)		s of hydrophytic vegetation and			
_ ′	lucky Mineral (S1)		Redox [Depression	ons (F8)			d hydrology must be present,			
	icky Peat or Peat (S						unless	disturbed or problematic.			
Restrictive I	Layer (if observed)	:									
Type:							Undria Cail	Present? Yes X No			
Depth (inc	ches):						Hydric Soil	Present? Yes No	_		
Remarks:											

HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
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) Water-Stained Leaves (B9) Aquatic Fauna (B13) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Gauge or Well Data (D9)	Stunted or Stressed Plants (D1)
Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	
Field Observations:	
Surface Water Present? Yes X No X Depth (inches): 10	
Water Table Present? Yes X No Depth (inches): 17	
Saturation Present? Yes X No Depth (inches): 12 (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	ctions), if available:
Remarks: PHOTO 105-NW-CONTINUATION OF W - 3 FOOT FRINGE AROUND BLACK POND- PHOTO- 106-NW-FRINGE	

Project/Site: SPCSL 2A (Tier 2)		(City/Co	ounty:	Macoupi	in	Sampling	Date: 10/	28/2010
Applicant/Owner: UPRR			State: LL Sampling Point:				Point: DF	P41	
Investigator(s): DP, DM Section, Township, Range: S5, T11N, R6W					nge: <u>S5, T11N, R6W</u>				
Landform (hillslope, terrace, etc.): RAILSID	E DITCH			L	ocal relief	(concave, convex, none):	NONE		
Slope (%): 0-2 Lat: 39.424264			Long: _	-89.7	789831		Datum: _	DD (NAD	83)
Soil Map Unit Name: 50A, VIRDEN SILTY	CLAY LOA	AM, 0-2% S	SLOP	ES		NWI classific	ation: NC	NE	
Are climatic / hydrologic conditions on the site	typical for thi	is time of yea	ar? Ye	s _X	No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hydro	logy:	significantly of	disturb	ed?	Are *	Normal Circumstances" p	resent?	Yes_X_	No
Are Vegetation, Soil, or Hydro	logy	naturally pro	blemat	tic?	(If ne	eded, explain any answe	rs in Rema	arks.)	
SUMMARY OF FINDINGS - Attacl	site map	showing	samı	pling	g point lo	ocations, transects	, import	ant feat	ures, etc.
Hydrophytic Vegetation Present? Yes	esXN	lo							
I .	~	lo		ls the	e Sampled				
Wetland Hydrology Present? Ye	es N	lo		withi	n a Wetlan	nd? Yes X	No		
Remarks:	VD44 LF	ND 40 40							
WETLAND DP_X. PFOA/PSSA. SP	KR11 and L	JP40-42 re	eprese	ent sa	ame wetta	and.			
VEGETATION – Use scientific name	s of plants								
VEGETATION - Ose scientific frame	s or plants	Absolute	Domi	inant	Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size: r=30')	% Cover			Status	Number of Dominant Sp			
1. Acer saccharinum		40	yes		facw	That Are OBL, FACW,		5	(A)
2. Maclura pomifera		_ <u>10</u>	yes		facu	Total Number of Domin	ant		
3						Species Across All Stra		6	(B)
4						Percent of Dominant Sp	ecies		
5		- 0				That Are OBL, FACW,	or FAC:	83	(A/B)
Sapling/Shrub Stratum (Plot size: r=15')	30	= Tota	I Cov	er	Prevalence Index work	ksheet:		
1. Acer saccharinum		50	yes		facw	Total % Cover of:		Multiply b	y:
					facu	OBL species	x 1	=	
3						FACW species	x 2	2 =	
4						FAC species	x 3	3 =	
5						FACU species			
Herb Stratum (Plot size: r=5'		55	= Total	l Cov	er	UPL species			
Herb Stratum (Plot size: r=5' 1. Aster simplex	.)	5	yes		facw	Column Totals:	(A)		(B)
Carex sp.		- 5	yes		10011	Prevalence Index	= B/A =		
3.						Hydrophytic Vegetation			
4.						1 - Rapid Test for H	lydrophyti	c Vegetatio	n
5.						X 2 - Dominance Tes	t is >50%		
6.						3 - Prevalence Inde	ex is ≤3.0 ¹		
7.						4 - Morphological A	daptation	s1 (Provide	supporting
8						data in Remarks			
9						Problematic Hydrop	onytic Veg	etation (E	xpiain)
10						¹ Indicators of hydric soi	l and water	and budgele	au must
Wanda Vine Steet in (Blot sine)	,	10	= Total	l Cov	er	be present, unless distu			gy must
Woody Vine Stratum (Plot size:		2	yes		facw	H. des about			
2.						Hydrophytic Vegetation			
		2	= Total	l Cov	er	Present? Yes	s_X_	No	_
Remarks: (Include photo numbers here or o	n a separate		. 510			1			
Carex sp. is likely FAC or wetter.									

Sampling	Point:	DP41

							onfirm the absence	
Depth	Matrix				x Feature	s		B
(inches) 0-12	Color (moist) 10YR 3/1	<u>%</u> 80	7.5YR	(moist)	%	_Type ¹ _Lo	SiL	Remarks
0-12		_	- 7.5110	J/ 4	- 10			
	10YR 4/3	10					SiL	
12-16	10YR 3/1	<u>50</u>					SiL	
	10YR 4/3	50						
16+	10YR 4/3	80					SiL	
	10YR 3/1	20						
¹Type: C=C	oncentration, D=D	enletion P	M=Peduced	Matrix MS	=Macked	4 Sand Grains	² Location	: PL=Pore Lining, M=Matrix.
Hydric Soil		epielion, K	M-Reduced	mauix, mi	3-Masket	J Sand Grains.		for Problematic Hydric Soils ³ :
Histosol				Sandy C	Sleyed Ma	atrix (S4)		Prairie Redox (A16)
_	pipedon (A2)				Redox (S5			Surface (S7)
_	istic (A3)		_	_ Stripped	Matrix (S	36)	Iron-M	anganese Masses (F12)
	en Sulfide (A4)		_	_	-	neral (F1)		Shallow Dark Surface (TF12)
_	d Layers (A5)		-			atrix (F2)	Other	(Explain in Remarks)
_	ick (A10) d Below Dark Surfa	200 (011)	7		d Matrix (Dark Surfa			
	ark Surface (A12)	ace (ATT)	<u>-</u>			urface (F7)	3Indicators	s of hydrophytic vegetation and
_	flucky Mineral (S1)		_		Depressio	, ,		d hydrology must be present,
_ ′	icky Peat or Peat (_		- op. 000.0	(. 0)		disturbed or problematic.
	Layer (if observed							· · · · · · · · · · · · · · · · · · ·
Type:								V
Depth (in	ches):						Hydric Soil	Present? Yes X No No No
Remarks:								
HYDROLO	GY							
HYDROLO		s:						
Wetland Hy	drology Indicator		uired: check	call that an	oply)		Seconda	ary Indicators (minimum of two required)
Wetland Hyd Primary India	drology Indicator cators (minimum o					res (B9)		ary Indicators (minimum of two required)
Wetland Hyd Primary Indic	drology Indicator cators (minimum o Water (A1)		_	Water-Stai	ined Leav		Sur	face Soil Cracks (B6)
Wetland Hyder Primary India Surface High Wa	drology Indicator cators (minimum o Water (A1) ater Table (A2)		_	Water-Stai Aquatic Fa	ined Leav iuna (B13)	Suri	face Soil Cracks (B6) inage Patterns (B10)
Wetland Hyder Primary India Surface High Wa	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3)		=	Water-Stai Aquatic Fa True Aqua	ined Leav iuna (B13 tic Plants	(B14)	Surl Drai Dry	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2)
Wetland Hyd Primary India Surface High Wa Saturatio Water M	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3)		=	Water-Stai Aquatic Fa True Aqua Hydrogen	ined Leav iuna (B13 tic Plants Sulfide O	(B14) dor (C1)	Surl Drai Dry- Cra	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8)
Wetland Hyd Primary India Surface High Wa Saturatio Water M Sedimen	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1)		=	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R	ined Leav iuna (B13 tic Plants Sulfide O Rhizosphe	(B14)	Suri Dra Dry Cra Roots (C3) Sati	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2)
Wetland Hyd Primary India Surface High Wa Saturatia Water M Sedimer Drift Des	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2)		=	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence	ined Leav iuna (B13 tic Plants Sulfide O Rhizosphe of Reduce	(B14) (G14) dor (C1) eres on Living F	Suri Drai Dry- Crai Sati Sturi	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
Wetland Hyd Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Algal Ma	drology Indicator cators (minimum o Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3)			Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence	ined Leav iuna (B13 tic Plants Sulfide O Rhizosphe of Reduce n Reducti	(B14) (B14) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So	Suri Drai Dry Crai Sati Sturi ills (C6) Geo	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1)
Wetland Hyd Primary India Surface High Wa Saturatia Water M Sedimer Drift Dep Algal Ma Iron Dep	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	f one is rec		Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R Presence o Recent Iro	ined Leav iuna (B13 tic Plants Sulfide O Rhizosphe of Reducti Surface	(B14) (B14) dor (C1) eres on Living F ed Iron (C4) don in Tilled So (C7)	Suri Drai Dry Crai Sati Sturi ills (C6) Geo	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2)
Wetland Hyd Primary India Surface High Wa Saturatio X Water M Sedimer Drift Deg Algal Ma Iron Deg	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	f one is rec	— — — — — — — — — —	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck	ined Leav iuna (B13 tic Plants Sulfide O Rhizosphe of Reducti n Reducti Surface (Well Data	(B14) (dor (C1) eres on Living Fed Iron (C4) ion in Tilled So (C7) (D9)	Suri Drai Dry Crai Sati Sturi ills (C6) Geo	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2)
Wetland Hyd Primary India Surface High Wa Saturatio X Water M Sedimer Drift Deg Algal Ma Iron Deg	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeric y Vegetated Conce	f one is rec	— — — — — — — — — —	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck Gauge or \	ined Leav iuna (B13 tic Plants Sulfide O Rhizosphe of Reducti n Reducti Surface (Well Data	(B14) (dor (C1) eres on Living Fed Iron (C4) ion in Tilled So (C7) (D9)	Suri Drai Dry Crai Sati Sturi ills (C6) Geo	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2)
Wetland Hyd Primary India Surface High Wa Saturation Water M Sedimen Drift Dep Algal Ma Iron Dep Inundation Sparsely	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Concavations:	one is reco	— — — — — — — — — —	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R Presence of Recent Iro Thin Muck Gauge or N Other (Exp	ined Leav iuna (B13 tic Plants Sulfide O Rhizosphe of Reduce n Reducti Surface (Well Data blain in Re	(B14) (dor (C1) eres on Living Fed Iron (C4) ion in Tilled So (C7) (D9)	Suri Drai Dry Crai Sati Sturi ills (C6) Geo	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2)
Wetland Hyd Primary India Surface High Wa Saturatia Water M Sedimer Drift Deg Algal Ma Iron Deg Inundati Sparsely	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Concavations: er Present?	al Imagery ave Surface	(B7)	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R Presence of Recent Iro Thin Muck Gauge or N Other (Exp	ined Leavillana (B13 tic Plants Sulfide O Rhizosphe of Reducting Reducting Surface (Well Data plain in Reducting Reducting Surface (Surface)	(B14) (B14) dor (C1) eres on Living F ed Iron (C4) don in Tilled So (C7) (D9) emarks)	Suri Drai Dry Crai Sati Sturi ills (C6) Geo	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2)
Wetland Hyderimary India Surface High Water M Saturation Water M Sedimer Drift Dep Algal Mater Inon Dep Inundation Sparsely Field Observant	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Concavations: er Present?	al Imagery ave Surface Yes Yes	(B7) e (B8)	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck Gauge or N Other (Exp	ined Leaver in the control of the co	(B14) (B14) dor (C1) eres on Living F ed Iron (C4) don in Tilled So (C7) (D9) emarks)	Suri Drai Dry Crai Stui Stui ills (C6) Gec FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2)
Wetland Hyderimary India Surface High Water M Saturation Water M Sedimer Drift Deg Algal Mater Inundation Sparsely Field Observ Surface Water Table Saturation P (includes cap	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria of Vegetated Concavations: er Present? Present? pillary fringe)	al Imagery ave Surface Yes Yes	(B7)	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck Gauge or N Other (Exp Depth (inc	ined Leavinna (B13 tic Plants Sulfide O Rhizosphe of Reduction Reduction Surface (Well Datablain in Reduction Reduct	(B14) (B14) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So (C7) (D9) emarks)	Surf Drai Dry- Crai Roots (C3) Satu Stur ills (C6) Ged FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2) C-Neutral Test (D5)
Wetland Hyderimary India Surface High Water M Saturation Water M Sedimer Drift Deg Algal Mater Inundation Sparsely Field Observ Surface Water Table Saturation P (includes cap	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria y Vegetated Concavations: er Present? Present?	al Imagery ave Surface Yes Yes	(B7)	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck Gauge or N Other (Exp Depth (inc	ined Leavinna (B13 tic Plants Sulfide O Rhizosphe of Reduce in Reducti Surface (Well Data blain in Re ches): ches): ches):	(B14) (B14) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So (C7) (D9) emarks)	Surf Drai Dry- Crai Roots (C3) Satu Stur ills (C6) Ged FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2) C-Neutral Test (D5)
Wetland Hyderimary India Surface High Wa Saturation Water M Sedimer Drift Deg Algal Ma Iron Deg Inundation Sparsely Field Obser Surface Wate Water Table Saturation Pe (includes cap Describe Re	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria of Vegetated Concavations: er Present? Present? pillary fringe)	al Imagery ave Surface Yes Yes	(B7)	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck Gauge or N Other (Exp Depth (inc	ined Leavinna (B13 tic Plants Sulfide O Rhizosphe of Reduce in Reducti Surface (Well Data blain in Re ches): ches): ches):	(B14) (B14) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So (C7) (D9) emarks)	Surf Drai Dry- Crai Roots (C3) Satu Stur ills (C6) Geo FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2) C-Neutral Test (D5)
Wetland Hyderimary India Surface High Water M Saturation Water M Sedimer Drift Deg Algal Mater Inundation Sparsely Field Observ Surface Water Table Saturation P (includes cap	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria of Vegetated Concavations: er Present? Present? pillary fringe)	al Imagery ave Surface Yes Yes	(B7)	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck Gauge or N Other (Exp Depth (inc	ined Leavinna (B13 tic Plants Sulfide O Rhizosphe of Reduce in Reducti Surface (Well Data blain in Re ches): ches): ches):	(B14) (B14) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So (C7) (D9) emarks)	Surf Drai Dry- Crai Roots (C3) Satu Stur ills (C6) Geo FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2) C-Neutral Test (D5)
Wetland Hyderimary India Surface High Wa Saturation Water M Sedimer Drift Deg Algal Ma Iron Deg Inundation Sparsely Field Obser Surface Wate Water Table Saturation Pe (includes cap Describe Re	drology Indicator cators (minimum of Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aeria of Vegetated Concavations: er Present? Present? pillary fringe)	al Imagery ave Surface Yes Yes	(B7)	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized F Presence of Recent Iro Thin Muck Gauge or N Other (Exp Depth (inc	ined Leavinna (B13 tic Plants Sulfide O Rhizosphe of Reduce in Reducti Surface (Well Data blain in Re ches): ches): ches):	(B14) (B14) dor (C1) eres on Living F ed Iron (C4) ion in Tilled So (C7) (D9) emarks)	Surf Drai Dry- Crai Roots (C3) Satu Stur ills (C6) Geo FAC	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2) C-Neutral Test (D5)

Project/Site: SPCSL 2A (Tier 2)		City/County	Macoupi	Sampling Date: 10/28/2010			
Applicant/Owner: UPRR		State: IL Sampling Point: DP42					
Investigator(s): DP, DM		Section, To	wnship, Rar	nge: <u>S5, T11N, R6W</u>			
Landform (hillslope, terrace, etc.): STREAM EDGE			Local relief ((concave, convex, none):	NONE		
		Long: <u>-89.</u>	789523		Datum: DD (NAD 83)		
Soil Map Unit Name: 50A-VIRDEN SILTY CLAY LOAM	Л, 0-2% S	SLOPES		NWI classifica	ation: NONE		
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar? Yes_					
Are Vegetation, Soil, or Hydrology si					resent? Yes X No		
Are Vegetation, Soil, or Hydrology na				eded, explain any answer			
SUMMARY OF FINDINGS – Attach site map s			-		•		
Hydrophytic Vegetation Present? Yes X No							
			e Sampled				
Wetland Hydrology Present? Yes X No		with	in a Wetlan	d? Yes	No		
Remarks: WETLAND DP_Y. PFOA/PSSA/PEMC. SP KR11	and DD4	0 42 ropr	ocant tha	cama watland			
WEITEAND DI_I. I I OWI 35WI EMO. SI KKIT	and Di 4	-0-42 Tept	esent the s	same wettand.			
VEGETATION – Use scientific names of plants.							
Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?		Dominance Test works			
1. Acer saccharinum	5	yes	facw	Number of Dominant Sp. That Are OBL, FACW, of			
2.							
3				Total Number of Domina Species Across All Strat			
4				Percent of Dominant Sp	naciae		
5				That Are OBL, FACW, o			
Sapling/Shrub Stratum (Plot size: r=15')	5	= Total Cov	/er	Prevalence Index work	rehoot:		
1. Acer saccharinum	25	yes	facw	Total % Cover of:			
2. Celtis occidentalis			fac		x 1 =		
3.				FACW species	x 2 =		
4				FAC species	x 3 =		
5				FACU species	x 4 =		
Herb Stratum (Plot size: r=5')	35	= Total Cov	/er	UPL species	x 5 =		
1. Carex sp.	15	ves		Column Totals:	(A) (B)		
2.				Prevalence Index	= B/A =		
3 Aster simplex	25	yes	facw	Hydrophytic Vegetatio	n Indicators:		
Muhlenbergia mexicana	15	yes	facw		lydrophytic Vegetation		
5. Acorus calamus	10		obl	X 2 - Dominance Test			
6				3 - Prevalence Inde			
7				4 - Morphological A	daptations ¹ (Provide supporting s or on a separate sheet)		
8					phytic Vegetation ¹ (Explain)		
9					myno regenation (Espiesny		
10	65			¹ Indicators of hydric soil	and wetland hydrology must		
Woody Vine Stratum (Plot size:)	00	= Total Cov	er	be present, unless distu	rbed or problematic.		
1				Hydrophytic			
2				Vegetation	Y 11-		
		= Total Cov	/er	Present? Yes	s_X No		
Remarks: (Include photo numbers here or on a separate s	,						
PHOTO 112 LOOKING SE. Carex sp. is likely FAC	C or wette	er.					

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	n the absence	of indicators.)		
Depth	Matrix		Redo	x Feature	es					
(inches)	Color (moist)	%_	Color (moist)	%	_Type ¹	_Loc ²	Texture	Remarks		
0-4	10YR 3/2	100					SiL	Lots of root matter.		
4-12	10YR 3/1	90	7.5YR 4/6	3	C	M	SiCL			
	10YR 5/6	7								
12-20	10YR 3/1	100					С			
12-20	1011 3/1	100								
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.										
Hydric Soil Indicators: Indicators: Indicators for Problematic Hydric Soils ³ :										
Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16)										
Histic Ep	pipedon (A2)			Redox (S				Surface (S7)		
Black Hi	stic (A3)		Strippe	d Matrix (S6)		Iron-M	langanese Masses (F12)		
	n Sulfide (A4)			-	neral (F1)			Shallow Dark Surface (TF12)		
_	Layers (A5)			_	latrix (F2)		Other	(Explain in Remarks)		
_	ick (A10)			d Matrix	. ,					
	d Below Dark Surface	e (A11)		Dark Surf	, ,		3 ₁₀ diaptor	of budsonbudio constation and		
_	ark Surface (A12) Nucky Mineral (S1)			Depression	urface (F7))		s of hydrophytic vegetation and d hydrology must be present,		
	icky Peat or Peat (S	3)	110000	Depressio	///S (1-0)			s disturbed or problematic.		
	Layer (if observed):						1	and and an proportion		
Type:	, , , , , , , , , , , , , , , , , , , ,									
Depth (inc							Hydric Soil	Present? Yes X No		
Remarks:										
Water in pit	at approx. 20 incl	nes.								
HYDROLO	GY									
Wetland Hy	drology Indicators:									
Primary India	cators (minimum of o	ne is requi	red; check all that ag	oply)			Second	ary Indicators (minimum of two required)		
Surface	Water (A1)		Water-Sta	ined Leav	ves (B9)		Sur	face Soil Cracks (B6)		
	ater Table (A2)		Aquatic Fa				Drainage Patterns (B10)			
Saturation			True Aqua	,	,					
Water M	larks (B1)		Hydrogen					yfish Burrows (C8)		
	nt Deposits (B2)				eres on Liv	ing Roots	(C3) Sat	uration Visible on Aerial Imagery (C9)		
Drift Dep	posits (B3)		Presence	of Reduc	ed Iron (C4	4)	Stu	nted or Stressed Plants (D1)		
X Algal Ma	at or Crust (B4)		Recent Iro	n Reduct	ion in Tille	d Soils (Ce	6) Geo	omorphic Position (D2)		
Iron Dep	oosits (B5)		Thin Muck	Surface	(C7)		FAC	C-Neutral Test (D5)		
Inundati	on Visible on Aerial I	magery (B	7) Gauge or	Well Data	(D9)					
Sparsely	Vegetated Concave	Surface (B8) Other (Ex	plain in R	emarks)					
Field Obser	vations:									
Surface Wat	er Present? Y	es	No Depth (in	ches):		_				
Water Table	Present? Y	es_X_	No Depth (in	ches): 20)	_				
Saturation P	resent? Y	es X	No Depth (in	ches): 20)	Wetl	land Hydrolog	y Present? Yes X No		
(includes car	oillary fringe)									
Describe Re	corded Data (stream	gauge, mo	onitoring well, aerial	photos, p	revious ins	pections),	if available:			
Remarks:										
At Culvert 2	212.									

Project/Site: SPCSL 2A (Tier 2)			City/C	ounty: Macou	oin	Sampling f	Date: 5/16/1	1
Applicant/Owner: UPRR					State: IL			
Investigator(s): KR, KT Section,				n, Township, R				
Landform (hillslope, terrace, etc.): FLOO					f (concave, convex, none):		/E	
Slope (%): 0-2 Lat: 39.40457								
Soil Map Unit Name: 50A VIRDEN SIL					NWI classific	_		
Are climatic / hydrologic conditions on the	site typical	for this time of ye	ar? Y	es No .	(If no, explain in R	(emarks.)		
Are Vegetation, Soil, or Hy	drology	significantly	disturt	oed? Are	"Normal Circumstances"	present? Y	es X N	o
Are Vegetation, Soil, or Hy	drology	naturally pro	oblema	itic? (If n	eeded, explain any answe	rs in Remar	ks.)	
SUMMARY OF FINDINGS - Att	ach site	map showing	y sam	pling point	locations, transects	, importa	int feature	s, etc.
Hydrophytic Vegetation Present?	Yes X	No						
Hydric Soil Present?	YesX	No		Is the Sample				
Wetland Hydrology Present?	YesX	No		within a Wetla	ind? Yes	No_		
Remarks:								
WETLAND KR_7. PFO1A/PEMC. APRIL ON RECORD).	8' WIDE,	, WETLINE KR	2-12'	WIDE, PHOT	O KR3-S, KR4-N, KR9)-N, KR10-	·S. (WEITE	<u>-</u> SI
VEGETATION – Use scientific na	mes of p	lants.						
- r-30'		Absolute		inant Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size: r=30' 1. Acer negundo)	<u>% Cover</u> 30	yes		Number of Dominant S		2	
2 Ulmus americana		10	- y cs	facw-	That Are OBL, FACW,	or FAC:	3	(A)
3 Acer saccharinum		$\frac{10}{30}$	yes		Total Number of Domin		3	(B)
·			- 700	14017	Species Across All Stra	ıta:		(B)
4			- —		Percent of Dominant S		100	
5		70	- Tot	al Cover	That Are OBL, FACW,	or FAC:	.00	(A/B)
Sapling/Shrub Stratum (Plot size:			_ = 100	ai Cover	Prevalence Index wor	ksheet:		
1					Total % Cover of:		Multiply by:	_
2.					OBL species	x1:	=	_
3.					FACW species	x 2		_
4					FAC species	x3:	=	_
5					FACU species	x4:	=	_
-		10	= Tot	al Cover	UPL species	x5:	=	_
Herb Stratum (Plot size: 5)				Column Totals:	(A)		_ (B)
Carex lanuginosa Toxicodendron radicans		50	_yes		Prevalence Index	- B/A -		
Z		<u>5</u>	- —	<u>fac+</u>	Hydrophytic Vegetati			
3					1 - Rapid Test for			
4					Z 2 - Dominance Tes		vegetation	
5					3 - Prevalence Ind			
6					4 - Morphological		(Provide sun	porting
7					data in Remark	s or on a se	parate sheet)	porting
8					Problematic Hydro	phytic Vege	tation1 (Explai	in)
9			- —					
10.		55	= Tota	al Cover	¹ Indicators of hydric so be present, unless dist			nust
Woody Vine Stratum (Plot size:					,	-		
1					Hydrophytic Vegetation			
2				al Caver	Present? Ye	s_X	No	
Remarks: (Include photo numbers here	or on a sor	parate sheet \	_ = 10ta	al Cover				
Trees are a composite of entire we			rific to	sample point	· however Carey occu	ire through	out wetland	
Recorded CT 1B and 2B at Culvert					, However, Oalex Cook	15 anough	out wellallu	•

SOIL Sampling Point KR1

Profile Description: (Describe to the depth	needed to document the indicator or co	onfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	DC ² Texture Remarks
0-8 10YR 3/1 100		SiC
¹ Type: C=Concentration, D=Depletion, RM=R	educed Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	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)	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 and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Type:	_	Hydric Soil Present? Yes X No
Depth (inches):	_	riyuric Son Present? Tes No
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators:		
Primary Indicators (minimum of one is require	d; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
High Water Table (A2)	Aquatic Fauna (B13)	Drainage Patterns (B10)
X Saturation (A3)	True Aquatic Plants (B14)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living R	
Drift Deposits (B3)	Presence of Reduced Iron (C4)	X Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soi	
Iron Deposits (B5)	Thin Muck Surface (C7)	X FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Gauge or Well Data (D9)	
Sparsely Vegetated Concave Surface (B8		
Field Observations:	y Other (Explain III Tellians)	
	Depth (inches):	
	Depth (inches):	
		Y
	Depth (inches): 2	Wetland Hydrology Present? Yes X No
(includes capillary fringe) Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspecti	ions), if available:
Double House Date (or call gauge, mon	trong trong across protoco, protoco moposti	one, a drainable.
Remarks:		

Project/Site: SPCSL 2A (Tier 2)			City/Co	ounty:	Macoupi	in	Samplin	g Date: <u>5/16/</u>	I1
Applicant/Owner: UPRR State: IL					State: IL	Sampling	g Point: KR2		
Investigator(s): KR, KT		:	Section	n, Tov	vnship, Rai	nge: <u>S18, T11N, R6W</u>			
Landform (hillslope, terrace, etc.): PLAIN	1			L	ocal relief	(concave, convex, none):	CONC	AVE	
Slope (%): 0-2 Lat: 39.40469					03156		Datum:	DD (NAD 83)
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY	LOAM, 0-2% S	SLOPE	ES		NWI classific	ation: NO	ONE	
Are climatic / hydrologic conditions on the	site typical f	for this time of yea	ar? Ye	es	No	X (If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hy	ydrology	significantly	disturb	ed?	Are *	Normal Circumstances" p	resent?	Yes N	No
Are Vegetation, Soil, or Hy	ydrology	naturally pro	blemat	tic?	(If ne	eded, explain any answe	rs in Rem	arks.)	
SUMMARY OF FINDINGS - Att	ach site r	nap showing	sam	pling	point le	ocations, transects	, impor	tant feature	es, etc.
Hydrophytic Vegetation Present?	Yes X	No							
Hydric Soil Present?	YesX	No			Sampled				
Wetland Hydrology Present?	Yes X	No		withi	n a Wetlan	nd? Yes X	No		
Remarks: WETLAND KR_6. PFO1A/PEMC.	DUOTO	KBE S BHOT	O KD	e N	\^/ETI INII		2 10' \\///	DE KD46'V	MDE
FLOWING CHANNEL 1-2" DEEP								DE, KK4-6 V	VIDE,
VEGETATION – Use scientific na	mes of pl	ants.							
Tree Stratum (Plot size: r=30'		Absolute % Cover			Indicator	Dominance Test work			
1 Acer negundo		25	yes		facw-	Number of Dominant S That Are OBL, FACW,		5	(A)
2. Morus sp.		25	yes		fac				. (1)
3.						Total Number of Domin Species Across All Stra		5	(B)
4.						· .			/
5						Percent of Dominant Sp That Are OBL, FACW,		100	(A/B)
Sapling/Shrub Stratum (Plot size: r-15	j'	50	= Tota	al Cov	er	Prevalence Index wor	kehoot.		
I .		_ <i>,</i> 5	yes		facw	Total % Cover of:		Multiply by:	
2.						OBL species			
3.						FACW species			
4.						FAC species			
5						FACU species	x	4 =	_
r=5'		5	= Tota	al Cov	er	UPL species	x	5 =	_
Herb Stratum (Plot size: r=5' 1 Rumex altissimus		20	yes		facw-	Column Totals:	(A)	(B)
Carex lanuginosa		80	yes		obl	Prevalence Index	= B/A =		
3						Hydrophytic Vegetation			
4.						1 - Rapid Test for I	lydrophyt	ic Vegetation	
5.						X 2 - Dominance Tes	it is >50%	,	
6						3 - Prevalence Inde	ex is ≤3.0°	1	
7						4 - Morphological A	daptation	ns¹ (Provide su	pporting
8						data in Remarks Problematic Hydro			
9						Problematic Hydro	priytic veç	getation (Expla	airi)
10						¹ Indicators of hydric soi	l and weti	land hydrology	must
Woody Vine Stratum (Plot size:			= Tota	I Cov	er	be present, unless distr			
1						Hydrophytic			
2				- Cov		Vegetation Present? Ye	s_X_	No	
Remarks: (Include photo numbers here	or on a sen		= Tota	ii COV	31				
Phalaris arundinacea dominant at o		-	ımple	point	photo: K	R7-S. KR8-N			
	-		13			-,			

SOIL Sampling Point: KR2

Profile Description: (Describe to the depti	h needed to document the indicator or c	offilm the absence of mulcators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	oc ² Texture Remarks
l		
l — — — — — — — — — — — — — — — — — — —		
l — — — — — — — — — — — — — — — — — — —		
l		
¹ Type: C=Concentration, D=Depletion, RM=I	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric 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)
1 —		Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	
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)	3
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Туре:	_	
Depth (inches):	_	Hydric Soil Present? Yes X No No
Remarks:		
	edation Assumed hydric per Step 12	h of the 1007 Corne Delinection Manual
Thot sampled due to saturation and mun	idation. Assumed hydric per Step 12	b of the 1987 Corps Delineation Manual.
HYDROLOGY		
HYDROLOGY Westland the declarate Indicators		
Wetland Hydrology Indicators:		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require	ed; check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	ed; check all that apply) Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) 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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) 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) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) 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 F	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) 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 F	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
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Project/Site: SPCSL 2A (Tier 2)	City/County:	Macoupir	Sampling Date: <u>5/17/11</u>				
Applicant/Owner: UPRR		State: IL Sampling Point: KR3					
Investigator(s): KR, KT	Section, To	wnship, Ran	ge: S7, T11N, R6W				
Landform (hillslope, terrace, etc.): PLAIN	ı	Local relief (concave, convex, none): CONCAVE				
	Long:89.8	Long: -89.801890 Datum: DD (NAD 83)					
Soil Map Unit Name: 46A HERRICK SILT LOAM, 0-2% SLO	OPES		NWI classification: NONE				
Are climatic / hydrologic conditions on the site typical for this time of			_				
Are Vegetation, Soil, or Hydrology significa			lormal Circumstances" present? Yes X No				
Are Vegetation, Soil, or Hydrology naturally			ded, explain any answers in Remarks.)				
SUMMARY OF FINDINGS – Attach site map show				, etc.			
Hydrophytic Vegetation Present? YesX No							
Hydric Soil Present? Yes No	_	e Sampled					
Wetland Hydrology Present? YesX No	with	in a Wetland	!? Yes X No				
Remarks: WETLINE KR_8. PFO1A/PEMA. KR15-S, KR16-N, WI	EST END OF	WETLAND	, KR17-S, KR18N. ISOLATED.				
VEGETATION – Use scientific names of plants.							
Tree Stratum (Plot size: r=30' Abso % Co % Co			Dominance Test worksheet:				
1. Acer saccharinum 30	yes	facw	Number of Dominant Species That Are OBL, FACW, or FAC: 5	(A)			
2. Morus sp. 20	yes	fac					
3. unidentified tree 20	yes		Total Number of Dominant Species Across All Strata: 6	(B)			
4			Percent of Dominant Species				
5				(A/B)			
Sapling/Shrub Stratum (Plot size: r=15')	= Total Cov	/er	Prevalence Index worksheet:				
	yes	facw	Total % Cover of: Multiply by:				
2.			OBL species x 1 =				
3.			FACW species x 2 =				
4.			FAC species x 3 =	,			
5			FACU species x 4 =				
Herb Stratum (Plot size: r=5' 10	= Total Cov	ver	UPL species x 5 =				
	yes	fac	Column Totals: (A)	(B)			
2 Carex vulpinoidea 50	yes	obl	Prevalence Index = B/A =				
3			Hydrophytic Vegetation Indicators:				
4.			1 - Rapid Test for Hydrophytic Vegetation				
5.			X 2 - Dominance Test is >50%				
6			3 - Prevalence Index is ≤3.0¹				
7			 4 - Morphological Adaptations¹ (Provide supportant and Adaptations) 	orting			
8			Problematic Hydrophytic Vegetation¹ (Explain))			
9,				,			
10			¹ Indicators of hydric soil and wetland hydrology mu	ust			
Woody Vine Stratum (Plot size:)	= Total Cov	ver -	be present, unless disturbed or problematic.				
1		—	Hydrophytic				
2	= Total Cov	 /er	Vegetation Yes				
Remarks: (Include photo numbers here or on a separate sheet.)							

SOIL Sampling Point: KR3

Profile Description: (Describe to the depti	n needed to document the indicator or co	onfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	c ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=I	Reduced Matrix MS=Masked Sand Grains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	todood matrix, mo matrica ound ordina:	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)	Other (Explain in Remarks)
2 cm Muck (A10)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	3to discount of books about a constant of the
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Type:	_	Hydric Soil Present? Yes X No
Depth (inches):	_	nyunc son Fresentr Tes No
Remarks:		
HYDROLOGY		
HYDROLOGY Wetland Hydrology Indicators:		
Wetland Hydrology Indicators:	ed: check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required) Surface Soil Cracks (R6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
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Project/Site: SPCSL 2A (Tier 2)		City/Cou	nty: Macoupi	n Sa	ampling Date: <u>5/17/1</u>	1
Applicant/Owner: UPRR		State: IL Sampling Point: KR4				
		Section,	Township, Rar	ge: S7, T11N, R6W		
Landform (hillslope, terrace, etc.): LEVEL PLAIN				concave, convex, none): Co	ONCAVE	
	ı	Long: -8		Da		
Soil Map Unit Name: 46A HERRICK SILT LOAM, 0-29				NWI classification		
Are climatic / hydrologic conditions on the site typical for this			No			
Are Vegetation, Soil, or Hydrology s				Normal Circumstances" pres		0
Are Vegetation, Soil, or Hydrology n				eded, explain any answers in		
SUMMARY OF FINDINGS – Attach site map						s. etc.
	0		31			,
Trydrophytic vegetation Flesent?	0	Is	the Sampled	Area		
1	0	w	ithin a Wetlan	d? Yes X	No	
Remarks:						
WETLAND KR_11. PFO1A/PEMA. ISOLATED. F Equisetum FOR 6' WIDTH. KR-21-S, KR22-N NO						
VEGETATION – Use scientific names of plants.						
Tree Stratum (Plot size: r=30')	Absolute		ant Indicator	Dominance Test workshe	et:	
Tree Stratum (Plot size: 1=50) 1. Ulmus americana	% Cover 30	yes	s? Status facw	Number of Dominant Spec		(A)
2				That Are OBL, FACW, or F	ж.	(^)
3.				Total Number of Dominant Species Across All Strata:	4	(B)
4.				Species Across Air Strata.		(D)
5.				Percent of Dominant Speci That Are OBL, FACW, or F		(A/B)
	00	= Total (Cover	That Are OBL, PACW, or P	АС.	(AVD)
Sapling/Shrub Stratum (Plot size: r=15')				Prevalence Index worksh	eet:	
1. Ulmus americana	_ <u>10</u>	yes	facw	Total % Cover of:		_
2				OBL species	_	_
3				FACW species		
4					x 3 =	_
5				FACU species		
Herb Stratum (Plot size: r=5')	10	= Total (Cover	UPL species		
1. Carex sp.	5			Column Totals:	(A)	_ (B)
2.				Prevalence Index = I	B/A =	
unidentified grass	30	yes		Hydrophytic Vegetation I	ndicators:	
4.				1 - Rapid Test for Hyd	rophytic Vegetation	
5. Rumex altissimus	15		facw	Z 2 - Dominance Test is	>50%	
6. Scirpus fluviatilis	10		obl	3 - Prevalence Index is	s ≤3.0¹	
7. Urtica dioica	30	yes	fac	4 - Morphological Adap	ptations1 (Provide sup	porting
8. Toxicodendron radicans	5		fac		on a separate sheet)	
9.				Problematic Hydrophy	tic Vegetation' (Explai	n)
10				1		
Woody Vine Stratum (Plot size:)	95	= Total (Cover	¹ Indicators of hydric soil an be present, unless disturbe		nust
1				Hydrophytic		
2				Vegetation	X	
		= Total (Cover	Present? Yes _	X No	
Remarks: (Include photo numbers here or on a separate s	sheet.)					
PHOTO KR23-S; KR24-N. Unidentified grass and	Carex sp.	. likely l	FAC or wette	r.		

SOIL Sampling Point KR4

Profile Description: (Describe to the depth	needed to document the indicator or c	onfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ L	oc ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=R	educed Matrix, MS=Masked Sand Grains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	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 and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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
1 1 /		
Remarks:		b of the 1987 Corps Delineation Manual.
HYDROLOGY		
Wetland Hydrology Indicators:	d: check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
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Project/Site: SPCSL 2A (Tier 2)		(City/Co	unty: Macoupi	in	Sampling D	ate: 5/17/11	
Applicant/Owner: UPRR					State: <u>IL</u>	Sampling P	oint: KR5	
Investigator(s): KR, KT		;	Section	n, Township, Rai	nge: S7, T11N, R6W			
Landform (hillslope, terrace, etc.): LEVE	L PLAIN			Local relief	(concave, convex, none):	CONCAV	Έ	
Slope (%): 0-2 Lat: 39.41143	9	I	Long: _	-89.798879		Datum: DE) (NAD 83)	
Soil Map Unit Name: 46A HERRICK S	ILT LOAM,	0-2% SLOPE	s		NWI classific	ation: NON	IE	
Are climatic / hydrologic conditions on the	site typical fo	r this time of yea	ar? Ye	s No _	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or H	ydrology	significantly	disturbe	ed? Are	Normal Circumstances"	resent? Ye	s_X No_	
Are Vegetation, Soil, or H	ydrology	naturally prol	blemat	ic? (If ne	eded, explain any answe	rs in Remark	cs.)	
SUMMARY OF FINDINGS - Att	ach site m	ap showing	sam	pling point le	ocations, transects	, importa	nt features,	etc.
Hydrophytic Vegetation Present?	Yes X	No						\neg
Hydric Soil Present?		No	- 1	is the Sampled				
Wetland Hydrology Present?	Yes X	_ No		within a Wetlar	nd? Yes	No		
Remarks:	DUIGTOO			VD0= 0 VD0	ON OON MURE MET	INIE 1/D 10	0017111115	
WETLAND KR_12. PFO1A/PEMA 10' WIDE. 12" WIDE. ABUTS CHA								
VEGETATION – Use scientific na	mes of pla	nts.						
r-30'		Absolute		nant Indicator	Dominance Test work	sheet:		\neg
Tree Stratum (Plot size: r=30' 1. Morus rubra)	% Cover 20	yes	ies? Status fac-	Number of Dominant S			
			700	- 100	That Are OBL, FACW,	or FAC: _4	(/	A)
2. 3.					Total Number of Domin			р,
4.					Species Across All Stra	ita:	(E	B)
5					Percent of Dominant S		00 (4	A/D\
			= Total	l Cover	That Are OBL, FACW,	or FAC:	()	A/B)
Sapling/Shrub Stratum (Plot size: r=1	5')			Prevalence Index wor	ksheet:		
1. Morus rubra		20	yes	fac	Total % Cover of:	<u></u> N	fultiply by:	
2					OBL species	x 1 =		
3					FACW species	x 2 =		
4					FAC species			
5					FACU species			
Herb Stratum (Plot size: r=5'		_20	= Total	l Cover	UPL species			
1 Equisetum laevigatum		70	yes	facw	Column Totals:	(A)		(B)
2 Solidago gigantea			yes	facw	Prevalence Index	= B/A =		
3 Rumex altissimus		5		facw-	Hydrophytic Vegetation	on Indicator	s:	\neg
4					1 - Rapid Test for I	-lydrophytic \	√egetation	
5.					X 2 - Dominance Tes	it is >50%		
6					3 - Prevalence Inde	ex is ≤3.0 ¹		
7					4 - Morphological A	Adaptations ¹	(Provide suppor	rting
8					data in Remark			
9					Problematic Hydro	phytic Veget	ation (Explain)	(
10					1			
r-15'		95	= Total	l Cover	¹ Indicators of hydric so be present, unless distr			st
Woody Vine Stratum (Plot size: r=15')	-			, , , , , , , , , , , , , , , , , , , ,			-
1. Vitis sp.		5			Hydrophytic			
2					Vegetation Present? Ye	s_X_ I	No	
Remarks: (Include photo numbers here	0F 0D 0 00F00		= Total	l Cover				
		,	шота) 6 KD34 0-	KD22 N			
*COLLECTED AT KR4; ALSO, NC	יהוח באט ע	WEILAND - P	потс) 3, NK31-3;	NL97-IN			

SOIL Sampling Point: KR5

Profile Description: (Describe to the depth	n needed to document the indicator or co	onfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	DC ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix MS=Masked Sand Grains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	reades many, mo-mastes sails statis.	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Dark Surface (S7)
Black Histic (A3)	Stripped Matrix (S6)	Iron-Manganese Masses (F12)
1 —		Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	
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)	3to distance of the development of the control of
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Type:	_	Hydric Soil Present? Yes X No
Depth (inches):	_	nyunc son Present? Tes No
Remarks:		
	7	ne 1987 Corps Delineation Manual.
·		io reer corps beinication manda.
HYDROLOGY		io reer corps beinication manda.
·		io reer corpo Demication Manaan.
HYDROLOGY		Secondary Indicators (minimum of two required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	ed; check all that apply) Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	ed; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Trainage Patterns (B10)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) X Saturation (A3)	ed; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Soots (C3) Saturation Visible on Aerial Imagery (C9)
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HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require) 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) Field Observations: Surface Water Present? Yes N Water Table Present? Yes N	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living Filled Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soil — Thin Muck Surface (C7) — Gauge or Well Data (D9) B) — Other (Explain in Remarks)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Secondary Indicators (minimum of two required) Authorized (C2)
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Project/Site: SPCSL 2A (Tier 2)		c	City/Co	ounty:	Macoupi	n	Sampling	Date: <u>5/17/</u>	11
Applicant/Owner: UPRR				State: IL Sampling Point: KR6					
Investigator(s): KR, KT		8	Section, Township, Range: S7, T11N, R6W						
Landform (hillslope, terrace, etc.): LEVE	L PLAIN			L	ocal relief (concave, convex, none)	CONCA	·VΕ	
Slope (%): 0-2 Lat: 39.41380					97494		Datum: _	DD (NAD 83)
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY LO	DAM, 0-2% S	LOP	ES		NWI classific	cation: NO	NE	
Are climatic / hydrologic conditions on the	site typical for	this time of yea	ır? Y€	es	No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hy	drology	_ significantly d	disturb	ed?	Are "I	Normal Circumstances"	present?	Yes X N	No
Are Vegetation, Soil, or Hy	drology	_ naturally prob	olema	tic?	(If ne	eded, explain any answe	ers in Rema	arks.)	
SUMMARY OF FINDINGS - Att	ach site ma	ap showing	sam	pling	point lo	cations, transects	s, import	ant feature	es, etc.
Hydrophytic Vegetation Present?	Yes X	No	\Box		-				
Hydric Soil Present?	Yes X	No		Is the	Sampled				
Wetland Hydrology Present?		No		withir	n a Wetlan	d? Yes X	No_		
Remarks:									
WETLAND KR_13. PEMC. MOSTEND WETLAND) 10' WIDE. PHOT								,	` `
VEGETATION – Use scientific na	mes of plar	nts.							
		Absolute			Indicator	Dominance Test work	ksheet:		
Tree Stratum (Plot size:		% Cover				Number of Dominant S		1	
1						That Are OBL, FACW,	or FAC:	1	_ (A)
2						Total Number of Domin		1	(D)
3						Species Across All Stra	ata: .	1	_ (B)
4 5						Percent of Dominant S		100	(A (D)
o			= Tota	al Cove		That Are OBL, FACW,	or FAC:	100	_ (A/B)
Sapling/Shrub Stratum (Plot size:			1010	0040		Prevalence Index wor	ksheet:		
1						Total % Cover of:		Multiply by:	_
2						OBL species	× 1	=	_
3						FACW species	x 2	=	_
4						FAC species			
5						FACU species			
Herb Stratum (Plot size: r=5'	,		= Tota	I Cove	er	UPL species			
Herb Stratum (Plot size: r=5' 1. Phalaris arundinacea		75	yes	1	facw	Column Totals:	(A)		(B)
Asclepias sp.		10				Prevalence Index	c = B/A =		
3						Hydrophytic Vegetati			
4.						1 - Rapid Test for	Hydrophytic	c Vegetation	
5						X 2 - Dominance Te			
6						3 - Prevalence Ind	ex is ≤3.0 ¹		
7.						4 - Morphological	Adaptations	s ¹ (Provide su	pporting
8						data in Remark			-
9						Problematic Hydro	phytic Veg	etation' (Expl	ain)
10						1			
Woody Vine Stratum (Plot size:)	85	= Tota	al Cove	er	¹ Indicators of hydric so be present, unless dist			must
1						Hydrophytic			
2						Vegetation	. X	No	
			= Tota	al Cove	er	Present? Ye	· · · · · ·	MO	
Remarks: (Include photo numbers here		,							
THROUGHOUT MOST OF WETLA	AND - Carex	sp., Scirpus	atrov	rirens	, AND Sc	irpus fluviatilis			

Profile Description: (Describe to the dept	n needed to document the indicator or co	milli the absence of mulcators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	c ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric 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)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Type:	_	Hydric Soil Present? Yes No
Depth (inches):	_	·-, · · ·
Remarks:		
HYDROLOGY		
HYDROLOGY Wetland Hydrology Indicators:		
Wetland Hydrology Indicators:	ed; check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) 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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) 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) Crayfish Burrows (C8)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (BField Observations: Surface Water Present? Water Table Present? Yes Note Table	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Represence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): 4 Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Isls (C6) X Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Represence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): 4 Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Isls (C6) X Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Represence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): 4 Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Isls (C6) X Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Represence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Isls (C6)

Project/Site: SPCSL 2A (Tier 2)			City/Co	ounty:	Macoupir	<u>1</u>	Samplin	ng Date: <u>5/17/1</u>	1
Applicant/Owner: UPRR		State: IL Sampling Point: KR7							
Investigator(s): KR, KT		{	Sectio	n, Tov	vnship, Ran	ge: S7, T11N, R6W			
Landform (hillslope, terrace, etc.): FLOOD	PLAIN			L	ocal relief (concave, convex, none):	CONC	AVE	
Slope (%): 0-2 Lat: 39.413419		ι	.ong:	-89.7	797166		Datum:	DD (NAD 83))
Soil Map Unit Name: 50A VIRDEN SILT	Y CLAY LOAI	M, 0-2% S	LOPI	ES		NWI classifica	ation: N	ONE	
Are climatic / hydrologic conditions on the si	te typical for this	s time of yea	ır? Ye	es					
Are Vegetation, Soil, or Hydr						Normal Circumstances" p			lo
Are Vegetation, Soil, or Hyd	rology r	naturally prob	olema	tic?		ded, explain any answer			
SUMMARY OF FINDINGS - Attac					point lo	cations, transects,	impo	rtant feature	s, etc.
Hydrophytic Vegetation Present?	res_XN	lo	Т						
Hydric Soil Present?	~	0		is the	Sampled .				
I .		lo		withi	n a Wetlan	d? Yes X	No	,	
Remarks:									
WETLAND KR_14. PEMA. ABUTS END WETLAND. KR35-S, KR36-N.								HOTOS-SOUT	ГН
VEGETATION - Use scientific nam	es of plants.								
Trac Stratum (Blat sine)	`	Absolute			Indicator	Dominance Test works	heet:		
Tree Stratum (Plot size:		% Cover				Number of Dominant Sp. That Are OBL, FACW, of		1	(A)
2.									(7
3						Total Number of Domina Species Across All Strat		1	(B)
4						Percent of Dominant Sp	ecies		
5						That Are OBL, FACW, o		100	(A/B)
Sapling/Shrub Stratum (Plot size:	`		= Tota	al Cove	er .	Prevalence Index work	shoot.		
1						Total % Cover of:		Multiply by:	
2.						OBL species			
3.						FACW species			_
4.						FAC species			
5						FACU species	x	4 =	
			= Tota	al Cove	er	UPL species	x	5 =	_
Herb Stratum (Plot size: r=5'	_)	00			<u> </u>	Column Totals:	(A		(B)
1. Phalaris arundinacea		90	yes		facw	Prevalence Index	- P/A -		
2					—— l	Hydrophytic Vegetatio			
3			_	_	——	1 - Rapid Test for H			
4			_	_		X 2 - Dominance Test			
5						3 - Prevalence Inde			
6					——	4 - Morphological A			porting
7 8					—	data in Remarks	or on a	separate sheet)	,
9.						Problematic Hydrop	hytic Ve	getation ¹ (Expla	in)
10									
Woody Vine Stratum (Plot size:			= Tota	al Cove	er .	¹ Indicators of hydric soil be present, unless distu			must
1						Hydrophytic			
2						Vegetation	×	No	
			= Tota	al Cove	er	riesentr 165		. но	
Remarks: (Include photo numbers here or		,							
PHOTO POINTS MARK SOUTH EN	D. PHOTOS I	N END WE	TLA	ND- S	SOUTH B	ANK. PHOTOS KR37	-S, KR	-38N	

SOIL Sampling Point: KR7	१७
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Profile Desc	ription: (Describe	to the dept	th needed to docun	nent the	indicator	or confirm	n the absence	of indicators.)			
Depth	Matrix (Octoor (oct))	0/		x Feature		12	T	Domestic			
(inches) 0-6	Color (moist) 10 YR 3/1	100	Color (moist)	%_	Type ¹	_Loc ²	Texture SC	Remarks			
6-16	2.5YR 5/3	100	10YR 5/8	20	_ <u>C</u>	<u>M</u>	<u>C</u>	REDOX 8-16"			
¹ Type: C=Co	oncentration, D=Dep	oletion, RM=	Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	² Location	: PL=Pore Lining, M=Matrix.			
Hydric Soil I	ndicators:						Indicators	for Problematic Hydric Soils ³ :			
Histosol	(A1)				atrix (S4)			Prairie Redox (A16)			
	pipedon (A2)			Redox (S	-			Surface (S7)			
Black Histic (A3) Stripped Matrix (S6)								anganese Masses (F12)			
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleyed Matrix (F2)								hallow Dark Surface (TF12)			
_	ck (A10)			d Matrix (Other	(Explain in Remarks)			
_	Below Dark Surfac	e (A11)		Dark Surf							
	ark Surface (A12)	~ (,			4 2)	3Indicators	of hydrophytic vegetation and			
Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Mucky Mineral (S1) Redox Depressions (F8)								d hydrology must be present,			
5 cm Mu	icky Peat or Peat (S	3)					unless	disturbed or problematic.			
Restrictive I	ayer (if observed)	:									
Type:							Undria Sail	Present? Yes X No No			
Depth (inc	ches):						Hydric Soil	Present? Yes No			
Remarks:											
HYDROLO	GY										
	drology Indicators:										
			ed; check all that ap	nlv)			Seconda	ary Indicators (minimum of two required)			
	Water (A1)	zie is requii	Water-Stai		ree (BQ)			ace Soil Cracks (B6)			
	iter Table (A2)		Aquatic Fa				~ ~				
X Saturation	, ,		True Aqua		,		Drainage Patterns (B10) Dry-Season Water Table (C2)				
	arks (B1)		Hydrogen					rfish Burrows (C8)			
_	nt Deposits (B2)		Oxidized R			ina Roots		uration Visible on Aerial Imagery (C9)			
_	oosits (B3)		Presence of					nted or Stressed Plants (D1)			
	it or Crust (B4)		Recent Iro					morphic Position (D2)			
	osits (B5)		Thin Muck	Surface	(C7)	,	_	-Neutral Test (D5)			
Inundation	on Visible on Aerial	Imagery (B7									
Sparsely	Vegetated Concav	e Surface (E	38) Other (Exp	lain in R	emarks)						
Field Obser	vations:										
Surface Wate	er Present? Y	es I	No Depth (inc	ches):		_					
Water Table	Present? Y	es 1	No Depth (inc	ches):		_					
Saturation Pr			No Depth (inc			Wet	land Hydrolog	y Present? Yes X No			
(includes cap			nitorina well periols	hoton n	raviava in						
Describe Rec	corded Data (stream	n gauge, mo	nitoring well, aerial p	onotos, p	revious ins	spections),	if available:				
Remarks:											

Project/Site: SPCSL 2A (Tier 2)			City/C	ounty:	Macoupi	n	Sampling	g Date: <u>5/17/1</u>	1
Applicant/Owner: UPRR		State: IL Sampling Point: KR8							
Investigator(s): KR, KT			Sectio	n, Tov	vnship, Ran	ge: S7, T11N, R6W			
Landform (hillslope, terrace, etc.): LEVEL						concave, convex, none):	CONC	4VE	
Slope (%): 0-2 Lat: 39.416244		เ	Long:	-89.7	795527		Datum:	DD (NAD 83))
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY LC	OAM, 0-2% S	LOP	ES		NWI classific	ation: NC	ONE	
Are climatic / hydrologic conditions on the	site typical for	this time of yea	ar? Y	es	No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hy	drology	_ significantly of	disturt	oed?	Are "I	Normal Circumstances" p	resent?	Yes X N	io
Are Vegetation, Soil, or Hy	drology	_ naturally prob	blema	tic?	(If ne	eded, explain any answe	rs in Rem	arks.)	
SUMMARY OF FINDINGS - Atta	ch site ma	p showing	sam	pling	g point lo	cations, transects	, impor	tant feature	s, etc.
Hydrophytic Vegetation Present?	Yes X	No							
Hydric Soil Present?	Yes	No		ls the	Sampled				
Wetland Hydrology Present?	YesX	No		withi	n a Wetlan	d? YesX	No		
Remarks:									
WETLAND KR_15. PFO1A/PEMC. 45-S, 43-S, 44-N. LONG LINEAR \									46-N,
VEGETATION – Use scientific nar	nes of plan	ts.							
r-30'		Absolute			Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size: r=30')	% Cover 60			Status fac	Number of Dominant S		0	
Populus deltoides Ulmus americana		$-\frac{60}{40}$	yes		facw	That Are OBL, FACW,	or FAC:	2	. (A)
3			yes		iacw	Total Number of Domin		2	(B)
4.						Species Across All Stra	ta:		(B)
5						Percent of Dominant Sp		100	(A (D)
·		100	= Tota	al Cov	 er	That Are OBL, FACW,	or FAC:	100	(A/B)
Sapling/Shrub Stratum (Plot size:)		- 100	a. 004		Prevalence Index wor	ksheet:		
1						Total % Cover of:		Multiply by:	_
2						OBL species	x 1	1 =	_
3						FACW species	×2	2 =	_
4						FAC species	x	3 =	_
5						FACU species			
Hart Starters (Blat size)	,		= Tota	al Cov	er	UPL species			
Herb Stratum (Plot size:						Column Totals:	(A)		(B)
1						Prevalence Index	= B/A =		_
3.						Hydrophytic Vegetation	on Indicat	tors:	
4.						1 - Rapid Test for I		-	
5.						Z 2 - Dominance Tes			
6						3 - Prevalence Inde	ex is ≤3.0¹	1	
7						4 - Morphological A data in Remarks	daptation	s1 (Provide sur	porting
8						Problematic Hydro			
9						Problematic Hydrol	oriyac veg	Jetation (Exple	,
10						¹ Indicators of hydric soi	l and wetl	and hydrology	must
Woody Vine Stratum (Plot size: r=15')		= Tota	al Cov	er	be present, unless distu			nast.
1. Vitis sp.		10	yes	:					
2						Hydrophytic Vegetation			
		10	= Tota	al Cov	 er	Present? Yes	s_X_	No	
Remarks: (Include photo numbers here of	or on a separa								
WETLINE SEG 1 & 2- 15' WIDE, W			Ξ, WI	ETLIN	NE SEG 4	-6' WIDE, WETLINE	SEG 5-6	WIDE. PHO	TOS
39 AND 40 ON S END.									

Profile Description: (Describe to the depth	needed to document the indicator or c	offilm the absence of mulcators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ L	oc ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Gleyed Matrix (34) 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 and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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:		Step 12b of the 1987 Corps Delineation Manual.
HYDROLOGY		
HYDROLOGY		
Wetland Hydrology Indicators:		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require	ed; check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	ed; check all that apply) Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6) X Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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) X Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 R	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4)	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4)	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ference of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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) Field Observations:	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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 (B6) Field Observations: Surface Water Present? Yes X	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Because of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (B) Field Observations: Surface Water Present? Yes X N Water Table Present? Yes X	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Some Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (Bit in its image) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present? Yes X N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Because of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes N Water Table Present? Yes N Saturation Present? Yes N (includes capillary fringe)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solution (Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (Bit in its image) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present? Yes X N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solution (Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary 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 (Bitle of Concave Surface) Field Observations: Surface Water Present? Water Table Present? Yes X N Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solution (Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes X N Water Table Present? Yes N Saturation Present? Yes X N (includes capillary fringe)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solution (Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary 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 (Bitle of Concave Surface) Field Observations: Surface Water Present? Water Table Present? Yes X N Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solution (Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary 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 (Bitle of Concave Surface) Field Observations: Surface Water Present? Water Table Present? Yes X N Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solution (Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary 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 (Bitle of Concave Surface) Field Observations: Surface Water Present? Water Table Present? Yes X N Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Solution (Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No

Project/Site: SPCSL 2A (Tier 2)		c	City/County: Macoupin Sampling Date: 5/17/11					
Applicant/Owner: UPRR			State: IL Sampling Point: KR9					
Investigator(s): KR, KT		s	ection, T	Township, Ran	ge: S5, T11N, R6W			
Landform (hillslope, terrace, etc.): FLOOD PI	_AIN			Local relief (concave, convex, none):	CONCAVE		
			ong: <u>-89</u>	9.788680		Datum: DD (NAD	83)	
Soil Map Unit Name: HERRICK SILT LOAM	Л, 0-2% SL	OPES			NWI classific	ation: NONE		
Are climatic / hydrologic conditions on the site t	ypical for this	time of year	? Yes_	No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hydrold	gy sig	gnificantly di	isturbed?	? Are "f	Normal Circumstances" p	resent? Yes X	_ No	
Are Vegetation, Soil, or Hydrold	gy na	aturally prob	lematic?	(If nee	eded, explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS - Attach	site map s	howing	sampli	ng point lo	cations, transects	, important feat	ures, etc.	
Hydrophytic Vegetation Present? Yes	X No							
Hydric Soil Present? Yes			ls t	the Sampled				
Wetland Hydrology Present? Yes	X No		wit	thin a Wetlan	d? Yes <u>X</u>	No		
Remarks:								
WETLAND KR_16. PFO1A/PEMA. PHOTOS KR 49-S, KR 50-N. (WETT)F SEG	
VEGETATION – Use scientific names	of plants.							
r-30'				nt Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size: r=30' 1. Acer saccharinum			Species' yes	? Status facw	Number of Dominant Sp		(4)	
					That Are OBL, FACW, o	or FAC: 2	(A)	
2					Total Number of Domina	2	(B)	
3					Species Across All Stra	ta: Z	(B)	
4					Percent of Dominant Sp		(A ID)	
5		90	Total Co	over	That Are OBL, FACW, o	FAC: 100	(A/B)	
)		1010101	1	Prevalence Index work	ksheet:		
1. Acer saccharinum		50	yes	facw	Total % Cover of:	Multiply by	<i>f</i> :	
2					OBL species	x 1 =		
3					FACW species	x 2 =		
4						x 3 =		
5					FACU species			
		50 =	Total Co	over	UPL species			
Herb Stratum (Plot size:)					Column Totals:	(A)	(B)	
1					Prevalence Index	= B/A =		
3.					Hydrophytic Vegetation			
4					X 1 - Rapid Test for H		n	
5					Z 2 - Dominance Tes			
6				I	3 - Prevalence Inde			
7					4 - Morphological A	daptations1 (Provide	supporting	
8					data in Remarks	s or on a separate sh	eet)	
9.					Problematic Hydrop	hytic Vegetation ¹ (E	xplain)	
10								
Woody Vine Stratum (Plot size:		=		over	¹ Indicators of hydric soil be present, unless distu		gy must	
1					Hydrophytic			
2					Vegetation	. X		
		=	Total Co	over	Present? Yes	s_X No	_	
Remarks: (Include photo numbers here or on	a separate si	heet.)						
SEG 3-30' WIDE- PHOTOS N END OF	SEG 3. KR	51-S. KR	52-N.					

		the depth needed to docur		confirm the absence	of indicators.)			
Depth (inches)	Color (moist)	% Color (moist)	x Features%Type ¹	Loc ² Texture	Remarks			
(Inches)	Color (moist)	70 COIOI (IIIOISI)		LOC TEXTUTE	Kemarks			
								
		ion, RM=Reduced Matrix, M	S=Masked Sand Grain		n: PL=Pore Lining, M=Matrix.			
Hydric Soil I					for Problematic Hydric Soils ³ :			
Histosol			Gleyed Matrix (S4)		Prairie Redox (A16)			
	ipedon (A2)		Redox (S5)		Surface (S7)			
Black His			Matrix (S6)		langanese Masses (F12)			
	n Sulfide (A4)		Mucky Mineral (F1)		Shallow Dark Surface (TF12)			
	Layers (A5)		Gleyed Matrix (F2)	<u> </u> Other	(Explain in Remarks)			
2 cm Mu	. ,		d Matrix (F3)					
	Below Dark Surface (_	Dark Surface (F6)	3to dia atau	of budsonbudio venetation and			
_	rk Surface (A12)		d Dark Surface (F7) Depressions (F8)		s of hydrophytic vegetation and			
	ucky Mineral (S1)	Redox i	Depressions (Fo)		d hydrology must be present, disturbed or problematic.			
	cky Peat or Peat (S3) ayer (if observed):			uniess	disturbed or problematic.			
				Hydric Soil	Present? Yes X No			
Depth (inc	:hes):			1.,, 4.1.0 00.1.	100			
Remarks:								
HYDROLO	GY							
Wetland Hyd	Irology Indicators:							
Primary Indic	ators (minimum of one	is required; check all that ap	ply)	Seconda	ary Indicators (minimum of two required)			
X Surface			ined Leaves (B9)	Sur	face Soil Cracks (B6)			
_	ter Table (A2)		auna (B13)		Drainage Patterns (B10)			
Saturation	, ,		tic Plants (B14)		-Season Water Table (C2)			
l —	arks (B1)		Sulfide Odor (C1)		yfish Burrows (C8)			
	t Deposits (B2)		Rhizospheres on Living		uration Visible on Aerial Imagery (C9)			
1 —	osits (B3)		of Reduced Iron (C4)		nted or Stressed Plants (D1)			
I —	t or Crust (B4)		n Reduction in Tilled S		omorphic Position (D2)			
1 — •	, ,	_			C-Neutral Test (D5)			
	osits (B5)	_	Surface (C7)		2-Neutral Test (D3)			
ı —	on Visible on Aerial Ima		Well Data (D9)					
	Vegetated Concave S	ourrace (B8) Other (Exp	olain in Remarks)					
Field Observ		V	/ "					
Surface Wate		No Depth (in						
Water Table	Present? Yes	No Depth (in	ches):					
Saturation Pr	esent? Yes	No Depth (in	ches):	Wetland Hydrolog	y Present? Yes X No			
(includes cap								
Describe Red	corded Data (stream ga	auge, monitoring well, aerial	photos, previous inspe	ctions), if available:				
Remarks:								

Project/Site: SPCSL 2A (Tier 2)		c	City/County: Macoupin Sampling Date: 5/17/1					
Applicant/Owner: UPRR			State: IL Sampling Point: KR10					
Investigator(s): KR, KT		s	ection, Tow	vnship, Rar	nge: S5, T11N, R6W			
Landform (hillslope, terrace, etc.): LEVE	_ PLAIN		L	ocal relief (concave, convex, none):	CONCAVE		
Slope (%): <u>0-2</u> Lat: <u>39.42807</u>		L		787260		Datum: DD (NAD	83)	
Soil Map Unit Name: 46A HERRICK S	LT LOAM,	0-2% SLOPES	<u>; </u>		NWI classific	ation: NONE		
Are climatic / hydrologic conditions on the	site typical fo	or this time of year	? Yes	No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hy	drology	significantly di	isturbed?	Are *	Normal Circumstances" p	resent? Yes X	No	
Are Vegetation, Soil, or Hy	drology	naturally prob	lematic?	(If ne	eded, explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS - Atta	ach site m	ap showing s	sampling	point lo	cations, transects	, important featu	ıres, etc.	
Hydrophytic Vegetation Present?	Yes X	_ No						
Hydric Soil Present?	Yes X	No	Is the	Sampled				
Wetland Hydrology Present?	YesX_	_ No	within	n a Wetlan	d? YesX	No		
Remarks:								
WETLAND KR_17. PFO1A/PEMA BALLAST. PHOTOS AT START O								
			V. (VV ∟11	ILOT ALL	(IL ON RECORD). 1	TO at southern ex	terrt.	
VEGETATION – Use scientific na	mes of pla							
Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?		Dominance Test work			
1					Number of Dominant S That Are OBL, FACW,		(A)	
2							_ (')	
3.					Total Number of Domin Species Across All Stra	2	(B)	
4					Percent of Dominant S	necies		
5					That Are OBL, FACW,		(A/B)	
Sapling/Shrub Stratum (Plot size: r=15	5'		Total Cove	er	Prevalence Index wor	kehoot:		
1 Acer saccharinum)	<u>15</u> .	ves	facw	Total % Cover of:		r	
2.					OBL species			
3.					FACW species			
4.					FAC species			
5					FACU species			
			Total Cove	er	UPL species			
Herb Stratum (Plot size:)				Column Totals:			
1. Ambrosia trifida open water			yes	fac+	December on Indone	- B/4 -		
£					Hydrophytic Vegetation	= B/A =		
3					,,			
4					2 - Dominance Tes	Hydrophytic Vegetatio	n	
5					3 - Prevalence Inde			
6						Adaptations ¹ (Provide	eupporting	
7					data in Remarks	s or on a separate she	et)	
8					Problematic Hydro	phytic Vegetation1 (Ex	(plain)	
9								
10.			Total Cove	er	¹ Indicators of hydric soi		gy must	
Woody Vine Stratum (Plot size:)		10101 0011		be present, unless distu	irbed or problematic.		
1					Hydrophytic			
2					Vegetation Present? Ye	s_X No		
			Total Cove	er	rieseitr Te	- NO		
Remarks: (Include photo numbers here		,	itat =	St		11	401	
2' wide open water with Ambrosia to wetland, extends SE from ditch wet		. A. trifida trans	itions to 6	o wide sil	ver mapie. seg. 2 is s	liver maple. seg 3	-12' Wide	

	ription: (Describe	to the depth r			dicator o	or confirm	the absence	of indicators.)			
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Tune ¹	_Loc ²	Texture	Remarks			
(IIICIICS)	COIOI (IIIOISI)		COIOI (IIIOISI)		1 4 0 0		Texture	Kemarks			
											
	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS	S=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix.			
Hydric Soil								for Problematic Hydric Soils ³ :			
Histosol				Gleyed Mat	rix (S4)		_	Prairie Redox (A16)			
	pipedon (A2)			Redox (S5)			_	urface (S7)			
Black Hi				Matrix (S6	-			anganese Masses (F12)			
	n Sulfide (A4)			Mucky Mine				hallow Dark Surface (TF12)			
	Layers (A5)			Gleyed Mat			△ Other (I	Explain in Remarks)			
_	ick (A10)	- (844)		d Matrix (F							
	Below Dark Surface	e (A11)	_	ark Surfac			3Indicators	of hydronhytic vegetation and			
_	ark Surface (A12)			d Dark Sur				of hydrophytic vegetation and			
	lucky Mineral (S1)	2)	Redox L	Depression:	s (F8)			hydrology must be present, disturbed or problematic.			
	cky Peat or Peat (S ayer (if observed)						uniess	disturbed or problematic.			
			-				Hydric Soil I	Present? Yes X No			
Depth (inc	ches):		_				,				
Remarks:											
HYDROLO	GY										
Wetland Hyd	drology Indicators:										
Primary India	ators (minimum of o	ne is required:	check all that ap	ply)			Secondar	ry Indicators (minimum of two required)			
X Surface			Water-Stai		s (B9)		Surfa	ace Soil Cracks (B6)			
_	iter Table (A2)		Aquatic Fa		,			nage Patterns (B10)			
X Saturation	, ,		True Aqua	, ,	B14)		Dry-Season Water Table (C2)				
1 —	arks (B1)		Hydrogen		,		_ ,	fish Burrows (C8)			
	nt Deposits (B2)		Oxidized R			na Roots (ration Visible on Aerial Imagery (C9)			
_	osits (B3)			of Reduced				ted or Stressed Plants (D1)			
	it or Crust (B4)		_	n Reductio		*		morphic Position (D2)			
	osits (B5)		Thin Muck			2 00113 (00	_	-Neutral Test (D5)			
	on Visible on Aerial	magani (P7)	Gauge or \					Neutral Test (D3)			
_	Vegetated Concav										
	-	e Suriace (Bo)	— Other (Ext	iain in Ren	iarks)						
Field Obser		. 🗸		//"							
Surface Wate			Depth (inc			-					
Water Table			Depth (inc			-					
Saturation Pr		es_X_ No	Depth (inc	ches): <u>0</u>		_ Wetla	and Hydrology	Present? Yes X No			
(includes cap		anuan manita	ring well agricl	hotoe nro	vieve ine	nastians)	if available:				
Describe Rec	corded Data (stream	gauge, monito	nng well, aenai p	onotos, pre	vious insp	pections),	if available:				
Remarks:											

Project/Site: SPCSL 2A (Tier 2)	c	City/County: Macoupin Sampling Date: 5/17/11					
Applicant/Owner: UPRR				State: <u> L</u>	Sampling Point: KR1	11	
Investigator(s): KR, KT	s	ection, Tov	wnship, Ran	ge: S5, T11N, R6W			
Landform (hillslope, terrace, etc.): LEVEL PLAIN		ι	.ocal relief (concave, convex, none):	CONCAVE		
	L	ong: <u>-89.7</u>	789192	1	Datum: DD (NAD 8	3)	
Soil Map Unit Name: 46A HERRICK SILT LOAM, 0-	-2% SLOPES	S		NWI classifica	tion: PUBGx		
Are climatic / hydrologic conditions on the site typical for the	his time of year	r? Yes	No	(If no, explain in Re	marks.)		
Are Vegetation, Soil, or Hydrology	significantly di	isturbed?	Are "f	Normal Circumstances" pre	esent? Yes X	No	
Are Vegetation, Soil, or Hydrology	naturally prob	lematic?	(If nee	eded, explain any answers	in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	showings	sampling	g point lo	cations, transects,	important featu	res, etc.	
	No					-	
	No	Is the	e Sampled				
14	No	withi	in a Wetlan	d? Yes_X_	No		
Remarks:							
WETLAND KR_18. PFO1A/PSSA/PEMC. PHC 59-S. KR 60-N. (WETTEST APRIL ON RECORI						KR	
VEGETATION – Use scientific names of plants	s.						
r=30'		Dominant		Dominance Test works	heet:		
Tree Stratum (Plot size: r=30' 1. Acer rubrum	<u>% Cover</u> _		Status fac	Number of Dominant Spe		(4)	
				That Are OBL, FACW, or	FAC: 3	(A)	
2				Total Number of Domina	2	(D)	
3				Species Across All Strata	1:	(B)	
4 5				Percent of Dominant Spe		(A (D)	
	4.0	Total Cov	er	That Are OBL, FACW, or	FAC: 100	(A/B)	
Sapling/Shrub Stratum (Plot size: r=15')			-	Prevalence Index works	sheet:		
1. Ulmus americana	<u>10</u>	yes	facw	Total % Cover of:			
2				OBL species			
3				FACW species			
4					x 3 =		
5				FACU species			
Herb Stratum (Plot size: r=5')	10=	Total Cov	er	UPL species			
1. Carex sp.	20	yes		Column Totals:	(A)	(B)	
open water	 70			Prevalence Index	= B/A =		
3.				Hydrophytic Vegetation	Indicators:		
4.					ydrophytic Vegetation	ı	
5.				2 - Dominance Test			
6				3 - Prevalence Index			
7				4 - Morphological Ac	faptations1 (Provide s	upporting	
8				Problematic Hydropi	or on a separate shee		
9				Problematic Hydropi	Tytic vegetation (Exp	Jiain)	
10				¹ Indicators of hydric soil	and wetland hydrolog	ny must	
Woody Vine Stratum (Plot size:)	20 =	Total Cov	er	be present, unless distur		y must	
1				Hydrophytic			
2				Vegetation Present? Yes	_X No		
December (Inches of the control of	=======================================	Total Cov	er				
Remarks: (Include photo numbers here or on a separate	,						
Carex sp. is likely FAC or wetter. Stream is appr	ox. 10 ft wid	e and 4 ir	n deep.				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)										
Depth Matrix	Redox Features									
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	oc ² Texture Remarks								
l — — — — — — — — — — — — — — — — — — —										
l — — — — — — — — — — — — — — — — — — —										
¹ Type: C=Concentration, D=Depletion, RM=R	educed Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.								
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :								
Histosol (A1)	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 and								
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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:										
Not sampled due to inundation. Assume	ed hydric per Step 12b of the 1987 C	orps Delineation Manual.								
		•								
HYDROLOGY										
HYDROLOGY Wetland Hydrology Indicators:										
Wetland Hydrology Indicators:	d: check all that apply)									
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required		Secondary Indicators (minimum of two required)								
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required X Surface Water (A1)	Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)								
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)								
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required X Surface Water (A1)	Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)								
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)								
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) Saturation (A3)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)								
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) 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 F	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9)								
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required X Surface Water (A1) High Water Table (A2) 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 F	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)								
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) 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 Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)								
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Project/Site: SPCSL 2A (Tier 2)		City/Coun	nty: Macoupi	in Sampling Date: 5/17/11
Applicant/Owner: UPRR			State: IL Sampling Point: KR12	
Investigator(s): KR, KT		Section, T	Township, Rar	nge: S5, T11N, R6W
Landform (hillslope, terrace, etc.): LEVEL PLAIN			Local relief	(concave, convex, none): CONCAVE
		Long:89	9.790368	Datum: DD (NAD 83)
Soil Map Unit Name: 536 DUMPS, MINE				NWI classification: NONE
Are climatic / hydrologic conditions on the site typical	I for this time of year	ar? Yes_	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 pro	blematic?	(If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site	map showing	sampli	ing point lo	ocations, transects, important features, et
	No	<u> </u>		
Hydric Soil Present? Yes	No No	Is	the Sampled	Area
_ ·	No	wit	thin a Wetlan	nd? Yes_X No
Remarks:				
WETLAND KR_19. PFO1A/PFOC/PEMC.				
Continuous wetland with different vegetation	n pockets. (WE	TTEST A	APRIL ON R	RECORD).
VEGETATION – Use scientific names of	olants.			
r-30'	Absolute		nt Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: r=30' 1. Populus deltoides	% Cover 50	Species Ves	? Status fac+	Number of Dominant Species
	$\frac{30}{5}$	<u>yes</u>	fac	That Are OBL, FACW, or FAC: 5 (A)
2. Morus rubra 3. Acer saccharinum	3	yes	facw	Total Number of Dominant
		yes	_ Idov	Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5	80	- Total C		That Are OBL, FACW, or FAC: 100 (A/B
Sapling/Shrub Stratum (Plot size: r=15'		= Total C	over	Prevalence Index worksheet:
1. Ulmus americana		yes	facw	Total % Cover of: Multiply by:
2. Acer saccharinum	5	yes	fac	OBL species x 1 =
3.				FACW species x 2 =
4.				FAC species x 3 =
5.				FACU species x 4 =
	15	= Total C	over	UPL species x 5 =
Herb Stratum (Plot size: r=5)				Column Totals: (A) (B)
1. Lemna minor	20	yes	_ <u>obl</u>	
2				Prevalence Index = B/A =
3				Hydrophytic Vegetation Indicators:
4				1 - Rapid Test for Hydrophytic Vegetation
5				2 - Dominance Test is >50%
6				3 - Prevalence Index is ≤3.0¹
7				 4 - Morphological Adaptations¹ (Provide supportin data in Remarks or on a separate sheet)
8				Problematic Hydrophytic Vegetation ¹ (Explain)
9				
10	00			¹ Indicators of hydric soil and wetland hydrology must
Woody Vine Stratum (Plot size:		= Total C	over	be present, unless disturbed or problematic.
1				Hydrophytic
2				Vegetation
				Present? Yes X No
Remarks: (Include photo numbers here or on a se				1
PEMF near southern end of wetland. PEM0	near middle of	wetland	I. PFOA/PF	OC wetland throughout.

Soll Sampling Point: KR12

l	ription: (Describe	to the depth r				or confirm	the absence of	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Type ¹	_Loc ²	Texture	Remarks
(Inches)	Color (moist)		COIOI (IIIOISI)		1 100		Texture	Kemarks
								
	oncentration, D=Dep	oletion, RM=Re	educed Matrix, MS	S=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I								for Problematic Hydric Soils ³ :
Histosol				Sleyed Mat			_	Prairie Redox (A16)
	pipedon (A2)			Redox (S5)				urface (S7)
Black His				Matrix (St				inganese Masses (F12)
	n Sulfide (A4)			Mucky Mine				nallow Dark Surface (TF12)
	Layers (A5)			Gleyed Mat			△ Other (E	Explain in Remarks)
2 cm Mu	i Below Dark Surfac	o (A11)		d Matrix (F Dark Surfac				
	ark Surface (A12)	æ (A11)	_	d Dark Suriac	, ,		3Indicators	of hydrophytic vegetation and
_	lucky Mineral (S1)			Dark Sur Depression		,		hydrology must be present,
	cky Peat or Peat (S	3)	Kedux I	repression	5 (1-0)			disturbed or problematic.
	ayer (if observed)						uniess (disturbed of problematic.
	h h		-				Hydric Soil F	Present? Yes X No No No
Depth (inc	ches):							
Remarks:	d due to inundati							
HYDROLO	GY							
Wetland Hyd	drology Indicators	:						
Primary Indic	ators (minimum of	one is required:	check all that ap	ply)			Secondar	y Indicators (minimum of two required)
X Surface			Water-Sta		s (B9)		Surfa	ice Soil Cracks (B6)
	ter Table (A2)		Aquatic Fa					nage Patterns (B10)
Saturation			True Aqua					Season Water Table (C2)
I —	arks (B1)		Hydrogen					fish Burrows (C8)
	t Deposits (B2)		Oxidized F			ing Roots (ration Visible on Aerial Imagery (C9)
1 —	oosits (B3)		Presence					ted or Stressed Plants (D1)
I — ·	t or Crust (B4)		Recent Iro					norphic Position (D2)
	osits (B5)		Thin Muck			00) 81100	_	Neutral Test (D5)
I — ·	on Visible on Aerial	Imagen/ (B7)	Gauge or					reducti rest (55)
ı —	Vegetated Concav							
Field Observ	-	e Surface (DS)	Other (Ext	naiii iii ivei	ilains)	_		
l		. X	Depth (inc	6				
Surface Water						-		
Water Table	Present?	es No	Depth (inc	ches):				
Saturation Pr		es No	Depth (in	ches):		_ Wetla	and Hydrology	Present? Yes No
(includes cap	oillary fringe) corded Data (strean	aguae monite	oring well periol	hotoe pre	wioue ine	nections)	if available:	
Describe Rec	corded Data (Stream	r gauge, monito	oring well, aerial p	motos, pre	vious iris	pections),	ii avaliable.	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)	c	City/County: Macoupin Sampling Date: 5/17/11					1	
Applicant/Owner: UPRR					State: IL	Sampling	Point: KR13	
Investigator(s): KR, KT	s	Section	n, Tov	vnship, Ran	ge: <u>S5, T11, R6</u>			
Landform (hillslope, terrace, etc.): LEVEL PLAIN			L	ocal relief (concave, convex, none):	CONC	4VE	
	L	ong:	-89.7	791956		Datum:	DD (NAD 83)	
Soil Map Unit Name: 46A HERRICK SILT LOAM, 0-29	% SLOPES	3			NWI classific	ation: NO	ONE	
Are climatic / hydrologic conditions on the site typical for this	s time of yea							
Are Vegetation, Soil, or Hydrology s	significantly d	isturb	ed?	Are *N	Normal Circumstances" p	oresent?	Yes X N	o
Are Vegetation, Soil, or Hydrology n	naturally prob	lemat	tic?	(If nee	eded, explain any answe	rs in Rem	arks.)	
SUMMARY OF FINDINGS - Attach site map				g point lo	cations, transects	, impor	tant feature	s, etc.
Hydrophytic Vegetation Present? Yes X N	lo							
	lo			Sampled				
Wetland Hydrology Present? Yes N	lo		withi	n a Wetlan	d? Yes X	No		
Remarks: WETLAND KR_20. PEMF. KR 63-S; KR 64-N. IS	COLATED	DEM	1E C	D'a KD10	KB12 and DB20 D	D20 ropu	cocont como	
wetland with different vegetative areas. (WETTES					, KK 13 and DF 30, D	r 39 Tepi	esent same	
VEGETATION - Use scientific names of plants.								
Trac Stratum (Blat size:	Absolute			Indicator	Dominance Test work	sheet:		
<u>Tree Stratum</u> (Plot size:) 1	% Cover				Number of Dominant S That Are OBL, FACW,		1	(A)
2					Total Number of Domin		4	
3					Species Across All Stra	ıta:		(B)
4 5			_		Percent of Dominant S		100	
0.			l Cov	 er	That Are OBL, FACW,	or FAC:	100	(A/B)
Sapling/Shrub Stratum (Plot size:)		1010	001		Prevalence Index wor	ksheet:		
1					Total % Cover of:			
2					OBL species			
3					FACW species			
4					FACULOPOSION			
5					FACU species UPL species			
Herb Stratum (Plot size: r=5')		- Tota	l Cov	er	Column Totals:			
1. Typha latifolia	30	yes		obl	Column Fotals.			_ (5)
open water	70			[Prevalence Index	= B/A =		_
3				[Hydrophytic Vegetation			
4					1 - Rapid Test for I			
5					2 - Dominance Tes			
6				——	3 - Prevalence Inde			
7				——	4 - Morphological / data in Remark	Adaptation s or on a s	is' (Provide sup separate sheet)	porting
8				——	Problematic Hydro			
9				——				
10		= Tota	l Cov	er	¹ Indicators of hydric soil be present, unless distr			nust
1				İ	Hydrophytic			
2.					Vegetation			
			l Cov	er	Present? Ye	s_ x	No	
Remarks: (Include photo numbers here or on a separate s	sheet.)							

I	ription: (Describe	to the depth r			dicator o	or confirm	the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Tyne ¹	_Loc ²	Texture	Remarks
(Inches)	Color (Illoist)		COIOI (IIIOISI)		1400		Texture	Kemarks
								
	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS	S=Masked S	Sand Gra	ins.		PL=Pore Lining, M=Matrix.
Hydric Soil I								for Problematic Hydric Soils ³ :
Histosol	1 7			Sleyed Matr	rix (S4)		_	Prairie Redox (A16)
	pipedon (A2)			Redox (S5)			_	urface (S7)
Black His				Matrix (S6				anganese Masses (F12)
	n Sulfide (A4)			Mucky Mine				hallow Dark Surface (TF12) Explain in Remarks)
	l Layers (A5) ick (A10)			Gleyed Mat d Matrix (F3			△ Other (i	Explain in Remarks)
_	d Below Dark Surfac	0 (411)		a matrix (F3 Dark Surfac				
	ark Surface (A12)	e (A11)	_	d Dark Surf	. ,		3Indicators	of hydrophytic vegetation and
_	fucky Mineral (S1)			epressions				hydrology must be present,
	icky Peat or Peat (S	3)		ocpi cooloi i	(10)			disturbed or problematic.
	Layer (if observed):						1	order board or proportions.
	zaye. (ii observed)							
			-				Hydric Soil I	Present? Yes X No No
	ches):							
Remarks:	d due to inundation							
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	cators (minimum of c	ne is required:	check all that ap	ply)			Secondar	ry Indicators (minimum of two required)
X Surface	Water (A1)		Water-Sta	ned Leaves	s (B9)		Surfa	ace Soil Cracks (B6)
	iter Table (A2)		Aquatic Fa		, ,			nage Patterns (B10)
Saturation	. ,		True Aqua		314)			Season Water Table (C2)
I —	arks (B1)		Hydrogen				_ ,	fish Burrows (C8)
	nt Deposits (B2)		Oxidized F			na Roots (ration Visible on Aerial Imagery (C9)
1 —	posits (B3)			of Reduced				ted or Stressed Plants (D1)
	at or Crust (B4)		_	n Reduction				morphic Position (D2)
1	osits (B5)		Thin Muck			2000 (00)	_	-Neutral Test (D5)
I — ·	on Visible on Aerial	magery (R7)	_	Well Data (I				reduction (55)
I —	Vegetated Concav							
Field Observ		e Surface (Bo)	Other (Ext	naiii iii iveii	iai ks/	_		
1		X N-	Depth (in	24"				
Surface Water						-		
Water Table	Present? Y	es No	Depth (in	ches):				.
Saturation Pr		es No	Depth (in	ches):		_ Wetla	and Hydrology	Present? Yes No
(includes cap	oillary fringe) corded Data (stream	nauna monite	ring well serial	hotoe pro	vioue incr	nectione) :	if available:	
Describe Rec	corded Data (Sirean	gauge, monito	ning well, aeriai j	motos, prev	vious iris	pections), i	ii avaliable.	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)	Cit	City/County: Macoupin Sampling Date: 5/18/1				
Applicant/Owner: UPRR				State: IL	Sampling Point	KR14
Investigator(s): KR, KT	Se	ection, Tow	nship, Ran	ge: S8, T11N, R6W		
Landform (hillslope, terrace, etc.): LEVEL PLAIN		L	ocal relief (concave, convex, none):	CONCAVE	
			92126		Datum: DD (N	IAD 83)
Soil Map Unit Name: 46A HERRICK SILT LOAM, 0-2	2% SLOPES			NWI classification	ation: NONE	
Are climatic / hydrologic conditions on the site typical for the	is time of year?					
Are Vegetation, Soil, or Hydrology	significantly dis	sturbed?	Are *N	Normal Circumstances" p	resent? Yes _	X No
Are Vegetation, Soil, or Hydrology	naturally proble	ematic?	(If nee	eded, explain any answer	rs in Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing s	ampling	point lo	cations, transects	, important f	eatures, etc.
Hydrophytic Vegetation Present? Yes X	No					
	No		Sampled			
Wetland Hydrology Present? YesX N	No	within	n a Wetlan	d? Yes	No	
Remarks: WETLAND KR_21. PEMC/PEMF. ISOLATED. ION RECORD).	N END PHO	TO KR 6	5-S; KR 6	6-N. KR 67-S; KR 68	-SE. (WETTE	EST APRIL
VEGETATION – Use scientific names of plants	s.					
Tree Stratum (Plot size:)		Dominant		Dominance Test works	sheet:	
1			otatus	Number of Dominant Sp. That Are OBL, FACW, of		(A)
2				Total Number of Domina		
3				Species Across All Strat	ta: <u>1</u>	(B)
4 5				Percent of Dominant Sp		(A/D)
·-			er .	That Are OBL, FACW, o	or FAG: 100	(A/B)
Sapling/Shrub Stratum (Plot size:)				Prevalence Index work		
1				Total % Cover of:		
2				OBL species		
3				FACW species FAC species		
4				FACU species		
5				UPL species		
Herb Stratum (Plot size: r=5')			"	Column Totals:		
1. Equisetum laevigatum	50	yes	facw			
2. open water	_ <u>50</u> _			Prevalence Index		
3			——	Hydrophytic Vegetatio 1 - Rapid Test for H		
4				1 - Rapid Test for H	, , , ,	atation
5				3 - Prevalence Inde		
6			——	4 - Morphological A		vida avanadia a
7				data in Remarks	daptations (Pro	te sheet)
8				Problematic Hydrop		
9						
Woody Vine Stratum (Plot size:)		Total Cove	er er	¹ Indicators of hydric soil be present, unless distu	and wetland hy irbed or problem	drology must atic.
1				Hydrophytic		
2				Vegetation	~	
		Total Cove	er	Present? Yes	s_X No_	
Remarks: (Include photo numbers here or on a separate	sheet.)					
Equisetum wetland, spikerush dominated (Juncus	s tenuis).					
I .						

	ription: (Describe	to the depth			dicator o	or confirm	the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Type ¹	_Loc ²	Texture	Remarks
(Inches)	Color (Illoist)		COIOI (IIIOISI)		1700		Texture	Kemarks
							2	
	oncentration, D=De	pletion, RM=Re	educed Matrix, MS	=Masked 8	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I								for Problematic Hydric Soils ³ :
Histosol				Sleyed Matr	rix (S4)		_	Prairie Redox (A16)
	pipedon (A2)			Redox (S5)				urface (S7)
Black His				Matrix (S6	-			anganese Masses (F12)
	n Sulfide (A4)			Mucky Mine				hallow Dark Surface (TF12)
	Layers (A5)			Sleyed Mat			△ Other (Explain in Remarks)
_	ick (A10) d Below Dark Surfac	oo (A11)		d Matrix (F3)ark Surfac				
	ark Surface (A12)	ce (ATT)	_	d Dark Surfac	, ,		3Indicators	of hydrophytic vegetation and
_	lucky Mineral (S1)			epressions	, ,			I hydrology must be present,
	icky Peat or Peat (S	:3)	Kedox E	epressions	(r o)			disturbed or problematic.
	_ayer (if observed)						uness	distarbed of problematic.
			_				Hydric Soil	Present? Yes X No No
Depth (inc	ches):		_				,	
Remarks:								
HYDROLO	GY							
Wetland Hyd	drology Indicators	:						
Primary Indic	ators (minimum of	one is required	; check all that ap	ply)			Seconda	ry Indicators (minimum of two required)
X Surface	Water (A1)		Water-Stai	ned Leaves	s (B9)		Surfa	ace Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	una (B13)			Drain	nage Patterns (B10)
Saturation	on (A3)		True Aqua	tic Plants (E	B14)		Dry-	Season Water Table (C2)
Water M	arks (B1)		Hydrogen					fish Burrows (C8)
	nt Deposits (B2)		Oxidized R			ina Roots (ration Visible on Aerial Imagery (C9)
1 —	oosits (B3)			of Reduced				ted or Stressed Plants (D1)
I — ·	it or Crust (B4)			n Reduction		,	_	morphic Position (D2)
	osits (B5)		Thin Muck			2 00110 (00	_	-Neutral Test (D5)
I — ·	on Visible on Aerial	Imagery (R7)	_	Vell Data (I	,			10000011001
I —	Vegetated Concav							
Field Observ	9	e Surface (Bo)	Other (Exp	all III Kell	iai kaj			
I		/ X N-	Depth (inc	0-18	3			
Surface Water						-		
Water Table			Depth (inc					
Saturation Pr		res No	Depth (inc	:hes):		_ Wetla	and Hydrology	Present? Yes X No
(includes cap	oillary fringe) corded Data (strean	n gauge monit	oring well periol r	hotoe prev	rioue inc	nections)	if available:	
Describe Rec	corded Data (stream	ii gauge, monii	oning well, aeriai p	motos, prev	vious iris	pections),	ii avaliable.	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)	City/C	City/County: Macoupin Sampling Date: 5/18/11				
Applicant/Owner: UPRR			State: <u>IL</u>	Sampling Point: KR15		
Investigator(s): KR, KT	Section	on, Township, Rai	nge: S8, T11N, R6W			
Landform (hillslope, terrace, etc.): LEVEL PLAIN		Local relief	(concave, convex, none):	CONCAVE		
		-89.792953		Datum: DD (NAD 83)		
Soil Map Unit Name: 46A HERRICK SILT LOAM, 0-	2% SLOPES		NWI classifica	ation: NONE		
Are climatic / hydrologic conditions on the site typical for the	his time of year? Y					
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are	Normal Circumstances" pr	resent? Yes X No No		
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (If ne	eded, explain any answer	s in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	showing san	npling point le	ocations, transects,	important features, etc.		
Hydrophytic Vegetation Present? Yes X	No					
	No	Is the Sampled				
Wetland Hydrology Present? Yes X	No	within a Wetlan	id? Yes	No		
Remarks: WETLAND KR_22. PSSC. ISOLATED. PHOTO		CO C 1/D70 N	401 M/IDE /METTE	OT ADDIL ON DECODD)		
WEILAND KR_22. PSSC. ISOLATED. PHOTO	US IN EIND. KK-	09-3, KK/U-IN.	. 12 WIDE. (WETTES	ST APRIL ON RECORD).		
VEGETATION – Use scientific names of plant	S.					
		ninant Indicator	Dominance Test works	sheet:		
<u>Tree Stratum</u> (Plot size:) 1			Number of Dominant Sp That Are OBL, FACW, o			
2			Total Number of Domina	ant		
3			Species Across All Strat	4		
4			Percent of Dominant Sp	ecies		
5			That Are OBL, FACW, o	or FAC: 100 (A/B)		
Sapling/Shrub Stratum (Plot size: r=15')	= Tot	ai Cover	Prevalence Index work	sheet:		
1. Acer saccharinum			Total % Cover of:	Multiply by:		
2. open water				x 1 =		
3				x 2 =		
4				x 3 =		
5				x 4 =		
Herb Stratum (Plot size:)	_40 = Tot	al Cover		x 5 =		
1			Column Totals.	(A) (B)		
2			Prevalence Index	= B/A =		
3			Hydrophytic Vegetatio			
4				lydrophytic Vegetation		
5			2 - Dominance Test			
6			3 - Prevalence Inde			
7			4 - Morphological Ai	daptations ¹ (Provide supporting or on a separate sheet)		
8				hytic Vegetation1 (Explain)		
9						
10	= Tot		¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must rbed or problematic.		
1.			Hydrophytic			
2.			Vegetation	~		
	= Tot	tal Cover	Present? Yes	X No		
Remarks: (Include photo numbers here or on a separate	e sheet.)					
dead saplings						

Profile Description: (Describe to the dept	needed to document the indicator or co	onfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	c ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	The state of the s	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)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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 No
Remarks:		
	d rook holloot. Accumed by drie nor Ct	ton 10h of the 1007 Corne Delineation Manual
John Hot Sampled due to indidation an	a rook bandot. Adodinioa nyano por ot	tep 12b of the 1987 Corps Delineation Manual.
Johns not sampled due to mundation and	a rook ballabi. Abballiba liyano por ol	tep 125 of the 1907 Corps Delineation Maridal.
Tooks not sampled due to mundation and	a rook ballaot. Accumed hydro per et	tep 125 of the 1907 Corps Delineation Manual.
Construct sampled due to mundation and	a rook ballaot. Accumod nyallo por ot	tep 125 of the 1907 Corps Delineation Manual.
HYDROLOGY	a rook ballaot. Accumod nyallo por ot	tep 125 of the 1907 Corps Delineation Maridal.
HYDROLOGY	a rook ballaot. Accumod flyaffo por Ci	lep 125 of the 1907 Corps Delineation Maridal.
HYDROLOGY Wetland Hydrology Indicators:		
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require	ed; check all that apply)	Secondary Indicators (minimum of two required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	ed; check all that apply) Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	ed; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ed; check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) coots (C3) Saturation Visible on Aerial Imagery (C9)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Gauge or Well Data (D9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi Thin Muck Surface (C7) Gauge or Well Data (D9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its sequence in it	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soi — Thin Muck Surface (C7)) — Gauge or Well Data (D9) 8) — Other (Explain in Remarks)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B) Field Observations: Surface Water Present? Yes X	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soi — Thin Muck Surface (C7)) — Gauge or Well Data (D9) 8) — Other (Explain in Remarks)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes N	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soi — Thin Muck Surface (C7)) — Gauge or Well Data (D9) 8) — Other (Explain in Remarks) lo — Depth (inches): 6	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes N Saturation Present? Yes N	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soi — Thin Muck Surface (C7)) — Gauge or Well Data (D9) 8) — Other (Explain in Remarks) lo — Depth (inches): 6	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes N	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soi — Thin Muck Surface (C7)) — Gauge or Well Data (D9) 8) — Other (Explain in Remarks) lo — Depth (inches):	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes No Saturation Present?	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soi — Thin Muck Surface (C7)) — Gauge or Well Data (D9) 8) — Other (Explain in Remarks) lo — Depth (inches):	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its sequence in it	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soi — Thin Muck Surface (C7)) — Gauge or Well Data (D9) 8) — Other (Explain in Remarks) lo — Depth (inches):	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes No Saturation Present?	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soi — Thin Muck Surface (C7)) — Gauge or Well Data (D9) 8) — Other (Explain in Remarks) lo — Depth (inches):	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its sequence in it	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soi — Thin Muck Surface (C7)) — Gauge or Well Data (D9) 8) — Other (Explain in Remarks) lo — Depth (inches):	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its sequence in it	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R — Presence of Reduced Iron (C4) — Recent Iron Reduction in Tilled Soi — Thin Muck Surface (C7)) — Gauge or Well Data (D9) 8) — Other (Explain in Remarks) lo — Depth (inches):	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No

Project/Site: SPCSL 2A (Tier 2)		(City/C	ounty: _	Macoupi	n	Sampli	ng Date: <u>5/18/</u>	/11
Applicant/Owner: UPRR						State: IL	Sampling Point: KR16		
Investigator(s): KR, KT			Sectio	n, Tow	nship, Rar	nge: S7, T11N, R6W			
Landform (hillslope, terrace, etc.): LEVE						(concave, convex, none):	CONC	CAVE	
Slope (%): 0-2 Lat: 39.41532		1	Long:	-89.79	95566		Datum:	DD (NAD 83	3)
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY L	OAM, 0-2% S	LOP	ES		NWI classific	ation: <u>N</u>	ONE	
Are climatic / hydrologic conditions on the	site typical fo	or this time of yea	ar? Ye	es	No	X (If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hy	drology	significantly	disturt	bed?	Are "	Normal Circumstances" p	resent?	Yes	No
Are Vegetation, Soil, or Hy	drology	naturally prol	olema	itic?	(If ne	eded, explain any answe	rs in Re	marks.)	
SUMMARY OF FINDINGS - Att	ach site m	ap showing	sam	pling	point lo	ocations, transects	, impo	rtant featur	res, etc.
Hydrophytic Vegetation Present?	Yes_X	No	\Box						
Hydric Soil Present?	YesX	_ No		Is the	Sampled				
Wetland Hydrology Present?	Yes X	No		within	a Wetlan	d? Yes	N	o	
Remarks:									
WETLAND KR_23. PEMA. PHOT RECORD).	O KR71-S,	KR72-N S EN	1D O	F SEG	6. 3-PHO	TO KR73-S;KR74-N.	(WET	TEST APRIL	. ON
VEGETATION – Use scientific na	mes of pla	ints.							
		Absolute			ndicator	Dominance Test work	sheet:		
Tree Stratum (Plot size:		% Cover				Number of Dominant S		0	
1						That Are OBL, FACW,	or FAC:	2	_ (A)
2						Total Number of Domin		0	
3						Species Across All Stra	ta:	2	_ (B)
4			_			Percent of Dominant Sp		400	
5						That Are OBL, FACW,	or FAC:	100	_ (A/B)
Sapling/Shrub Stratum (Plot size:		, —	= lota	al Cove	r	Prevalence Index wor	ksheet:		
1						Total % Cover of:		Multiply by:	
2.						OBL species	;	x 1 =	
3.						FACW species			
4.						FAC species			
5						FACU species)	x 4 =	
			= Tota	al Cove	r	UPL species			
Herb Stratum (Plot size: r=5')			_		Column Totals:	(A)	(B)
1. Carex brevior		30	_yes		ac				
2. Juncus tenuis		$\frac{20}{50}$	_yes	<u>f</u>	ac	Prevalence Index			
3. open water		50	_			Hydrophytic Vegetation			
4						1 - Rapid Test for H			
5						_ 2 - Dominiance 168			
6			_			3 - Prevalence Inde		_	
7						4 - Morphological A data in Remarks	daptation a	ons' (Provide si a separate shee	upporting et)
8						Problematic Hydro			-
9			_					, , ,	,
10			_			¹ Indicators of hydric soi	and we	etland hydrolog	v must
Woody Vine Stratum (Plot size:)		= Tota	al Cove	г	be present, unless distu	irbed or	problematic.	
1						Hydrophytic			
2.						Vegetation	v		
				al Cove	r	Present? Yes	\$ <u> </u>	_ No	,
Remarks: (Include photo numbers here	or on a sepa	rate sheet.)							
SEG. 1DOMINATED BY Carex sp. SEG 3- Carex vulpinoidea, Carex b		'A DETANIMO	Y Rui	mex al	tissimus	, Conium maculatum,	AND A	Ambrosia trific	da.
Joed 5- Galex vulpinoluea, Galex L	nevior.								

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l	ription: (Describe	to the depth r			dicator o	or confirm	the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Type ¹	_Loc ²	Texture	Remarks
(Inches)	Color (Illoist)		COIOI (IIIOISI)		1400		Texture	Kemarks
							2	
	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS	S=Masked S	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I								for Problematic Hydric Soils ³ :
Histosol	. ,			Sleyed Matr	rix (S4)			Prairie Redox (A16)
	pipedon (A2)			Redox (S5)				urface (S7)
Black His				Matrix (S6				anganese Masses (F12)
	n Sulfide (A4)			Mucky Mine				hallow Dark Surface (TF12)
	Layers (A5)			Gleyed Mat			△ Other (Explain in Remarks)
2 cm Mu	. ,	- (844)		d Matrix (F3				
	Below Dark Surface	e (A11)	_	ark Surfac	, ,		3 ₁₀ diagtors	of budsonbudio constation and
_	ark Surface (A12)			d Dark Surf				of hydrophytic vegetation and
	lucky Mineral (S1)	2)	Redox I	Depressions	s (F8)			I hydrology must be present, disturbed or problematic.
	cky Peat or Peat (S ayer (if observed)						uniess	disturbed or problematic.
			-				Hydric Soil	Present? Yes X No
Depth (inc	ches):		_				11,41110 00111	
Remarks:								
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	ators (minimum of o	ne is required:	check all that ap	ply)			Seconda	ry Indicators (minimum of two required)
X Surface	Water (A1)		Water-Sta	ned Leaves	s (B9)		Surfa	ace Soil Cracks (B6)
	ter Table (A2)		Aquatic Fa		, ,			nage Patterns (B10)
Saturation	. ,		True Aqua		B14)			Season Water Table (C2)
I —	arks (B1)		Hydrogen		,			fish Burrows (C8)
	t Deposits (B2)		Oxidized F			na Roots (ration Visible on Aerial Imagery (C9)
1 —	osits (B3)			of Reduced				ted or Stressed Plants (D1)
I — ·	t or Crust (B4)			n Reduction			_	morphic Position (D2)
	osits (B5)		Thin Muck			2 00113 (00)	_	-Neutral Test (D5)
I — ·	on Visible on Aerial	Imageny (B7)	_	Well Data (I				reducti rest (50)
ı —	Vegetated Concav							
Field Observ	-	e Surface (Bo)	Other (Ext	naiii iii ixeii	iai ka	_		
l		- X	D # //-	2				
Surface Water			Depth (in			— ı		
Water Table	Present? Y	es No	Depth (inc	ches):				
Saturation Pr		es No	Depth (in	ches):		_ Wetla	and Hydrology	Present? Yes X No
(includes cap	ollary fringe) corded Data (stream	gauge monito	vring well periol	hotoe pre	vioue iner	nections) i	if available:	
Describe Rec	Sided Data (Sirean	rgauge, monito	ning well, aeriai j	motos, pre	vious irisį	pections), i	ii avaliable.	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)		c	City/Count	ty: Macoupi	n	Sampling Date:	5/18/11
Applicant/Owner: UPRR	pplicant/Owner: UPRR					Sampling Point:	KR17
Investigator(s): KR, KT		s	Section, T	ownship, Rar	nge: S7, T11N, R6W		
Landform (hillslope, terrace, etc.): LEVE					(concave, convex, none):		
Slope (%): 0-2 Lat: 39.41396	62	L	.ong:89	9.797346		Datum: DD (N	AD 83)
Soil Map Unit Name: 50A VIRDEN SII	LTY CLAY L	OAM, 0-2% SI	LOPES		NWI classific	ation: NONE	
Are climatic / hydrologic conditions on the	e site typical fo	r this time of year	r? Yes_	No	(If no, explain in R	(emarks.)	
Are Vegetation, Soil, or H	lydrology	significantly d	listurbed?	? Are "l	Normal Circumstances" p	oresent? Yes _	X No
Are Vegetation, Soil, or H	lydrology	naturally prob	olematic?	(If ne	eded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS - Att	tach site m	ap showing s	sampli	ng point lo	ocations, transects	, important f	eatures, etc.
Hydrophytic Vegetation Present?	Yes X	No	\Box				
Hydric Soil Present?		No		the Sampled			
Wetland Hydrology Present?	YesX_	No	wit	thin a Wetlan	d? Yes	No	
Remarks:							
WETLAND KR_24. PEMC/PEMF LOOKING AT CULVERT AREA S							-S, 78-N,
VEGETATION – Use scientific na	ames of pla	nts.					
		Absolute		nt Indicator	Dominance Test work	sheet:	
Tree Stratum (Plot size:		% Cover			Number of Dominant S That Are OBL, FACW,		(A)
2							
3					Total Number of Domin Species Across All Stra	ata: 1	(B)
4					Percent of Dominant S		
5					That Are OBL, FACW,		(A/B)
Sapling/Shrub Stratum (Plot size:		, ——=	= Total Co	over	Prevalence Index wor	ksheet:	
1					Total % Cover of:		ply by:
2					OBL species	x 1 =	
3					FACW species	x 2 =	
4					FAC species	x 3 =	
5					FACU species		
Herb Stratum (Plot size: r=5'	,	=	= Total Co	over	UPL species		
1 Phalaris arundinacea		30	yes	facw	Column Totals:	(A)	(B)
flowing water		70	,		Prevalence Index	= B/A =	
3					Hydrophytic Vegetation	on Indicators:	
4					1 - Rapid Test for I		atation
5					2 - Dominance Tes	it is >50%	
6					3 - Prevalence Ind		
7					4 - Morphological /	Adaptations¹ (Pro s or on a separat	vide supporting
8					Problematic Hydro		
9						priyate vegetation	· (Explain)
10					¹ Indicators of hydric so	il and wetland hy	drology must
Woody Vine Stratum (Plot size:)	30=	= Total Co	over	be present, unless distr		
1					Hydrophytic		
2					Vegetation Present? Ye	s_X_ No_	
			= Total Co	over	riesentr 10	3 NO_	
Remarks: (Include photo numbers here		-					
SEG. 3- Scirpus atrovirens, SEG 2 KR81-S, KR82-N. KR80-N N END		TED BY C. vul	Ipinoide	a ALONG E	BANKS; CATTAILS II	N CHANNEL.	PHOTO

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The state of the s	needed to document the indicator or o	emmin the advented of management,
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ L	oc ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains	2Location: PL=Pore Lining, M=Matrix.
Hydric 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)	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)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)	Nedox Depressions (Fo)	unless disturbed or problematic.
Restrictive Layer (if observed):		unless disturbed of problematic.
_		
Type:	_	Hydric Soil Present? Yes X No
Depth (inches):	_	Trydric doil r resent? Tes No
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators:	d: check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6) Z Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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) Z Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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) X Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Surface Soil Cracks (B6) X Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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 (B8)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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:	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc 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) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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 (B6) Field Observations: Surface Water Present? Yes X	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 6IN	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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 (B6) Field Observations: Surface Water Present? Yes X	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc 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) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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 (B8) Field Observations: Surface Water Present? Yes X	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): By Other (By Data (B) Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary 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 (B8) Field Observations: Surface Water Present? Water Table Present? Yes X No Saturation Present? Yes X No Saturation Present?	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary 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 (B8) Field Observations: Surface Water Present? Yes X No Saturation Present? Yes X No Saturation Present?	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary 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 (B8) Field Observations: Surface Water Present? Water Table Present? Yes X No Saturation Present? Yes X No Saturation Present?	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary 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 (B8) Field Observations: Surface Water Present? Water Table Present? Yes X Notes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary 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 (B6) Field Observations: Surface Water Present? Water Table Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches):	Surface Soil Cracks (B6) Trainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Image: No Image: No No Image: No Ima
Wetland Hydrology Indicators: Primary 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 (B8) Field Observations: Surface Water Present? Water Table Present? Yes X Notes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches):	Surface Soil Cracks (B6) Trainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Image: No Image: No No Image: No Ima
Wetland Hydrology Indicators: Primary 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 (B6) Field Observations: Surface Water Present? Water Table Present? Yes X No Saturation Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches):	Surface Soil Cracks (B6) Trainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Image: No Image: No No Image: No Ima
Wetland Hydrology Indicators: Primary 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 (B6) Field Observations: Surface Water Present? Water Table Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No Wetland Hydrology Present? Yes No Image: No Image: No No Image: No Ima

Project/Site: SPCSL 2A (Tier 2)	City/C	ounty: Macoupi	in	Sampling Date: 5/18/11
Applicant/Owner: UPRR			State: IL	
Investigator(s): KR, KT	Section Section	on, Township, Rai	nge: S16, T10N, R7W	
Landform (hillslope, terrace, etc.): LEVEL PLAIN			(concave, convex, none):	_
	Long:	-89.872440		Datum: DD (NAD 83)
Soil Map Unit Name: 50A VIRDEN SILTY CLAY L	OAM, 0-2% SLOP	PES	NWI classific	ation: NONE
Are climatic / hydrologic conditions on the site typical for	r this time of year? Y			
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are	Normal Circumstances" p	resent? Yes X No No
Are Vegetation, Soil, or Hydrology	naturally problems	atic? (If ne	eded, explain any answer	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	ap showing san	npling point le	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes X	No			
Hydric Soil Present? YesX	No	Is the Sampled		
	No	within a Wetlar	nd? Yes	No
Remarks: WETLAND KR 25A & KR 25B. PEMF. ISOL	ATED KR 83-E	KR84-S KR85	S-N WEST SIDE TRA	CK KR86-W WETI AND
ON NORTH AND SOUTH SIDE OF ROAD IN				
VEGETATION – Use scientific names of plan	nts.			
		ninant Indicator	Dominance Test works	sheet:
<u>Tree Stratum</u> (Plot size:) 1)	% Cover Spe		Number of Dominant Sp That Are OBL, FACW, of	
2.				
3			Total Number of Domina Species Across All Strat	4
4			Percent of Dominant Sp	
5			That Are OBL, FACW, o	
Carling/Charle Stantum (District)	= Tot	al Cover	Prevalence Index work	rehoot:
Sapling/Shrub Stratum (Plot size:				Multiply by:
1				x 1 =
2 3				x 2 =
4				x 3 =
5				x 4 =
	= Tot	al Cover		x 5 =
Herb Stratum (Plot size: r=5')			Column Totals:	(A) (B)
1. Typha latifolia open water	<u>70</u> yes	s obl	Description of Indian	- D/A -
	30		Hydrophytic Vegetatio	= B/A =
3			1 - Rapid Test for H	
4			2 - Dominance Test	
5			3 - Prevalence Inde	
6			_	daptations ¹ (Provide supporting
7				or on a separate sheet)
8 9			Problematic Hydrop	phytic Vegetation1 (Explain)
10.				
Woody Vine Stratum (Plot size:)		al Cover	¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must rbed or problematic.
1			U. d t. d.	
2			Hydrophytic Vegetation	
		tal Cover	Present? Yes	3_X No
Remarks: (Include photo numbers here or on a separa			I	
North of road, there is mostly an unknown gras to east outside of study area boundary. PH KR	s, species with ye			

l	ription: (Describe	to the depth n				or confirm	the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Tune ¹	Loc ²	Texture	Remarks
(Inches)	Color (moist)	70	COIOI (IIIOISI)		1400		Texture	Kemarks
							2	
	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS	=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I								for Problematic Hydric Soils ³ :
Histosol				Sleyed Mat			_	Prairie Redox (A16)
	ipedon (A2)			Redox (S5)				urface (S7)
Black His				Matrix (Se				anganese Masses (F12)
	n Sulfide (A4)			Mucky Mine				hallow Dark Surface (TF12)
	Layers (A5)			Sleyed Mat			△ Other (i	Explain in Remarks)
2 cm Mu	ck (A10) I Below Dark Surfac	0 (011)		d Matrix (F)ark Surfac				
	rk Surface (A12)	e (ATT)		d Dark Sunac	, ,		3Indicators	of hydrophytic vegetation and
_	lucky Mineral (S1)			epression				hydrology must be present,
	cky Peat or Peat (S	3)	Nedox E	repression	3 (10)			disturbed or problematic.
_	ayer (if observed):	-					T T T T T T T T T T T T T T T T T T T	distributed of problematics.
	h >		-				Hydric Soil I	Present? Yes X No No No
	:hes):							
Remarks:	d due to inundation							
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	ators (minimum of o	ne is required:	check all that ap	ply)			Secondar	ry Indicators (minimum of two required)
× Surface	Water (A1)		Water-Stai	ned Leave	s (B9)		Surfa	ace Soil Cracks (B6)
	ter Table (A2)		Aquatic Fa					nage Patterns (B10)
Saturation	, ,		True Aqua	, ,				Season Water Table (C2)
I —	arks (B1)		Hydrogen				_ ,	fish Burrows (C8)
	t Deposits (B2)		Oxidized R			ina Roots (ration Visible on Aerial Imagery (C9)
1 —	osits (B3)		Presence					ted or Stressed Plants (D1)
I — ·	t or Crust (B4)		Recent Iro				_	morphic Position (D2)
	osits (B5)		Thin Muck			2 00113 (00	_	-Neutral Test (D5)
I — ·	on Visible on Aerial	mageny (B7)	Gauge or \				_ 17.0	reduction rest (50)
I —	Vegetated Concav							
Field Observ		e Suriace (Bo)	Other (EXP	all III IVel	ilaiks/			
l		×	D # - # -	4				
Surface Water			Depth (inc			-		
Water Table		es No	Depth (inc	:hes):				v
Saturation Pr		es No	Depth (inc	:hes):		_ Wetla	and Hydrology	Present? Yes X No
(includes cap	illary fringe) corded Data (stream	gauge monito	ring well perial r	hotoe pre	vioue ine	nections) i	if available:	
Describe Rec	zorded Data (stream	gauge, monito	ning well, aeriai p	motos, pre	vious iris	pections), i	ii avaliable.	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)	City/C	ounty: Macoup	in	Sampling Date: <u>5/18/11</u>
Applicant/Owner: UPRR				Sampling Point: KR19
	Section	on, Township, Ra	nge: S5, T11N, R6W	
			(concave, convex, none):	CONCAVE
	Long:	-89.783822		Datum: DD (NAD 83)
Soil Map Unit Name: 50A VIRDEN SILTY CLAY LOA	AM, 0-2% SLOP	ES	NWI classific	eation: NONE
Are climatic / hydrologic conditions on the site typical for the	nis time of year? Y	es No _	(If no, explain in R	lemarks.)
Are Vegetation, Soil, or Hydrology	significantly distur	bed? Are	Normal Circumstances"	oresent? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (If ne	eded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map	showing sam	npling point le	ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes X	No			
Hydric Soil Present? Yes X	No	Is the Sampled		
Wetland Hydrology Present? YesX I	No	within a Wetlar	nd? Yes	No
Remarks:				
WETLAND KR_26. PFOC/PFO1A/PEMF. PHO CP KR-2 SET. E OF TRACK. PHOTO KR-93-W				
VEGETATION – Use scientific names of plants	S.			
	Absolute Dom	ninant Indicator	Dominance Test work	sheet:
Tree Stratum (Plot size:) 1	% Cover Spe		Number of Dominant S That Are OBL, FACW,	
2.			Total Number of Domin	
3			Species Across All Stra	0
4			Percent of Dominant S	pecies
5			That Are OBL, FACW,	
Sapling/Shrub Stratum (Plot size: 15)	= Tot	al Cover	Prevalence Index wor	ksheet:
1 Acer saccharinum	10 yes	s facw		Multiply by:
2.				x 1 =
3				x 2 =
4				x 3 =
5.				x 4 =
	10 = Tot	al Cover		x 5 =
Herb Stratum (Plot size:)			Column Totals:	(A) (B)
unidentified grass spLikely FAC or wetter.	_ <u>20</u> _ yes	<u> </u>	Dravalance Index	= B/A =
a open water	- 80		Hydrophytic Vegetation	
				Hydrophytic Vegetation
4			× 2 - Dominance Tes	
5				
6			_	Adaptations ¹ (Provide supporting
7			data in Remark	s or on a separate sheet)
8			Problematic Hydro	phytic Vegetation ¹ (Explain)
9				
Woody Vine Stratum (Plot size:)		al Cover	¹ Indicators of hydric so be present, unless dist	il and wetland hydrology must urbed or problematic.
1			Hydrophytic	
2.			Vegetation	•
		al Cover	Present? Ye	s_X No
Remarks: (Include photo numbers here or on a separate				

	Matrix	Redox Features	
Depth (inches)		Redox Features Color (moist) % Type¹ L	oc² Texture Remarks
¹ Type: C=Ce	oncentration, D=Depletion	n, RM=Reduced Matrix, MS=Masked Sand Grains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil		,,	Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
_	pipedon (A2)	Sandy Redox (S5)	Dark Surface (S7)
	istic (A3)	Stripped Matrix (S6)	Iron-Manganese Masses (F12)
	en Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
	d Layers (A5)	Loamy Gleyed Matrix (F2)	X Other (Explain in Remarks)
	uck (A10)	Depleted Matrix (F3)	
Depleted	d Below Dark Surface (A1		
Thick Da	ark Surface (A12)	Depleted Dark Surface (F7)	3Indicators of hydrophytic vegetation and
Sandy N	Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mu	icky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive I	Layer (if observed):		
Type:			X
Depth (in	ches):		Hydric Soil Present? Yes No
Remarks:			
HYDROLO			
Wetland Hy	drology Indicators:		
Wetland Hye Primary India	drology Indicators: cators (minimum of one is	required; check all that apply)	Secondary Indicators (minimum of two require
Wetland Hy	drology Indicators: cators (minimum of one is	required; check all that apply) Water-Stained Leaves (B9)	Secondary Indicators (minimum of two require Surface Soil Cracks (B6)
Wetland Hyd Primary India X Surface	drology Indicators: cators (minimum of one is		
Primary Indic Surface High Wa Saturatio	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3)	Water-Stained Leaves (B9)Aquatic Fauna (B13)True Aquatic Plants (B14)	Surface Soil Cracks (B6)Drainage Patterns (B10)Dry-Season Water Table (C2)
Primary Indic Surface High Wa Saturatio	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6) Drainage Patterns (B10)
Wetland Hyd Primary India Surface High Wa Saturatio Water M	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3)	Water-Stained Leaves (B9)Aquatic Fauna (B13)True Aquatic Plants (B14)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Primary India Surface High Wa Saturatio Water M Sedimer	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) larks (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) Crayfish Burrows (C8)
Primary India X Surface High Wa X Saturatia Water M Sedimer Drift Dep	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) darks (B1) nt Deposits (B2)	 Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living 	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Primary India X Surface High Wa X Saturatia Water M Sedimer Drift Dep Algal Ma	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) tarks (B1) nt Deposits (B2) posits (B3)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hyd Primary India X Surface High Wa X Saturatia Water M Sedimer Drift Deg Algal Ma Iron Deg	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hyd Primary India Surface High Wa Saturatio Water M Sedimer Drift Deg Algal Ma Iron Deg Inundatio	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hyd Primary India X Surface High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Sur	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Primary India Surface High Wa Saturatia Water M Sedimer Drift Deg Algal Ma Iron Deg Inundatia Sparsely	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Sur vations:	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Primary India X Surface High Wa X Saturatia Water Ma Sedimer Drift Deg Algal Ma Iron Deg Inundatia Sparsely Field Observ Surface Water	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) tarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Survations: er Present?	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Primary India X Surface High Wa X Saturatia Water M Sedimer Drift Deg Algal Ma Iron Deg Inundatia Sparsely Field Obser Surface Water Water Table	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Sur vations: er Present? Yes Present? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks) No Depth (inches): No Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) pils (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
Primary India X Surface High Wa X Saturatia Water Ma Sedimer Drift Deg Algal Ma Iron Deg Inundatia Sparsely Field Obser Surface Water Table Saturation P	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) larks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Sur vations: er Present? Present? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hyd Primary India X Surface High Wa X Saturatio Water M Sedimer Drift Deg Algal Ma Iron Deg Inundati Sparsely Field Obser Surface Water Table Saturation P (includes cap	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Survations: er Present? Present? Yes resent? Yes pillary fringe)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks) No Depth (inches): 2 No Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) bils (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hyd Primary India X Surface High Wa X Saturatio Water M Sedimer Drift Deg Algal Ma Iron Deg Inundati Sparsely Field Obser Surface Water Table Saturation P (includes cap	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Survations: er Present? Present? Yes resent? Yes pillary fringe)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks) No Depth (inches): No Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) bils (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Primary Indic Surface High Wa Saturatio Water M Sedimer Drift Deg Algal Ma Iron Dep Inundatio Sparsely Field Obser Surface Water Water Table Saturation Pe (includes cap Describe Re	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Survations: er Present? Present? Yes resent? Yes pillary fringe)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks) No Depth (inches): 2 No Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) bils (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hyd Primary India X Surface High Wa X Saturatio Water M Sedimer Drift Deg Algal Ma Iron Deg Inundati Sparsely Field Obser Surface Wate Water Table Saturation P (includes cap Describe Re	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) tarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Sur vations: er Present? Yes Present? Yes pillary fringe) corded Data (stream gauge	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks) X No Depth (inches): X No Depth (inches): X No Depth (inches): ge, monitoring well, aerial photos, previous inspect	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Dils (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hyd Primary India X Surface High Wa X Saturatio Water M Sedimer Drift Deg Algal Ma Iron Deg Inundati Sparsely Field Obser Surface Wate Water Table Saturation P (includes cap Describe Re	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) tarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Sur vations: er Present? Yes Present? Yes pillary fringe) corded Data (stream gauge	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks) No Depth (inches): 2 No Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Dils (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hyd Primary India X Surface High Wa X Saturatio Water M Sedimer Drift Deg Algal Ma Iron Deg Inundati Sparsely Field Obser Surface Wate Water Table Saturation P (includes cap Describe Re	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) tarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Sur vations: er Present? Yes Present? Yes pillary fringe) corded Data (stream gauge	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks) X No Depth (inches): X No Depth (inches): X No Depth (inches): ge, monitoring well, aerial photos, previous inspect	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Dils (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Primary India Surface High Wa Saturation Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation Sparsely Field Obser Surface Wate Water Table Saturation Pe (includes cap Describe Ref	drology Indicators: cators (minimum of one is Water (A1) ater Table (A2) on (A3) tarks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Image y Vegetated Concave Sur vations: er Present? Yes Present? Yes pillary fringe) corded Data (stream gauge	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) ery (B7) Gauge or Well Data (D9) face (B8) Other (Explain in Remarks) X No Depth (inches): X No Depth (inches): X No Depth (inches): ge, monitoring well, aerial photos, previous inspect	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Dils (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No

Project/Site: SPCSL 2A (Tier 2)	City/0	County: Macoupir	<u> </u>	Sampling Date: 5/18/11	
Applicant/Owner: UPRR			State: IL	Sampling Point: KR20	
Investigator(s): KR, KT	Secti	ion, Township, Ran	ge: <u>S5, T11N, R6W</u>		
Landform (hillslope, terrace, etc.): LEVEL PLAIN		Local relief (concave, convex, none):	CONCAVE	
	Long	: <u>-89.783995</u>		Datum: DD (NAD 83)	
Soil Map Unit Name: 50A VIRDEN SILTY CLAY LOAN	Л, 0-2% SLOF	PES	NWI classifica	ation: NONE	
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology si	gnificantly distu	rbed? Are "N	lormal Circumstances" p	resent? Yes X No No	
Are Vegetation, Soil, or Hydrology na	aturally problem	natic? (If nee	ded, explain any answer	s in Remarks.)	
SUMMARY OF FINDINGS - Attach site map s	showing sar	mpling point lo	cations, transects,	important features, etc.	
Hydrophytic Vegetation Present? Yes X No					
Hydric Soil Present? Yes No		Is the Sampled			
		within a Wetland	1? Yes	No	
Remarks: WETLAND KR_27. PEMA. ISOLATED. KR 94-S	KD OF N E	WIDED			
WEILAND KR_27. FEMA. ISOLATED. KR 94-5	. KK 95-N. 5	WIDER.			
VEGETATION – Use scientific names of plants.					
		minant Indicator	Dominance Test works	sheet:	
<u>Tree Stratum</u> (Plot size:) 1)		ecies? Status	Number of Dominant Sp That Are OBL, FACW, of		
2.			Total Number of Domina		
3			Species Across All Strat		
4			Percent of Dominant Sp	ecies	
5			That Are OBL, FACW, o		
Sapling/Shrub Stratum (Plot size:)	= To	otal Cover	Prevalence Index work	sheet:	
1			Total % Cover of:	Multiply by:	
2			OBL species	x 1 =	
3				x 2 =	
4		———		x 3 =	
5		otal Cover		x 4 = x 5 =	
Herb Stratum (Plot size: r=5')	=10	ntal Cover		(A) (B)	
1. Carex sp.	<u>60</u> <u>ye</u>	s			
2			Prevalence Index		
3			Hydrophytic Vegetatio		
4			X 2 - Dominance Test	ydrophytic Vegetation	
5 6		The state of the s	3 - Prevalence Inde		
7			4 - Morphological A	daptations1 (Provide supporting	
8.				or on a separate sheet)	
9			Problematic Hydrop	hytic Vegetation ¹ (Explain)	
10			¹ Indicators of hydric soil	and wetland hydrology must	
Woody Vine Stratum (Plot size:)	60 = To	otal Cover	be present, unless distu		
1			Hydrophytic		
2			Vegetation Present? Yes	X No	
Demodra (Individe abote questo de la constante		tal Cover			
Remarks: (Include photo numbers here or on a separate s	neet.)				
Carex sp. is likely FACW or OBL.					

	needed to document the indicator or cor	firm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Loc	Z Texture Remarks
0-16 10YR 3/1 100		C
¹ Type: C=Concentration, D=Depletion, RM=Re	educed Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Redox (S5)	X 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)	Other (Explain in Remarks)
2 cm Muck (A10)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	3
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed):		unless disturbed or problematic.
Туре:	_	Hydric Soil Present? Yes X No
Depth (inches):	_	1.74 25 125 125 125
Remarks:		
HYDROLOGY		
HYDROLOGY Wetland Hydrology Indicators		
Wetland Hydrology Indicators:		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) 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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) 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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required Surface Water (A1) High Water Table (A2) 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 Ro	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)
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Project/Site: SPCSL 2A (Tier 2)			City/Co	ounty: <u>N</u>	Macoupir	1	Sampling	Date: <u>5/18/</u>	11
Applicant/Owner: UPRR					State: <u> L</u>	Sampling	Point: KR21	i	
Investigator(s): KR, KT Section, Town				ship, Ran	ge: S5, T11N, R6W				
Landform (hillslope, terrace, etc.): LEVE	L PLAIN			Loc	cal relief (concave, convex, none):	Concav	e	
Slope (%): 0-2 Lat: 39.43314			Long:	-89.78	34272		Datum: _	DD (NAD 83	,)
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY	LOAM, 0-2% S	LOPE	ES		NWI classifica	ation: NO	NE	
Are climatic / hydrologic conditions on the	site typical f	for this time of yea	ar? Ye	es	No	(If no, explain in Re	emarks.)		
Are Vegetation, Soil, or Hy	drology	significantly	disturb	ed?	Are *N	lormal Circumstances" p	resent? \	Yes X 1	No
Are Vegetation, Soil, or Hy	drology	naturally pro	blemat	tic?	(If nee	ded, explain any answer	s in Rema	arks.)	
SUMMARY OF FINDINGS - Atta	ach site n	nap showing	sam	pling	point lo	cations, transects,	import	ant featur	es, etc.
Hydrophytic Vegetation Present?	Yes X	No	T						
Hydric Soil Present?	Yes X	No		Is the S	Sampled .				
Wetland Hydrology Present?	Yes X	No		within	a Wetlan	i? Yes_X	No_		
Remarks:									
WETLAND KR_28. PEMC. ISOLA (WETTEST APRIL ON RECORD).	ATED. 5" \	WIDE. PHOTO	97-N	IW. WE	ETLAND	CONTINUES NORT	H FROM	STUDY AF	₹EA.
VEGETATION – Use scientific na	mes of pla	ants.							
Toro Otroboro (Diet siese		Absolute		inant In		Dominance Test works	sheet:		
Tree Stratum (Plot size:		% Cover				Number of Dominant Sp. That Are OBL, FACW, of		2	(A)
2									
3						Total Number of Domina Species Across All Strat		2	(B)
4						Paraent of Dominant Sa			
5						Percent of Dominant Sp That Are OBL, FACW, of		100	(A/B)
Sapling/Shrub Stratum (Plot size: r=15	5'	, —	= Tota	l Cover	·	Prevalence Index work	rehoot:		
1 Acer saccharinum)		ves	fa	acw	Total % Cover of:		Multiply by:	
2.						OBL species			
3.						FACW species			_
4.						FAC species			
5						FACU species	x 4	=	
		_	= Tota	l Cover	.	UPL species			
Herb Stratum (Plot size: r=5')					Column Totals:	(A)		(B)
1. Carex vulpinoidea		25	yes		<u>bl</u>				
2. unidentified grass sp.		$\frac{10}{10}$	yes		—— l	Prevalence Index			
3. Polygonum sp.			yes		—	Hydrophytic Vegetatio			
4					——	1 - Rapid Test for H		c vegetation	
5						3 - Prevalence Inde			
6					—	4 - Morphological A		e ¹ (Provide eu	pporting
7			_			data in Remarks	or on a s	eparate sheet	i)
8						Problematic Hydrop	hytic Veg	etation1 (Expl	ain)
9									
10.		45	= Tota	l Cover		¹ Indicators of hydric soil			must
Woody Vine Stratum (Plot size:)		1010	00101		be present, unless distu	rbea or pr	obiematic.	
1						Hydrophytic			
2						Vegetation Present? Yes	. X	No	
			= Tota	l Cover	·	Tes	<u> </u>		
Remarks: (Include photo numbers here		-							
Unidentified grass and Polygonum	sp. are like	ely FAC or wet	ter.						

Depth Matrix		onfirm the absence of indicators.)
I DEDUT MAILIX	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	oc ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Gleyed Matrix (34)	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 and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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:		tep 12b of the 1987 Corps Delineation Manual.
HYDROLOGY		
Wetland Hydrology Indicators:		
. Troughly hit droug didivators.		
	id: check all that apply)	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
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Project/Site: SPCSL 2A (Tier 2)	City	County: Macoupi	n	Sampling Date: 5/18/11
Applicant/Owner: UPRR			State: <u>IL</u> S	Sampling Point: KR22
Investigator(s): KR, KT	Sec.		ge: S32, T12N, R6W	
Landform (hillslope, terrace, etc.): LEVEL PLAIN		Local relief (concave, convex, none):	CONCAVE
Soil Map Unit Name: 50A VIRDEN SILTY CLAY LOA			NWI classificat	
Are climatic / hydrologic conditions on the site typical for thi	s time of year?			
Are Vegetation, Soil, or Hydrologys				esent? Yes X No
Are Vegetation, Soil, or Hydrology r	-		eded, explain any answers	
SUMMARY OF FINDINGS – Attach site map				
Hydrophytic Vegetation Present? Yes X N	lo			
Hydric Soil Present? Yes N	lo	Is the Sampled		
	lo	within a Wetlan	d? Yes	_ No
Remarks:	OT! \	\^/^ TED \^//T! E		OF WETLAND OUTODE
WETLAND KR_29. PSSC/PUB. ISOLATED. MC OF STUDY AREA. EAST BANK WITHIN STUDY		WAIER WITH F	SSC FRINGE. MOST	OF WEILAND OUTSIDE
VEGETATION – Use scientific names of plants				
Tree Statum (Blot sine)		ominant Indicator	Dominance Test works	heet:
<u>Tree Stratum</u> (Plot size:) 1)	% Cover Sp	ecies? Status	Number of Dominant Spe That Are OBL, FACW, or	
2.				(,,
3.			Total Number of Dominal Species Across All Strata	^
4.			•	
5			Percent of Dominant Spe That Are OBL, FACW, or	
r=15'	= T	otal Cover	Deciral annual landary words	haati
Sapling/Shrub Stratum (Plot size: r=15') 1. Ulmus americana	25 ye	es facw-	Prevalence Index works	Multiply by:
2. Salix nigra	25 ye 50 ye		OBL species	
3.			FACW species	
4.			FAC species	
5.			FACU species	
	75 = T	otal Cover	UPL species	
Herb Stratum (Plot size: r=5')			Column Totals:	(A) (B)
1. Lemna minor		es <u>obl</u>		
2				= B/A =
3			Hydrophytic Vegetation X 1 - Rapid Test for Hy	
4			2 - Dominance Test	
5			3 - Prevalence Index	
6				aptations ¹ (Provide supporting
7				or on a separate sheet)
8 9			Problematic Hydroph	nytic Vegetation1 (Explain)
10.				
Woody Vine Stratum (Plot size:)	90 = T	otal Cover	¹ Indicators of hydric soil a be present, unless disturb	and wetland hydrology must bed or problematic.
1			Hydrophytic	
2.			Vegetation	
		otal Cover	Present? Yes	No
Remarks: (Include photo numbers here or on a separate	sheet.)			
NORTH OF CITY ST. RECORDED WETLAND D DRAINAGE DITCH)	ITCH 3' WIDE	E. PHOTO 103-\	N, 104-E, PHOTO 105	-E, 106-N, (UPL

US Army Corps of Engineers

Profile Description: (Describe to the depth	needed to document the indicator or c	online absence of mulcators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	oc² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Gleyed Matrix (34)	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 and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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:		
Not sampled due to saturation to surfac	e. Assumed hydric per Step 12b of t	he 1987 Corps Delineation Manual.
I .		
LIVEROLOGY		
HYDROLOGY		
HYDROLOGY Wetland Hydrology Indicators:		
	ed; check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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) Crayfish Burrows (C8)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (B) Field Observations: Surface Water Present? Yes X N Water Table Present? Yes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled Some Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	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) ills (C6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (Bit image) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present? Yes X N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (B) Field Observations: Surface Water Present? Yes X N Water Table Present? Yes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes X N Water Table Present? Yes N Saturation Present? Yes X N (includes capillary fringe)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (Bivater Table Present? Water Table Present? Yes X N Saturation Present? Ves X N Saturation Present? Ves X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes N Water Table Present? Yes N Saturation Present? Yes N (includes capillary fringe)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary 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 (Bitle of Concave Surface) Field Observations: Surface Water Present? Water Table Present? Yes X N Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary 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 (Bitle of Concave Surface) Field Observations: Surface Water Present? Water Table Present? Yes X N Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary 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 (Bitle of Concave Surface) Field Observations: Surface Water Present? Water Table Present? Yes X N Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No

Project/Site: SPCSL 2A (Tier 2)	_ City/County: Macc	oupin Sampling Date: 5/19/11
Applicant/Owner: UPRR		State: IL Sampling Point: KR23
Investigator(s): KR, KT	_ Section, Township,	, Range: S28, T12N, R6W
Landform (hillslope, terrace, etc.): LEVEL PLAIN	Local re	elief (concave, convex, none): CONCAVE
Slope (%): <u>0-2</u> Lat: <u>39.450662</u>		4 Datum: DD (NAD 83)
Soil Map Unit Name: 46A HERRICK SILTY LOAM, 0-2% SLC)PES	NWI classification: NONE
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes N	lo (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significant	dy disturbed? A	Are "Normal Circumstances" present? YesX No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (i	If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	ng sampling poir	nt locations, transects, important features, et
Hydrophytic Vegetation Present? Yes No		
Hydric Soil Present? Yes No	_	
Wetland Hydrology Present? YesX No	within a We	etland? Yes X No
Remarks: WETLAND KR_30. PFO1A/PEMA. ISOLATED. PHOTO) 109 NI (SOLITH E	END OF WETLAND) PHOTO 100 S. PHOTO
110-S. 10' WIDE. (WETTEST APRIL ON RECORD).	7 100-N (300111 E	.ND OF WETLAND), FITOTO 109-3. FITOTO
VEGETATION – Use scientific names of plants.		
Tree Stratum (Plot size: r=30'	te Dominant Indicat er Species? Statu	ie.
1. Acer saccharinum 70	yes facw	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2. Ulmus americana 10	facw-	
3		Species Across All Strata: 1 (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: 100 (A/B
Sapling/Shrub Stratum (Plot size:)	= Total Cover	Prevalence Index worksheet:
1		Total % Cover of: Multiply by:
2		OBL species x 1 =
3		FACW species x 2 =
4		FAC species x 3 =
5		FACU species x 4 =
Herb Stratum (Plot size:)	= Total Cover	UPL species x 5 = Column Totals: (A) (B)
1		(A)(B)
2		Prevalence Index = B/A =
3		Hydrophytic Vegetation Indicators:
4		1 - Rapid Test for Hydrophytic Vegetation
5		2 - Dominance Test is >50%
6		3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide supportin
7		data in Remarks or on a separate sheet)
8		Problematic Hydrophytic Vegetation ¹ (Explain)
10		
	= Total Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1		Hydrophytic
2		Vegetation Present? Yes_X No
	= Total Cover	103 103
Remarks: (Include photo numbers here or on a separate sheet.)	at at aamala naist	
Rumex altissimus and Carex sp. in 40% of wetland but no	ı aı sample point.	

	ription: (Describ	e to the depth			cator or co	onfirm the at	osence o	f indicators.))		
Depth (inches)	Color (moist)	%	Color (moist)	x Features % Tv	ype ¹ Lo	nc ² Tex	ture		Remarks		
(Inches)	Color (Illoist)		COIOI (IIIOISI)		100	JC 10x	iture		remains		
											
	oncentration, D=De	pletion, RM=R	educed Matrix, MS	S=Masked Sar	nd Grains.				ng, M=Matrix.	3	
Hydric Soil						Indi			ic Hydric Soi	IS":	
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) Very Shallow Dark Surface (TF12)				
Hydrogen Sulfide (A4)			Loamy Mucky Mineral (F1)			$\overline{\mathbf{v}}$					
Stratified Layers (A5)				Loamy Gleyed Matrix (F2)				xplain in Rem	narks)		
_	ick (A10)	(844)		d Matrix (F3)	(E6)						
	d Below Dark Surfa	Redox Dark Surface (F6)				diantera es	f budsonbudio				
Thick Dark Surface (A12)				Depleted Dark Surface (F7)				³ Indicators of hydrophytic vegetation and wetland hydrology must be present,			
Sandy Mucky Mineral (S1) 5 cm Mucky Peat or Peat (S3)			Redox L	Redox Depressions (F8)				nyarology mu isturbed or pr			
	Layer (if observed						uniess a	isturbed or pr	obiematic.		
			_			Hydr	ric Soil P	resent? Ye	es_XN	lo	
Depth (inc	ches):		_			,					
Remarks:											
HYDROLO	GY										
Wetland Hy	drology Indicators	:									
Primary India	cators (minimum of	one is required	d; check all that ap	ply)		S	Secondary	/ Indicators (n	ninimum of two	o required)	
Surface Water (A1)			Water-Stai	Water-Stained Leaves (B9)				ce Soil Cracks	s (B6)		
X High Water Table (A2)			Aquatic Fa	Aquatic Fauna (B13)				Drainage Patterns (B10)			
X Saturation (A3)			True Aqua		Dry-Season Water Table (C2)						
1 —	larks (B1)		Hydrogen Sulfide Odor (C1)				sh Burrows (0	C8)			
Value Marks (B1) Nydrogen Suinde Cotor (C1) Craynish Burrows (C5) Craynish Burrows (C6)										erv (C9)	
Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)										, (,	
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Stanted of Stressed Plants (D1)											
Iron Deposits (B5) Thin Muck Surface (C7) ** FAC-Neutral Test (D5)											
Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)											
_	Vegetated Conca			lain in Remar							
Field Obser		ve Surface (Bo	Other (EXP	all III Kelliai	100						
			D#- ('								
Surface Water Present? Yes No Depth (inches):											
				Depth (inches): 10					••		
			Depth (inc	Depth (inches): 0 Wetla			tland Hydrology Present? Yes No				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:											
Remarks:											

Project/Site: SPCSL 2A (Tier 2)		(City/Co	ounty: Macoup	oin Sampling Date: 5/18/11
Applicant/Owner: UPRR					State: IL Sampling Point: KR24
Investigator(s): KR, KT			Section	n, Township, Ra	ange: S32, T12N, R6W
Landform (hillslope, terrace, etc.): LEVE	L			Local relief	f (concave, convex, none): CONCAVE
Slope (%): 0-2 Lat: 39.44257		ι			Datum: DD (NAD 83)
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY LO	DAM, 0-2% S	LOPE	ES	NWI classification: NONE
Are climatic / hydrologic conditions on the	site typical for	this time of yea	ar? Ye	s No _	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hy	drology	_ significantly of	disturb	ed? Are	"Normal Circumstances" present? YesX No
Are Vegetation, Soil, or Hy	drology	_ naturally prob	blemat	tic? (If n	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Att	ach site ma	ap showing	sam	pling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present?	Yes X	No			
Hydric Soil Present?	~	No		is the Sample	
Wetland Hydrology Present?		No		within a Wetla	nd? Yes X No
Remarks:					
WETLAND KR_31. PEMA. ISOLA END OF WETLAND. (WETTEST A) 111-	-SE. PHOTO	112-S, PHOTO 113-N, PHOTO 114-S. SOUTH
VEGETATION – Use scientific na	mes of plar	nts.			
		Absolute		nant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:				ies? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2					
3					Total Number of Dominant Species Across All Strata: (B)
4					Percent of Dominant Species
5					That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size:	,		= Tota	l Cover	Prevalence Index worksheet:
1					Total % Cover of: Multiply by:
2.					OBL species x 1 =
3.					FACW species x 2 =
4					FAC species x 3 =
5					FACU species x 4 =
r-5'			= Total	l Cover	UPL species x 5 =
Herb Stratum (Plot size: r=5' 1. Spartina pectinata)	60	yes	facw	Column Totals: (A) (B)
Carex sp.		<u> 10</u>	yes	lacv	Prevalence Index = B/A =
3.					Hydrophytic Vegetation Indicators:
Asclepias sp.		10			1 - Rapid Test for Hydrophytic Vegetation
5.					Z 2 - Dominance Test is >50%
6					3 - Prevalence Index is ≤3.01
7.					4 - Morphological Adaptations ¹ (Provide supporting
8.					data in Remarks or on a separate sheet)
9					Problematic Hydrophytic Vegetation ¹ (Explain)
10					The directions of boundary and constraint boundaries are constraint.
Woody Vine Stratum (Plot size:)	80	= Total	l Cover	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1					Hydrophytic
2					Vegetation Present? Yes X No
			= Tota	l Cover	riesentr tes NO
Remarks: (Include photo numbers here	or on a separa	ate sheet.)			

Profile Description: (Describe to the dept	h needed to document the indicator or co	nfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	c ² Texture Remarks
0-3 7.5 YR 2.5/1 100		
l — — — — — — — — — — — — — — — — — — —		
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix MS=Masked Sand Grains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	readou mane, me maerea caria crame:	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Redox (S5)	Z 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)	Other (Explain in Remarks)
2 cm Muck (A10)	Depleted Matrix (F3)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
	_	3Indicators of hydrophytic vagatation and
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present, unless disturbed or problematic.
5 cm Mucky Peat or Peat (S3) Restrictive Layer (if observed):		unless disturbed or problematic.
Type:	_	Hydric Soil Present? Yes X No
Depth (inches):	_	Tryunc con recount
Remarks:		
l .		o 12b of the 1987 Corps Delineation Manual.
		·
HYDROLOGY		
HYDROLOGY Wetland Hydrology Indicators:		
	ed: check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) X Saturation (A3)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 R	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 R	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches):	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes No Saturation Present?	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (B) Field Observations: Surface Water Present? Water Table Present? Yes N Saturation Present? Yes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes No Saturation Present?	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No

Project/Site: SPCSL 2A (Tier 2)		(City/Cour	nty: Macoupi	in	Sampling	Date: 5/18/1	1
Applicant/Owner: UPRR					State: IL	Sampling	Point: KR25	
Investigator(s): KR, KT			Section,	Township, Rar	nge: S32, T12N, R6W	<u> </u>		
Landform (hillslope, terrace, etc.): LEVEL	_ PLAIN			_ Local relief	(concave, convex, none)	CONCA	۷E	
Slope (%): 0-2 Lat: 39.44065						Datum: _	DD (NAD 83)	1
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY LO	DAM, 0-2% S	LOPES	3	NWI classific	cation: <u>NO</u>	NE	
Are climatic / hydrologic conditions on the	site typical for	this time of yea	ar? Yes	No _	(If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hy	drology	_ significantly	disturbed	d? Are	Normal Circumstances"	present?	Yes X N	о
Are Vegetation, Soil, or Hy	drology	_ naturally prob	blematic	? (If ne	eded, explain any answe	rs in Rema	arks.)	
SUMMARY OF FINDINGS - Atta	ach site ma	p showing	sampl	ling point le	ocations, transects	s, import	ant feature	s, etc.
Hydrophytic Vegetation Present?	Yes X	No						
Hydric Soil Present?	Yes X	No	Is	the Sampled				
Wetland Hydrology Present?	Yes X	No	w	ithin a Wetlan	ıd? Yes_X	No_		
Remarks:								
WETLAND KR_32. PFO1A/PEMA	. 30' WIDE.	PHOTO 114	-S, 115	5-N. ISOLAT	ED. (WETTEST APF	≀IL ON RE	ECORD).	
VEGETATION – Use scientific na	mes of plan	its.						
Tree Stratum (Plot size: r=30'	`	Absolute % Cover		ant Indicator s? Status	Dominance Test work			
1 Acer saccharinum		90	yes	facw	Number of Dominant S That Are OBL, FACW,		4	(A)
2.								(7
3.					Total Number of Domir Species Across All Stra		4	(B)
4					Persont of Dominant S	-		
5					Percent of Dominant S That Are OBL, FACW,		100	(A/B)
Sapling/Shrub Stratum (Plot size: r=15	5'		= Total C	Cover	Prevalence Index wo	rkehoot:		
1. Acer saccharinum			yes	facw	Total % Cover of:		Multiply by:	
2.					OBL species			
3					FACW species			_
4.					FAC species			
5					FACU species	x 4	=	
- E'		20	= Total C	Cover	UPL species	x 5	=	_
Herb Stratum (Plot size: r=5')	_		<i>t</i>	Column Totals:	(A)		(B)
Juncus tenuis Carex sp.		$-\frac{5}{10}$	yes	<u>fac</u>	Prevalence Index	- P/A -		
Z			_yes		Hydrophytic Vegetati			
3					1 - Rapid Test for			
4					X 2 - Dominance Tes		o regetation	
5 6					3 - Prevalence Ind			
7.					4 - Morphological		s ¹ (Provide sur	porting
8.					data in Remark	s or on a se	eparate sheet))
9.					Problematic Hydro	phytic Veg	etation ¹ (Expla	in)
10					4			
		15	= Total C	Cover	¹ Indicators of hydric so be present, unless dist			must
Woody Vine Stratum (Plot size:								
1					Hydrophytic Vegetation			
2			= Total 0	Cover	Present? Ye	s_X_	No	
Remarks: (Include photo numbers here	or on a separa		- Total C	oovei				
Carex sp. is likely FAC or wetter.		/						
I								

		e to the depth	needed to docum		licator or	r confirm	the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Type ¹	Loc ²	Texture	Remarks
(III CO)	Color (moist)		OOIOI (IIIOIOI)		1100	200	TOATO	Nomana
¹Tune: C=C	neentration D=De	nleties BM=	Reduced Matrix, MS	-Macked S	and Crair		2l continu	PL=Pore Lining, M=Matrix.
Hydric Soil		pielion, Rivi-r	Reduced Matrix, Mis	-Maskeu S	and Graii	115.		for Problematic Hydric Soils ³ :
,			Candy	Navad Matrix	(04)			•
Histosol	pipedon (A2)			Bleyed Matrix Redox (S5)	x (54)			Prairie Redox (A16) urface (S7)
Black Hi				Matrix (S6)				anganese Masses (F12)
_	n Sulfide (A4)			Mucky Miner				hallow Dark Surface (TF12)
	Layers (A5)			Gleyed Matri				Explain in Remarks)
	ick (A10)			d Matrix (F3)				Explain in remains,
_	Below Dark Surfa	ice (A11)		ark Surface				
	ark Surface (A12)	, , ,	_	d Dark Surfa	. ,		3Indicators	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox [Depressions	(F8)			hydrology must be present,
5 cm Mu	cky Peat or Peat (S3)					unless	disturbed or problematic.
Restrictive I	ayer (if observed	i):						
Type:			_					
Depth (inc	ches):						Hydric Soil	Present? Yes X No
Remarks:								
	takan dua ta sat	uration to cu	urfaco Accumac	l hydric no	r Stop 1	2h of the	o 1097 Corp.	s Delineation Manual.
HYDROLO	GY							
Wetland Hyd	drology Indicators	3:						
Primary India	ators (minimum of	one is require	d; check all that ap	ply)			Seconda	ry Indicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Leaves	(B9)		Surfa	ace Soil Cracks (B6)
X High Wa	ter Table (A2)		Aquatic Fa	una (B13)			× Drain	nage Patterns (B10)
X Saturation	on (A3)		True Aqua	tic Plants (B	14)		Dry-	Season Water Table (C2)
Water M	arks (B1)		Hydrogen	Sulfide Odor	(C1)		Cray	fish Burrows (C8)
	nt Deposits (B2)		Oxidized R	hizospheres	on Livin	g Roots (C3) Satu	ration Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)			of Reduced I				ited or Stressed Plants (D1)
	it or Crust (B4)		Recent Iro	n Reduction	in Tilled	Soils (C6)		morphic Position (D2)
Iron Dep	osits (B5)		Thin Muck	Surface (C7	7)	,		-Neutral Test (D5)
	on Visible on Aeria	Imagery (B7)	_	Well Data (D			_	
_	Vegetated Conca			lain in Rema				
Field Observ		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,			
Surface Water		Ves N	o Depth (inc	hee).				
			o Depth (inc			-		
Water Table						-		- · · · · · · · · · · · · · · · · · · ·
Saturation Projection (includes cap		Yes N	o Depth (inc	ches): U		Wetla	and Hydrology	Present? Yes No
		m gauge, mon	itoring well, aerial p	nhotos, previ	ious inspe	ections), i	f available:	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)			City/Co	unty: Macoupi	in	Sampling Dat	ie: <u>5/19/11</u>
Applicant/Owner: UPRR					State: <u>IL</u>	Sampling Poir	nt: KR26
Investigator(s): KR, KT		;	Section	n, Township, Rai	nge: S28, T12, R6		
Landform (hillslope, terrace, etc.): ROLL	ING PLAIN			Local relief	(concave, convex, none):	CONCAVE	
Slope (%): 0-2 Lat: 39.45413			Long: _	-89.774750		Datum: DD ((NAD 83)
Soil Map Unit Name: 46A HERRICK S	ILT LOAM C)-2% SLOPES	S		NWI classific	ation:	
Are climatic / hydrologic conditions on the	site typical for	r this time of yea	ar? Ye	s No _	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hy	drology	significantly	disturb	ed? Are *	Normal Circumstances" p	resent? Yes	_X No
Are Vegetation, Soil, or Hy	drology	naturally pro	blemat	ic? (If ne	eded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Att	ach site m	ap showing	samı	pling point l	ocations, transects	, important	features, etc.
Hydrophytic Vegetation Present?	Yes X	No			_		
Hydric Soil Present?	YesX	No		Is the Sampled			
Wetland Hydrology Present?	Yes X	No		within a Wetlan	nd? Yes	No	
Remarks:	VD 440 N	VD 440 C 44	20.0	404 N. 400 C	400 N 404 E AT OL	II \/EDT 200	co puoto
WETLAND KR_33. PEMA/PEMC. 125-W. (WETTEST APRIL ON RE		KR 119-5, 12	20-5,	121-IN, 122-5	, 123-N, 124-E AT CC	LVERI 209.	.60. PHOTO
VEGETATION – Use scientific na	mes of pla	nts.					
		Absolute		nant Indicator	Dominance Test work	sheet:	
Tree Stratum (Plot size:				ies? Status	Number of Dominant Sp That Are OBL, FACW, of	pecies	(A)
2							(^)
3					Total Number of Domin Species Across All Stra	ant ta: 2	(B)
4					Percent of Dominant Sp		
5					That Are OBL, FACW,		(A/B)
Sapling/Shrub Stratum (Plot size:		, —	= Total	l Cover	Prevalence Index work	ksheet:	
1					Total % Cover of:		Itiply by:
2.					OBL species		
3					FACW species	x 2 = _	
4					FAC species	x 3 = _	
5					FACU species		
Herb Stratum (Plot size: r=5'	,		= Total	l Cover	UPL species		
Herb Stratum (Plot size: r=5' 1. Carex sp. (A)		50	yes		Column Totals:	(A) _	(B)
2.					Prevalence Index	= B/A =	
3. Carex sp. (B)		30	yes		Hydrophytic Vegetation	n Indicators:	
4					1 - Rapid Test for I		getation
5					2 - Dominance Tes		
6					3 - Prevalence Inde		
7					4 - Morphological A data in Remarks	daptations' (P	rovide supporting rate sheet)
8					Problematic Hydro		
9							
10		00	= Total	l Cover	¹ Indicators of hydric soi be present, unless distu		
Woody Vine Stratum (Plot size:					processin, assessment	nood or proble	
1					Hydrophytic Vegetation		
2				I Cover	Present? Yes	s_X No	,
Remarks: (Include photo numbers here	or on a separa		- rota	Cover	l		
Unmarked control point recorded a		,	trol po	int recorded a	at 209.60. At 209.60,	10' wide, 40'	long linear
wetland between BN & UP culverts					,	•	-

US Army Corps of Engineers

	ription: (Describe	to the depth n			dicator o	or confirm	the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Tyne ¹	_Loc ²	Texture	Remarks
(Inches)	Color (moist)		COIOI (IIIOISI)		1400		Texture	Kemarks
							2	
	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS	S=Masked	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I								for Problematic Hydric Soils ³ :
Histosol				Bleyed Mat	rix (S4)		_	Prairie Redox (A16)
	pipedon (A2)			Redox (S5)				urface (S7)
Black His				Matrix (S6	-			anganese Masses (F12)
	n Sulfide (A4)			Mucky Mine				hallow Dark Surface (TF12)
	Layers (A5)			Gleyed Mat			△ Other (Explain in Remarks)
_	ick (A10)	- (444)		d Matrix (F				
	Below Dark Surface	e (A11)	_	ark Surfac			3 ₁₀ diagtors	of hudson butio constation and
_	ark Surface (A12)			d Dark Surf				of hydrophytic vegetation and
	lucky Mineral (S1)	2)	Redox L	Depressions	s (F8)			I hydrology must be present, disturbed or problematic.
	cky Peat or Peat (S: _ayer (if observed):						uniess	disturbed or problematic.
			-				Hydric Soil	Present? Yes X No
Depth (inc	ches):		-				,	
Remarks:								
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary Indic	ators (minimum of o	ne is required;	check all that ap	ply)			Seconda	ry Indicators (minimum of two required)
X Surface			Water-Stai		s (B9)		Surfa	ace Soil Cracks (B6)
High Wa	iter Table (A2)		Aquatic Fa		, ,			nage Patterns (B10)
X Saturation	, ,		True Aqua	, ,	B14)			Season Water Table (C2)
1 —	arks (B1)		Hydrogen					fish Burrows (C8)
	nt Deposits (B2)		Oxidized R			na Roots (ration Visible on Aerial Imagery (C9)
_	osits (B3)			of Reduced				ted or Stressed Plants (D1)
I — ·	it or Crust (B4)			n Reduction		,		morphic Position (D2)
	osits (B5)		Thin Muck			2 00113 (00)		-Neutral Test (D5)
I — ·	on Visible on Aerial I	magani (P7)	Gauge or \	-			<u> </u>	-Neutral Test (D3)
I —	Vegetated Concave		Other (Exp					
	-	e Suriace (Bo)	— Other (Ext	iain in Ren	iarks)			
Field Observ		×		1				
Surface Water			Depth (inc			-		
Water Table			Depth (inc			_		
Saturation Pr	resent? Y	es_XNo_	Depth (inc	ches): <u>0</u>		_ Wetla	and Hydrology	Present? Yes X No
(includes cap		sausa manita	ring well periols	hotoe pro	vieue ine	nastiana) :	if a milable:	
Describe Rec	corded Data (stream	gauge, monito	ring well, aenal p	onotos, pre	vious ins	pections), i	if available:	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)	0	City/Cou	unty: .	Macoupir	<u>1</u> S	ampling Date:	5/19/11
Applicant/Owner: UPRR					State: <u>IL</u> S	ampling Point:	KR27
Investigator(s): KR, KT	8	Section	, Tow	nship, Ran	ge: S28, T12N, R6W		
Landform (hillslope, terrace, etc.): LEVEL PLAIN			_ Lo	ocal relief (concave, convex, none): C	ONCAVE	
Slope (%): 0-2 Lat: 39.463375	ι	.ong: _	89.7	72954	D	atum: DD (N.	AD 83)
Soil Map Unit Name: 50A VIRDEN SILTY CLAY LOAF	M 0-2% SL	OPES	S		NWI classificati	on:	
Are climatic / hydrologic conditions on the site typical for this	s time of yea	r? Yes	s	No	(If no, explain in Ren	narks.)	
Are Vegetation, Soil, or Hydrology s	ignificantly d	disturbe	ed?	Are *N	lormal Circumstances" pre	sent? Yes	K No
Are Vegetation, Soil, or Hydrology n	aturally prob	olemati	c?	(If nee	ded, explain any answers	in Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing	samp	oling	point lo	cations, transects, i	mportant fo	eatures, etc.
Hydrophytic Vegetation Present? Yes X N	0						
	0	- 1		Sampled			
Wetland Hydrology Present? YesX N	o		withir	n a Wetland	1? Yes	_ No	_
Remarks:	E 400 N	407.0	400	. 0. 400 1	LICOLATED CONNE	OTED TO V	VETI AND
WETLAND KR_34. PEMA/PEMC. 10 FEET WID KR_33 VIA CULVERT 209.60. (WETTEST APRIL							
VEGETATION - Use scientific names of plants.							
Total Object of Children	Absolute			Indicator	Dominance Test worksh	eet:	
<u>Tree Stratum</u> (Plot size:) 1	% Cover			Status	Number of Dominant Spec That Are OBL, FACW, or	cies FAC: 2	(A)
2					Total Number of Dominan	t	
3					Species Across All Strata:	2	(B)
4					Percent of Dominant Spec		(4.470)
5			Cove		That Are OBL, FACW, or	FAC: 100	(A/B)
Sapling/Shrub Stratum (Plot size:)		10101	0010	. [Prevalence Index works	heet:	
1					Total % Cover of:		
2					OBL species		
3					FACW species		
4					FAC species		
5					FACU species		
Herb Stratum (Plot size: r=5')		= Total	Cove	ır	UPL species		
1. Rumex altissimus	40	yes	f	facw-	Column Totals:	(A)	(B)
2. Carex granularis	30	yes		facw	Prevalence Index =	B/A =	
3					Hydrophytic Vegetation	Indicators:	
4					1 - Rapid Test for Hyd	frophytic Vege	tation
5					2 - Dominance Test is		
6					3 - Prevalence Index		
7					4 - Morphological Ada data in Remarks o	eptations1 (Prov	vide supporting
8					Problematic Hydrophy		
9			— -		rroblemate rijaropii;	tio vogetation	(Explain)
10			— -		¹ Indicators of hydric soil a	nd wetland hvo	drology must
Woody Vine Stratum (Plot size:)	70=	= Total	Cove	er	be present, unless disturb		
1					Hydrophytic		
2					Vegetation Present? Yes	X No_	
Remarks: (Include photo numbers here or on a separate s		= Total	Cove	er			
Remarks. (include photo numbers here or on a separate s	sileet.)						

Profile Description: (Describe to the depti	n needed to document the indicator or co	onfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	oc² Texture Remarks
l — — — — — — — — — — — — — — — — — — —		
¹ Type: C=Concentration, D=Depletion, RM=I	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Gleyed Matrix (34) 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 and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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:		Step 12b of the 1987 Corps Delineation Manual.
HYDROLOGY		
Wetland Hydrology Indicators:	ed: check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)Drainage Patterns (B10)Dry-Season Water Table (C2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) 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) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) 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) Roots (C3) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) 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 F	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) 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 Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) X Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) X Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (B	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) X Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (B	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So 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) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) X Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (BField Observations: Surface Water Present? Yes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) X Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (BField Observations: Surface Water Present? Yes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So 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) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) X Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (BField Observations: Surface Water Present? Water Table Present? Yes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (in	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) ills (C6) X Geomorphic Position (D2) X FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (BField Observations: Surface Water Present? Water Table Present? Yes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) X FAC-Neutral Test (D5)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (B Field Observations: Surface Water Present? Water Table Present? Yes X Naturation Present? Yes X Nincludes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches): 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) ills (C6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (B Field Observations: Surface Water Present? Water Table Present? Yes X Naturation Present? Yes X Nincludes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches): Depth (inches): Depth (inches): 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) ills (C6)

Project/Site: SPCSL 2A (Tier 2)		City/Co	ounty: Macoupi	in	Sampling Date: 5/19/11
Applicant/Owner: UPRR				State: IL	Sampling Point: KR28
Investigator(s): KR, KT		Section	n, Township, Rai	nge: S28, T12N, R6W	
Landform (hillslope, terrace, etc.): LEVEL P	_AIN		Local relief	(concave, convex, none):	CONCAVE
		Long:	-89.773190		Datum: DD (NAD 83)
Soil Map Unit Name: 50A VIRDEN SILTY	CLAY LOAM 0-2	% SLOPE	S	NWI classifica	ation:
Are climatic / hydrologic conditions on the site	typical for this time	of year? Ye	s No		
Are Vegetation, Soil, or Hydrol					resent? Yes X No No
Are Vegetation, Soil, or Hydro				eded, explain any answer	
SUMMARY OF FINDINGS - Attach	site map show	ving sam	pling point k	ocations, transects,	, important features, etc.
Hydrophytic Vegetation Present? Ye	sXNo				
1	s No		Is the Sampled		
,	s No		within a Wetlan	nd? Yes	No
Remarks: WETLAND KR_35. PFO1A/PEMA. P (WETTEST APRIL ON RECORD).	HOTO 130-S, PF	HOTO 131	-N, 15' WIDE.	SOUTH END: PHOT	ΓΟ 132-S, 133-N.
VEGETATION – Use scientific name	s of plants.				
Tree Stratum (Plot size: r=30'	Abso		inant Indicator ies? Status	Dominance Test works	sheet:
1 Populus deltoides	30	yes	fac+	Number of Dominant Sp. That Are OBL, FACW, of	
2					
3				Total Number of Domina Species Across All Strat	2
4				Percent of Dominant Sp	aciae
5				That Are OBL, FACW, o	
Sapling/Shrub Stratum (Plot size:	30	= Tota	l Cover	Prevalence Index work	sheet:
1					Multiply by:
2.					x 1 =
3.				FACW species	x 2 =
4.				FAC species	x 3 =
5				FACU species	x 4 =
r=5'		= Tota	l Cover	UPL species	x 5 =
Herb Stratum (Plot size: r=5' 1. Rumex altissimus		yes	facw-	Column Totals:	(A) (B)
Conium maculatum	10	yes yes		Prevalence Index	= B/A =
3.				Hydrophytic Vegetatio	
4.				1 - Rapid Test for H	lydrophytic Vegetation
5.				X 2 - Dominance Test	t is >50%
6.				3 - Prevalence Inde	x is ≤3.0 ¹
7.				4 - Morphological A	daptations ¹ (Provide supporting
8				I	or on a separate sheet)
9				Problematic Hydrop	ohytic Vegetation ¹ (Explain)
10				1Indicators of hydric soil	and wetland hydrology must
Woody Vine Stratum (Plot size:) 35_	= Tota	l Cover	be present, unless distu	
1				Hydrophytic	
2			l Cover	Vegetation Present? Yes	x No
Remarks: (Include photo numbers here or o	n a separate sheet.))			

		e to the depth			ator or co	nfirm the absence	e of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features % Tvi	pe ¹ Loc	c ² Texture	Remarks
(IIICIICS)	Color (moist)		COIOI (IIIOISI)		<u></u>	- Texture	Kemarks
							
		epletion, RM=R	Reduced Matrix, MS	S=Masked San	d Grains.		n: PL=Pore Lining, M=Matrix.
Hydric Soil							s for Problematic Hydric Soils ³ :
Histosol				Sleyed Matrix (S4)		Prairie Redox (A16)
	pipedon (A2)			Redox (S5)			Surface (S7)
Black Hi				Matrix (S6)	(54)		Manganese Masses (F12)
	n Sulfide (A4)			Mucky Mineral			Shallow Dark Surface (TF12)
_	Layers (A5)			Gleyed Matrix (F2)	△ Other	(Explain in Remarks)
_	ick (A10) d Below Dark Surfa	200 (011)		d Matrix (F3) Dark Surface (F	:e\		
	ark Surface (A12)	ice (ATT)	_	d Dark Surface (r	,	3Indicator	s of hydrophytic vegetation and
_	lucky Mineral (S1)			Depressions (F			nd hydrology must be present,
	icky Peat or Peat (Kedox t	repressions (F	0)		s disturbed or problematic.
	ayer (if observed					unies	s disturbed or problematic.
		-					
			_			Hydric Soil	Present? Yes No
Depth (inc	ches):		_				
Remarks:							
Manual.	surface and u	lable to dete	imine color and	texture. Ass	urnea ny	unc per Step 12	b of the 1987 Corps Delineation
Wariaai.							
HYDROLO	cv						
	drology Indicator						
			di abasi all that an	-h-A		Canand	and Indicators (minimum of two society)
1		r one is require	d; check all that ap	. //			ary Indicators (minimum of two required)
1 4	Water (A1)			ned Leaves (B	9)		face Soil Cracks (B6)
I	ter Table (A2)		Aquatic Fa	, ,			inage Patterns (B10)
X Saturation	on (A3)		True Aqua	tic Plants (B14)	Dry	-Season Water Table (C2)
Water M	arks (B1)			Sulfide Odor (0			yfish Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidized R	thizospheres o	n Living Ro	oots (C3) Sat	uration Visible on Aerial Imagery (C9)
Drift Dep	oosits (B3)		Presence	of Reduced Iron	n (C4)	Stu	nted or Stressed Plants (D1)
Algal Ma	t or Crust (B4)		Recent Iro	n Reduction in	Tilled Soil:	s (C6) X Geo	omorphic Position (D2)
Iron Dep	osits (B5)		Thin Muck	Surface (C7)		X FAC	C-Neutral Test (D5)
Inundation	on Visible on Aeria	I Imagery (B7)	Gauge or \	Well Data (D9)			
Sparsely	Vegetated Conca	ve Surface (B8	B) Other (Exp	lain in Remark	s)		
Field Observ	vations:						
Surface Wate	er Present?	Yes No	Depth (inc	ches):			
Water Table			Depth (inc				
Saturation Pr			Depth (inc		— I,	Watland Hudralan	y Present? Yes X No
(includes cap		res No	Depth (inc	cnes): U	— I '	wetiand Hydrolog	ly Present? Yes No
		m gauge, moni	itoring well, aerial p	hotos, previou	s inspection	ons), if available:	
Remarks:							

Project/Site: SPCSL 2A (Tier 2)			City/Co	ounty:	Macoupi	in Sampling Date: 5/19/11
Applicant/Owner: UPRR						State: IL Sampling Point: KR29
Investigator(s): KR, KT			Sectio	n, Tow	vnship, Rar	nge: S28, T12, R6
Landform (hillslope, terrace, etc.): LEVE	L PLAIN			L	ocal relief ((concave, convex, none): CONCAVE
Slope (%): 0-2 Lat: 39.45988				-89.7	73733	Datum: DD (NAD 83)
Soil Map Unit Name: 46A HERRICK S	SILT LOAM, 0-2	2% SLOPE	S			NWI classification:
Are climatic / hydrologic conditions on the	site typical for th	nis time of yea	ar? Ye	es	No	(If no, explain in Remarks.)
Are Vegetation, Soil, or H	ydrology	significantly of	disturb	ed?	Are "I	Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or H	ydrology	naturally prob	blema	tic?	(If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Att	ach site map	showing	sam	pling	point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?	YesX_	No				
Hydric Soil Present?	~	No		ls the	Sampled	
Wetland Hydrology Present?		No		withi	n a Wetlan	nd? Yes X No
Remarks:						
						T N END, THEN WIDENS TO 25' WIDE WITH oint. (WETTEST APRIL ON RECORD)
VEGETATION - Use scientific na	ames of plants	s.				
T 01-11-11-11-11-11-11-11-11-11-11-11-11-1		Absolute			Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:		% Cover				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2						
3.						Total Number of Dominant Species Across All Strata: 2 (B)
4						Percent of Dominant Species
5						That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size:)		= Tota	al Cove	er	Prevalence Index worksheet:
1						Total % Cover of:Multiply by:
2.						OBL species x 1 =
3						FACW species x 2 =
4						FAC species x 3 =
5						FACU species x 4 =
r-5'			= Tota	al Cove	er	UPL species x 5 =
Herb Stratum (Plot size: r=5' 1. Rumex altissimus)	30	yes		facw-	Column Totals: (A) (B)
Carex sp.		- 50	yes		iacw-	Prevalence Index = B/A =
3.						Hydrophytic Vegetation Indicators:
4.				_		1 - Rapid Test for Hydrophytic Vegetation
5.						2 - Dominance Test is >50%
6						3 - Prevalence Index is ≤3.01
7						4 - Morphological Adaptations ¹ (Provide supporting
8						data in Remarks or on a separate sheet)
9						Problematic Hydrophytic Vegetation ¹ (Explain)
10						1
Woody Vine Stratum (Plot size:)	80	= Tota	al Cove	er	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1			_			Hydrophytic
2						Vegetation Present? Yes X No
Demodes (Indude - Late			= Tota	al Cove	er	100
Remarks: (Include photo numbers here		,	_			
Carex sp. is likely FAC or wetter.	acer saccharin	ium in areas	5.			

Depth Matrix		
	Redox Features Color (moist) % Type ¹ Loc ²	— Touture Bernada
(inches) Color (moist) % 0-10 10YR 2/2 100	Color (moist) % Type¹ Loc²	
10-12 10YR 6/3 100		
12-15 10 YR 11/2 100		
12 13 10 11/12 100		
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
— Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2) Black Histic (A3)	Sandy Redox (S5) Stripped Matrix (S6)	Dark Surface (S7) Iron-Manganese Masses (F12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)	Yery Shallow Dark Surface (1712) X Other (Explain in Remarks)
2 cm Muck (A10)	Depleted Matrix (F3)	Otter (Explain in Remarks)
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Type:		v
Depth (inches):		Hydric Soil Present? Yes X No
Remarks:		
Step 12b of the 1987 Corps Delineation		onger support for hydric soils. Assumed hydric per
HYDROLOGY		
HYDROLOGY Wetland Hydrology Indicators:		
	ed; check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) 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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required as a surface Water (A1) High Water Table (A2) 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) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required as a surface Water (A1) High Water Table (A2) 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 Roc	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and in the second and in	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required on the indicators (A1) High Water Table (A2) 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 Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and in the second and in	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and in the second of t	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and in the second and in	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and in the second and in	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required on the image of the ima	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils 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) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required on the image of the image	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required on the image of the	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required on the image of the	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required on the indicators of the image of	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and in the secondary of the se	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required and in the secondary of the se	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Roc Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) ots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)

Project/Site: SPCSL 2A (Tier 2)	City	/County: Macoup	in	Sampling Date: 5/19/11
Applicant/Owner: UPRR			State: <u>IL</u>	Sampling Point: KR30
Investigator(s): KR, KT	Sec	tion, Township, Ra	nge: S28, T12N, R6W	
Landform (hillslope, terrace, etc.): LEVEL PLAIN		Local relief	(concave, convex, none):	CONCAVE
		g: <u>-89.775354</u>		Datum: DD (NAD 83)
Soil Map Unit Name: 46A HERRICK SILT LOAM, 0	-2% SLOPES		NWI classifica	ation: NONE
Are climatic / hydrologic conditions on the site typical for	this time of year?	Yes No _	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology	_ significantly dist	urbed? Are	Normal Circumstances" pr	resent? Yes _X No
Are Vegetation, Soil, or Hydrology	_ naturally proble	matic? (If ne	eded, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sa	mpling point le	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes X	No			
	No	Is the Sampled		
Wetland Hydrology Present? Yes X	No	within a Wetlar	id? Yes	No
Remarks: WETLAND KR_37. PFO1A. ISOLATED. PHO	TO 136-S. PHC	TO 137-N 10' V	VIDE AT SOUTH END	2-20' WIDE 12" DEEP
BORDERED BY SILVER MAPLE, COTTONWO			VIDE AT SOUTH END	. 2-20 WIDL, 12 DLLI .
VEGETATION - Use scientific names of plan				
Tree Stratum (Plot size:)		ominant Indicator pecies? Status	Dominance Test works	
1			Number of Dominant Sp That Are OBL, FACW, o	
2			Total Number of Domina	ant
3			Species Across All Strat	4
4			Percent of Dominant Sp	
5	=T		That Are OBL, FACW, o	or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size: r=15')			Prevalence Index work	sheet:
1. Ulmus americana	<u>100</u> y	es facw-		Multiply by:
2				x 1 =
3				x 2 =
4				x 3 =
5		otal Cover		x5=
Herb Stratum (Plot size:)		otal Cover		(A)(B)
1				
2			Prevalence Index	
3			Hydrophytic Vegetation 1 - Rapid Test for H	
4			Z 2 - Dominance Test	
5			3 - Prevalence Inde	
6 7			4 - Morphological A	daptations1 (Provide supporting
8.			data in Remarks	or on a separate sheet)
9.			Problematic Hydrop	hytic Vegetation ¹ (Explain)
10			**Indiantors of budge coil	and wellend budseless sweet
Woody Vine Stratum (Plot size:)	= T	otal Cover	be present, unless distu	and wetland hydrology must rbed or problematic.
1			Hydrophytic	
2			Vegetation Present? Yes	. X No
Pamarka: //polisida abata aumbara hara arang	= T	otal Cover		
Remarks: (Include photo numbers here or on a separa	ite sneet.)			
I .				,

Profile Description: (Describe to the depti	n needed to document the indicator or co	onlim the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	oc² Texture Remarks
l — — — — — — — — — — — — — — — — — — —		
¹ Type: C=Concentration, D=Depletion, RM=I	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Gleyed Matrix (34) 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 and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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: Not sampled due to saturation to surface		
HYDROLOGY		
Wetland Hydrology Indicators:	ad: check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 F	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 F	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
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Project/Site: SPCSL 2A (Tier 2)			City	//County	Macoupi	<u>n</u>	Sampling	Date: 5/19/1	1
Applicant/Owner: UPRR						State: <u>IL</u>	Sampling	Point: KR31	
Investigator(s): KR, KT			Sec	ction, To	wnship, Rar	nge: S21, T12N, R6W			
Landform (hillslope, terrace, etc.): ROLL	ING PLA	INS			Local relief (concave, convex, none):	CONCA	AVE	
Slope (%): 0-2 Lat: 39.47190				ng: <u>-89.</u>	771062		Datum:	DD (NAD 83)	
Soil Map Unit Name: 46A HERRICK S	ILT LOAN	И 0-2% SLC	PES			NWI classific	ation: PF	O1C	
Are climatic / hydrologic conditions on the	site typical	I for this time	of year?			X (If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hy	drology _	significa	antly dist	turbed?	Are "	Normal Circumstances" p	resent?	Yes X N	o
Are Vegetation, Soil, or Hy	drology	natural	y proble	matic?	(If ne	eded, explain any answe	rs in Rem	arks.)	
SUMMARY OF FINDINGS - Atta	ach site	map show	ving sa	amplin	g point lo	ocations, transects	, impor	tant feature	s, etc.
Hydrophytic Vegetation Present?	YesX	No		T					
Hydric Soil Present?	Yes X	No		ls th	e Sampled				
Wetland Hydrology Present?	YesX	No	_	with	in a Wetlan	d? YesX	No		
Remarks:									
WETLAND KR_38. PFO1A/PEMC 20' WIDE. (WETTEST APRIL ON F		. ,	'HOTO	141 (S	S). 15' WIE	DE. TURNS INTO SIL	.VER MA	APLE WETLA	ND.
		•							
VEGETATION – Use scientific na	mes of p		lista D		Indiantas	Daminana Tasturak			
Tree Stratum (Plot size:)				Indicator Status	Dominance Test work Number of Dominant Sp			
1						That Are OBL, FACW,		2	(A)
2						Total Number of Domin	ant		
3						Species Across All Stra		2	(B)
4			— –			Percent of Dominant Sp	oecies		
5						That Are OBL, FACW, o		100	(A/B)
Sapling/Shrub Stratum (Plot size:		, —	=T	Total Cov	/er	Prevalence Index work	ksheet:		
1						Total % Cover of:		Multiply by:	_
2.						OBL species			_
3.						FACW species	x	2 =	
4.						FAC species	x	3 =	_
5						FACU species	x	4 =	_
r_E'		_	=T	Total Cov	ver	UPL species	x	5 =	_
Herb Stratum (Plot size: r=5')	00			- 1-1	Column Totals:	(A)		_ (B)
1. Scirpus fluviatilis unidentified grass		$\frac{30}{60}$	<u>y</u>		obl	Brevalence Index	- B/A -		
Rumex altissimus		$\frac{60}{5}$	<u> </u>	es	facw	Prevalence Index Hydrophytic Vegetation			
		<u> </u>	—-		- Iacw	1 - Rapid Test for H			
4						X 2 - Dominance Tes			
5						3 - Prevalence Inde			
6						4 - Morphological A			porting
7 8						data in Remarks			
9.						Problematic Hydrog	phytic Vec	getation¹ (Expla	in)
10									
		95	=1	Total Cov	/er	¹ Indicators of hydric soil be present, unless distu			nust
Woody Vine Stratum (Plot size:									
1						Hydrophytic			
2						Vegetation Present? Yes	s_X	No	
Remarks: (Include photo numbers here	or on a ser	narate sheet		Total Cov	/er				
Wetland ends about 120' S of GPS				ното	143-F Un	marked control point	recorde	d at MM 208	80
Unidentified grass species likely FA							. 5501460	. at 171111 2001	

Profile Description: (Describe to the depth	needed to document the maicator or c	offilling the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	oc ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric 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)	3Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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: Not sampled due to surface water. Ass		
HYDROLOGY		
Wetland Hydrology Indicators:	d: check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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? Yes X	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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? Yes X No	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require) X 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? Yes X No Saturation Present? Yes No Saturation Present?	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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? Yes X No	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Fersence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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? Water Table Present? Yes Note the process of the present	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Fersence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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? Water Table Present? Yes Notes the process of the proces	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Fersence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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? Water Table Present? Yes Note the process of the present	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Fersence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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? Water Table Present? Yes Notes the process of the proces	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Fersence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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? Water Table Present? Yes Notes the process of the proces	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Fersence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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? Water Table Present? Yes Notes the process of the proces	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Fersence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) sils (C6) Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No

Project/Site: SPCSL 2A (Tier 2)		City/County	<u> Macoupi</u>	<u>n</u>	Sampling Date: 5/19/11
Applicant/Owner: UPRR				State: IL	Sampling Point: KR32
Investigator(s): KR, KT	;	Section, To	wnship, Rar	nge: S21, T12N, R6W	
Landform (hillslope, terrace, etc.): PLAINS			Local relief ((concave, convex, none):	CONCAVE
Slope (%): 2-5 Lat: 39.476038	ו	Long:89.	.770192		Datum: DD (NAD 83)
Soil Map Unit Name: VIRDEN SILTY CLAY LOAM 0-2	% SLOPE	ES		NWI classifica	ation: NONE
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology sig					resent? Yes X No
Are Vegetation, Soil, or Hydrology na				eded, explain any answer	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map s				ocations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes X No					
			ne Sampled		
Wetland Hydrology Present? Yes X No		with	nin a Wetlan	d? Yes	No
Remarks: WETLAND KR_39. PFO1A. PHOTO 144 (S), PHOTO	OTO 145	(N), (N E	ND), PHO	TO 146 (S), PHOTO 1	147 (N), ISOLATED.
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: r=30')	Absolute % Cover		Indicator Status	Dominance Test works	
1. Populus deltoides	30	yes	fac+	Number of Dominant Sp. That Are OBL, FACW, of	
2. Celtis occidentalis	15	yes	fac-		
3.				Total Number of Domina Species Across All Strat	1
4				_	
5				Percent of Dominant Sp That Are OBL, FACW, of	
Sapling/Shrub Stratum (Plot size: r=15')	45	= Total Co	ver	Prevalence Index work	reheat.
1. Acer saccharinum	5	yes	facw		Multiply by:
2.					x 1 =
3.					x 2 =
4.				FAC species	x 3 =
5				FACU species	x 4 =
r=5'	5	= Total Co	ver	UPL species	x 5 =
Herb Stratum (Plot size: r=5' 1. Toxicodendron radicans	<5	yes	fac	Column Totals:	(A) (B)
2				Prevalence Index	= B/A =
3				Hydrophytic Vegetatio	
4.					lydrophytic Vegetation
5.				X 2 - Dominance Test	
6				3 - Prevalence Inde	
7				4 - Morphological A	daptations ¹ (Provide supporting s or on a separate sheet)
8					phytic Vegetation ¹ (Explain)
9					Anytho Pogotation (Explain)
10					and wetland hydrology must
Woody Vine Stratum (Plot size:)	~ 0	= Total Co	ver	be present, unless distu	rbed or problematic.
1				Hydrophytic	
2		= Total Co		Vegetation Present? Yes	s_X No
Remarks: (Include photo numbers here or on a separate si		- 10tal C0	vei		
, , , , , , , , , , , , , , , , , , , ,					
I .					

I	ription: (Describ	e to the depth			or or confirm	n the absence of	f indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features % Type	Loc ²	Texture	Remarks
(Inches)	Color (Illoist)		COIDI (IIICISI)			TEXTUTE	Kemarks
¹Tuna: C=C		plotion PM=P	aduand Matrix MS	C-Macked Sand (21 continu	PL=Pore Lining, M=Matrix.
Hydric Soil	oncentration, D=De	pielion, Rivi-Re	educed Matrix, Mc	5-Masked Sand (oranis.		or Problematic Hydric Soils ³ :
,			Candy	Slaved Matrix (C4	`		
Histosol	oipedon (A2)			Gleyed Matrix (S4 Redox (S5))	_	rairie Redox (A16) rface (S7)
	stic (A3)			Matrix (S6)			nganese Masses (F12)
_	n Sulfide (A4)			Mucky Mineral (F	1)		allow Dark Surface (TF12)
	Layers (A5)			Gleyed Matrix (F2			xplain in Remarks)
_	ick (A10)			d Matrix (F3)	,	Office (E	Apiaii iii Neiliaiks)
_	d Below Dark Surfa	ce (A11)		Dark Surface (F6)			
	ark Surface (A12)	,		d Dark Surface (F		3Indicators o	f hydrophytic vegetation and
_	fucky Mineral (S1)			Depressions (F8)	- /		hydrology must be present,
	icky Peat or Peat (S3)	_	, , ,			isturbed or problematic.
	Layer (if observed						
Type:							
	ches):		_			Hydric Soil P	resent? Yes X No
Remarks:	orres).						
	d due to saturati			401 (1) 40	07.0	5 i' i' M	
HYDROLO	GY						
Wetland Hyd	drology Indicators	; :					
	cators (minimum of		: check all that ap	ply)		Secondary	/ Indicators (minimum of two required)
	Water (A1)			ned Leaves (B9)			ce Soil Cracks (B6)
	iter Table (A2)		Aquatic Fa				age Patterns (B10)
X Saturation	, ,			tic Plants (B14)		_	eason Water Table (C2)
outurau				Sulfide Odor (C1)			sh Burrows (C8)
	larks (B1)			Rhizospheres on L			
1 —	nt Deposits (B2) posits (B3)			of Reduced Iron (ation Visible on Aerial Imagery (C9)
—			_		,		ed or Stressed Plants (D1)
1	at or Crust (B4)		_	n Reduction in Til	ied Soils (Co	_	orphic Position (D2)
1	oosits (B5)	I(DZ)	_	Surface (C7)		FAC-N	Neutral Test (D5)
_	on Visible on Aeria			Well Data (D9)			
	Vegetated Conca	ve Surface (B8)	Other (Exp	lain in Remarks)			
Field Obser							
Surface Water			Depth (inc				
Water Table			Depth (inc				
Saturation P	resent?	Yes X No	Depth (inc	ches): <u>0</u>	Wetla	and Hydrology I	Present? Yes X No
(includes cap							
Describe Re	corded Data (strea	m gauge, monit	oring well, aerial p	photos, previous i	nspections),	if available:	
Remarks:							

Project/Site: SPCSL 2A (Tier 2)		City/County	Macoupi	<u>n</u>	Sampling Date: 5/19/11
Applicant/Owner: UPRR				State: IL	Sampling Point: KR33
Investigator(s): KR, KT	;	Section, To	wnship, Rar	nge: S21, T12N, R6W	
Landform (hillslope, terrace, etc.): LEVEL PLAIN			Local relief ((concave, convex, none):	NONE
	ו	Long: <u>-89.</u>	769614		Datum: DD (NAD 83)
Soil Map Unit Name: 127B HARRISON SILT LOAM, 2	-5% SLO	PES		NWI classifica	ation: NONE
Are climatic / hydrologic conditions on the site typical for this	time of yea				
Are Vegetation, Soil, or Hydrology sig					resent? Yes X No No
Are Vegetation, Soil, or Hydrology na				eded, explain any answer	
SUMMARY OF FINDINGS – Attach site map s					
Hydrophytic Vegetation Present? Yes X No					
			e Sampled		
Wetland Hydrology Present? Yes X No		with	in a Wetlan	d? Yes	No
Remarks:	I /EDOM	C END W	/CTLAND)	NICOLATED (METT	TECT ADDIL ON DECORD
WETLAND KR_40. PFO1A/PEMA. PHOTO 148-N	N (FROIVI	2 END M	/ETLAND)	. ISOLATED. (WETT	EST APRIL ON RECORD)
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?		Dominance Test works	
1. Ulmus americana	5	yes	facw-	Number of Dominant Sp That Are OBL, FACW, o	
2. Catalpa bignonioides	5	yes	facu		
3				Total Number of Domina Species Across All Strat	F
4				Percent of Dominant Sp	ecies
5				That Are OBL, FACW, o	
Sapling/Shrub Stratum (Plot size: r=15')	10	= Total Cov	/er	Prevalence Index work	sheet:
1. Acer saccharinum	5	yes	facw		Multiply by:
2				OBL species	x 1 =
3				FACW species	x 2 =
4					x 3 =
5					x 4 =
Herb Stratum (Plot size: r=5')	5	= Total Cov	/er		x 5 =
1 Eleocharis sp.	25	yes	obl	Column Totals:	(A) (B)
Alopecurus carolinianus	30	yes	facw	Prevalence Index	= B/A =
3				Hydrophytic Vegetatio	n Indicators:
4					lydrophytic Vegetation
5				X 2 - Dominance Test	
6				3 - Prevalence Inde	
7				4 - Morphological A	daptations ¹ (Provide supporting or on a separate sheet)
8					ohytic Vegetation ¹ (Explain)
9					
10	55	= Total Cov			and wetland hydrology must
Woody Vine Stratum (Plot size:)		= Total Cov	/er	be present, unless distu	rbed or problematic.
1				Hydrophytic	
2				Vegetation Present? Yes	. X No
December (Include at the control of		= Total Cov	/er	. resent fes	
Remarks: (Include photo numbers here or on a separate si	neet.)				

Profile Description: (Describe to the depth	needed to document the indicator or c	onfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ L	oc ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Gleyed Matrix (34)	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 and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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
1 1 /	_	
Remarks: Not sampled due to saturation. Assume		
HYDROLOGY		
HYDROLOGY Westland Hydrology Indicators		
Wetland Hydrology Indicators:		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) 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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require) 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 Presence of Reduced Iron (C4)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
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Project/Site: SPCSL 2A (Tier 2)		c	City/Cor	unty: Macoupi	n	Sampling	Date: 5/19/1	1
Applicant/Owner: UPRR					State: IL	Sampling	Point: KR34	
Investigator(s): KR, KT		8	Section	, Township, Rar	nge: S21, T12N, R6V	V		
Landform (hillslope, terrace, etc.): PLAIN	1			Local relief	concave, convex, none	: CONCA	VE	
Slope (%): 0-2 Lat: 39.46830	7	ι	Long: _	89.771649		_ Datum: _	DD (NAD 83)	
Soil Map Unit Name: 46A HERRICK S			3		NWI classifi	ication: NC	NE	
Are climatic / hydrologic conditions on the	site typical for	this time of yea				Remarks.)		
Are Vegetation, Soil, or Hy	drology	_ significantly d	disturbe	ed? Are "	Normal Circumstances"	present? '	Yes X N	ο
Are Vegetation, Soil, or Hy	ydrology	_ naturally prob	blemati	c? (If ne	eded, explain any answ	ers in Rema	arks.)	
SUMMARY OF FINDINGS - Att	ach site ma	p showing	samp	oling point le	ocations, transect	s, import	ant feature	s, etc.
Hydrophytic Vegetation Present?	Yes X	No	$\overline{}$					
Hydric Soil Present?	Yes X	No	1	s the Sampled				
Wetland Hydrology Present?		No	١ ا	within a Wetlan	d? Yes X	No_		
Remarks:								
WETLAND KR_41. PEMA. ISOLA 151-S. 152-N. WATERFILLED DIT							END-PHOTO)
VEGETATION – Use scientific na	mes of plan	ts.						
		Absolute	Domir	nant Indicator	Dominance Test wor	ksheet:		
Tree Stratum (Plot size:				es? Status	Number of Dominant S			
1					That Are OBL, FACW,	or FAC:		(A)
2					Total Number of Domi		4	
3					Species Across All Str	ata:	1	(B)
4					Percent of Dominant S		100	
5			- Total	Cover	That Are OBL, FACW,	or FAC:	100	(A/B)
Sapling/Shrub Stratum (Plot size:)		- Total	Cover	Prevalence Index wo	rksheet:		
1					Total % Cover of:		Multiply by:	_
2					OBL species	x 1	=	_
3					FACW species	x 2	=	_
4					FAC species	x 3	=	_
5					FACU species	× 4	=	_
r-5'			= Total	Cover	UPL species	x 5	í =	_
Herb Stratum (Plot size: r=5' 1. unidentified grass)	90	yes		Column Totals:	(A)		_ (B)
					Prevalence Inde	x = B/A =		
3.					Hydrophytic Vegetat			
4.					1 - Rapid Test for			
5.					X 2 - Dominance Te			
6					3 - Prevalence Inc	dex is ≤3.01		
7					4 - Morphological	Adaptations	s ¹ (Provide sup	porting
8					data in Remark	ks or on a s	eparate sheet)	
9.					Problematic Hydro	ophytic Veg	etation1 (Explai	n)
10					4			
Woody Vine Stratum (Plot size:)	90	= Total	Cover	¹ Indicators of hydric so be present, unless dis			nust
1					Hydrophytic			
2.					Vegetation	Y	N.	
		:	= Total	Cover	Present? Y	es	No	
Remarks: (Include photo numbers here	or on a separa	te sheet.)						
Unidentified grass is likely FAC or v	wetter.							

Depth		Redox Features	
(inches)	Matrix Color (moist) %	Color (moist) % Type¹ Loc	² Texture Remarks
¹Type: C=Co	oncentration D=Depletion RM	=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	-	Treased matri, no matrice dana diane.	Indicators for Problematic Hydric Soils ³ :
Histosol		Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
_	pipedon (A2)	Sandy Redox (S5)	Dark Surface (S7)
Black Hi		Stripped Matrix (S6)	Iron-Manganese Masses (F12)
	n Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow Dark Surface (TF12)
	Layers (A5)	Loamy Gleyed Matrix (F2)	X Other (Explain in Remarks)
	ick (A10)	Depleted Matrix (F3)	
_	d Below Dark Surface (A11)	Redox Dark Surface (F6)	
	ark Surface (A12)	Depleted Dark Surface (F7)	3Indicators of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mu	icky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive I	ayer (if observed):		
Type:			.,
	ches):		Hydric Soil Present? Yes X No
Remarks:			
HYDROLO			
	drology Indicators:		
	cators (minimum of one is requ		
Surface			Secondary Indicators (minimum of two required)
High Wa	Water (A1)	ired: check all that apply) Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
	Water (A1) iter Table (A2)		
Saturation	nter Table (A2) on (A3)	Water-Stained Leaves (B9)Aquatic Fauna (B13)True Aquatic Plants (B14)	Surface Soil Cracks (B6)Drainage Patterns (B10)Dry-Season Water Table (C2)
	iter Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
Water M	nter Table (A2) on (A3)	Water-Stained Leaves (B9)Aquatic Fauna (B13)True Aquatic Plants (B14)	 Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Water M	eter Table (A2) on (A3) earks (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) Crayfish Burrows (C8)
Water M Sedimer Drift Dep	nter Table (A2) on (A3) larks (B1) nt Deposits (B2)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) cots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Water M Sedimer Drift Dep Algal Ma	ater Table (A2) on (A3) larks (B1) on Deposits (B2) posits (B3)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) sots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Water M Sedimer Drift Dep Algal Ma	on (A3) arks (B1) the Deposits (B2) cosits (B3) at or Crust (B4)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Role Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7)	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) G (C6) G Geomorphic Position (D2)
Water M Sedimer Drift Dep Algal Ma Iron Dep	on (A3) arks (B1) at Deposits (B2) posits (B3) at or Crust (B4) posits (B5)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9)	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) G (C6) G Geomorphic Position (D2)
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely	on (A3) larks (B1) on (B2) on (B3) on (B3) on (B3) on (B4) on (B4) on (B5)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9)	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) G (C6) G Geomorphic Position (D2)
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely	on (A3) larks (B1) on (B2) oosits (B3) of or Crust (B4) oosits (B5) on Visible on Aerial Imagery (Bay Vegetated Concave Surface ovations:	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils 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) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) G (C6) Geomorphic Position (D2)
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatic Sparsely Field Observ Surface Water	ater Table (A2) on (A3) larks (B1) on Deposits (B2) ossits (B3) at or Crust (B4) ossits (B5) on Visible on Aerial Imagery (Bay Vegetated Concave Surface (Vations: er Present? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Rome Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) B8) Other (Explain in Remarks) No Depth (inches): 2	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) G (C6) Geomorphic Position (D2)
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Obser Surface Water	on (A3) larks (B1) on (A3) larks (B1) on Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Imagery (By Vegetated Concave Surface ovations: er Present? Yes Present? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) (B8) Other (Explain in Remarks) No Depth (inches): No Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Observ Surface Water Vater Table Saturation Prince Sedimer Sedimer Sedimer Mater Mater Sedimer Mater Mate	on (A3) larks (B1) on (A3) larks (B1) on Deposits (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Imagery (Bay Vegetated Concave Surface (Vations: er Present? Present? Yes resent? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) (B8) Other (Explain in Remarks) No Depth (inches): No Depth (inches):	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) G (C6) G Geomorphic Position (D2)
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation Sparsely Field Observ Surface Water Water Table Saturation Per (includes cap	ster Table (A2) on (A3) larks (B1) on (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Imagery (B overlines varions: er Present? Present? Yes resent? Yes resent? Yes resent? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) (B8) Other (Explain in Remarks) No Depth (inches): No	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation Sparsely Field Observ Surface Water Water Table Saturation Per (includes cap	ster Table (A2) on (A3) larks (B1) on (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Imagery (B overlines varions: er Present? Present? Yes resent? Yes resent? Yes resent? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) (B8) Other (Explain in Remarks) No Depth (inches): No Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Obsen Surface Water Water Table Saturation Pr (includes cap Describe Red	ster Table (A2) on (A3) larks (B1) on (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Imagery (B overlines varions: er Present? Present? Yes resent? Yes resent? Yes resent? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) (B8) Other (Explain in Remarks) No Depth (inches): No	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundation Sparsely Field Observ Surface Water Water Table Saturation Per (includes cap	ster Table (A2) on (A3) larks (B1) on (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Imagery (B overlines varions: er Present? Present? Yes resent? Yes resent? Yes resent? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) (B8) Other (Explain in Remarks) No Depth (inches): No	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Obsen Surface Water Water Table Saturation Pr (includes cap Describe Red	ster Table (A2) on (A3) larks (B1) on (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Imagery (B overlines varions: er Present? Present? Yes resent? Yes resent? Yes resent? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) (B8) Other (Explain in Remarks) No Depth (inches): No	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Obsen Surface Water Water Table Saturation Pr (includes cap Describe Red	ster Table (A2) on (A3) larks (B1) on (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Imagery (B overlines varions: er Present? Present? Yes resent? Yes resent? Yes resent? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) (B8) Other (Explain in Remarks) No Depth (inches): No	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Field Obser Surface Water Water Table Saturation Pr (includes cap Describe Red	ster Table (A2) on (A3) larks (B1) on (B2) oosits (B3) at or Crust (B4) oosits (B5) on Visible on Aerial Imagery (B overlines varions: er Present? Present? Yes resent? Yes resent? Yes resent? Yes	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Gauge or Well Data (D9) (B8) Other (Explain in Remarks) No Depth (inches): No	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No

Project/Site: SPCSL 2A (Tier 2)	City	y/County: _	Macoupin	<u> </u>	Sampling Date: 5/19/11
Applicant/Owner: UPRR				State: IL	Sampling Point: KR35
Investigator(s): KR, KT	Sec	ction, Tow	nship, Rang	ge: S21, T12N, R6W	
Landform (hillslope, terrace, etc.): PLAINS		Lo	ocal relief (o	concave, convex, none):	CONCAVE
		ng: <u>-89.7</u>	70420		Datum: DD (NAD 83)
Soil Map Unit Name: 46A HERRICK SILT LOAM 0-2%	SLOPES			NWI classifica	ation: PFO1C/PUBGh
Are climatic / hydrologic conditions on the site typical for this	time of year?	Yes	No	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology sig	gnificantly dist	turbed?	Are "N	ormal Circumstances" p	resent? Yes X No No
Are Vegetation, Soil, or Hydrology na	turally proble	matic?	(If nee	ded, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS - Attach site map s	howing sa	ampling	point lo	cations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes X No					
			Sampled A		
Wetland Hydrology Present? Yes X No		within	a Wetland	!? Yes	No
Remarks:		(F \\//\\C	DUOTO	452 C DUOTO 454	N (C END OF WETLAND)
WETLAND KR_42. PFO1A/PFOC/PUB. ADJACE PHOTO 155-S, 156-N. (WETTEST APRIL ON RE		KE, WUS	, PHOTO	153-5. PHOTO 154-	N (S END OF WEILAND)
VEGETATION – Use scientific names of plants.					
Tree Stratum (Plot size: r=30')	Absolute D % Cover S	ominant I		Dominance Test works	sheet:
1. Acer saccharinum			acw	Number of Dominant Sp. That Are OBL, FACW, or	
2.				Total Number of Domina	
3				Species Across All Strat	2
4				Percent of Dominant Sp	ecies
5				That Are OBL, FACW, o	
Sapling/Shrub Stratum (Plot size:)	<u>70 </u>	Total Cove	er	Prevalence Index work	sheet:
1				Total % Cover of:	Multiply by:
2					x 1 =
3					x 2 =
4					x 3 =
5					x 4 =
Herb Stratum (Plot size: r=5')	=1	Total Cove			x 5 = (A) (B)
1. Toxicodendron radicans	<u>20</u> <u>y</u>	es f	ac+	Column Totals.	(^) (b)
unidentified grass	<u>50</u> <u>y</u>	es		Prevalence Index	= B/A =
3				Hydrophytic Vegetatio	
4					lydrophytic Vegetation
5				X 2 - Dominance Test	
6			——	3 - Prevalence Inde	x is ≤3.0° daptations¹ (Provide supporting
7				data in Remarks	or on a separate sheet)
8 9				Problematic Hydrop	ohytic Vegetation ¹ (Explain)
10.					
	70 = 1	Total Cove	er	¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must
Woody Vine Stratum (Plot size:)			-	be present, unless dista	ibed of problematic.
1			——	Hydrophytic Vegetation	
2		Fotal Cove		Vegetation Present? Yes	. X No
Remarks: (Include photo numbers here or on a separate sh		Julia COVE			
Unidentified grass is likely FAC or wetter.					
I .					

Depth	cription: (Describe Matrix			x Features			
(inches)	Color (moist)	%	Color (moist)	%Type¹	Loc²	Texture	Remarks
0-16	10 YR 3/2	100				SiC	
				. — —			
¹ Type: C=C	Concentration, D=Dep	oletion, RM=R	educed Matrix, MS	S=Masked Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:					Indicators f	for Problematic Hydric Soils ³ :
Histoso	l (A1)		Sandy C	Gleyed Matrix (S4)		Coast P	Prairie Redox (A16)
Histic E	pipedon (A2)		Sandy F	Redox (S5)		Dark St	urface (S7)
Black H	listic (A3)		Stripped	d Matrix (S6)		Iron-Ma	nganese Masses (F12)
Hydrog	en Sulfide (A4)		Loamy I	Mucky Mineral (F1)		Very Sh	nallow Dark Surface (TF12)
Stratifie	d Layers (A5)		Loamy (Gleyed Matrix (F2)		X Other (I	Explain in Remarks)
2 cm M	uck (A10)		Deplete	d Matrix (F3)			
Deplete	ed Below Dark Surface	ce (A11)	Redox [Dark Surface (F6)			
Thick D	ark Surface (A12)		Deplete	d Dark Surface (F7)	3Indicators	of hydrophytic vegetation and
	Mucky Mineral (S1)		Redox [Depressions (F8)			hydrology must be present,
	ucky Peat or Peat (S					unless	disturbed or problematic.
Restrictive	Layer (if observed)	:					
Type:			_			Undria Cail I	Present? Yes X No No
Depth (in	nches):		_			Hydric Soil I	Present? Yes No
Remarks:							
HYDROLO							
	drology Indicators						
Primary Indi	icators (minimum of	one is require	d; check all that ap	oply)		Secondar	ry Indicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ined Leaves (B9)			ace Soil Cracks (B6)
High W	ater Table (A2)		Aquatic Fa	auna (B13)		Drain	nage Patterns (B10)
	ion (A3)		True Aqua	itic Plants (B14)			Season Water Table (C2)
Water N	Marks (B1)		Hydrogen	Sulfide Odor (C1)		Cray	fish Burrows (C8)
Sedime	ent Deposits (B2)		Oxidized R	Rhizospheres on Liv	ing Roots ((C3) Satur	ration Visible on Aerial Imagery (C9)
Drift De	posits (B3)		Presence	of Reduced Iron (C-	4)	Stunt	ted or Stressed Plants (D1)
Algal M	at or Crust (B4)		Recent Iro	n Reduction in Tille	d Soils (C6) X Geor	morphic Position (D2)
Iron De	posits (B5)		Thin Muck	Surface (C7)		X FAC-	Neutral Test (D5)
Inundat	ion Visible on Aerial	Imagery (B7)	_	Well Data (D9)			
Sparse	y Vegetated Concav	e Surface (B8	Other (Exp	olain in Remarks)			
Field Obse	rvations:						
Surface Wa	ter Present?	res No	Depth (inc	ches):	_		
Water Table				ches):	— I		
Saturation F			Depth (inc			and Hydrology	Present? Yes X No
		165 140	Deptil (iii	cries). O	_ ••••••	ina riyarology	Present: res NO
(includes ca			toring well, aerial p	photos, previous ins	pections), i	if available:	
(includes ca	ecorded Data (stream	n gauge, mon					
(includes ca		n gauge, mon					
(includes ca		n gauge, mon					
(includes ca Describe Re Remarks:	ecorded Data (strean		ER RECORDE	D AFTER ALL. V	VETLAND) POLYGON	RECRDED, SOME SECTION
(includes ca Describe Re Remarks:	ecorded Data (stream		ER RECORDE	D AFTER ALL. V	VETLAND) POLYGON	RECRDED, SOME SECTION
(includes ca Describe Re Remarks: NO GPS F	ecorded Data (stream		ER RECORDE	D AFTER ALL. V	VETLAND) POLYGON	RECRDED, SOME SECTION

Project/Site: SPCSL 2A (Tier 2)			City/Co	ounty:	Macoupi	n Sampling Date: 5/19/11
Applicant/Owner: UPRR						State: IL Sampling Point: KR36
Investigator(s): KT, KR			Section	n, Tov	vnship, Ran	nge: S16. T12N, R6W
Landform (hillslope, terrace, etc.): LEVE	L PLAIN			L	ocal relief ((concave, convex, none): CONCAVE
Slope (%): 0-2 Lat: 39.48161		ι	ong:	-89.7	768892	Datum: DD (NAD 83)
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY LOA	AM, 0-2% S	LOPE	ES		NWI classification:
Are climatic / hydrologic conditions on the	site typical for th	is time of yea	r? Ye	es	No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hy	ydrology	significantly of	disturb	ed?	Are "I	Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hy	ydrology	naturally prob	olemat	tic?	(If ne	eded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Att	ach site map	showing	sam	pling	point lo	ocations, transects, important features, etc.
Hydrophytic Vegetation Present?	Yes X	No	Т			
Hydric Soil Present?	~	No		ls the	Sampled	
Wetland Hydrology Present?		No		withi	n a Wetlan	d? Yes X No
Remarks:						
						12 FEET WIDE. CP KR-4 SET EAST END OF R_43. WETTEST APRIL ON RECORD.
VEGETATION - Use scientific na	mes of plants	s .				
		Absolute			Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:		% Cover				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2.						
3.						Total Number of Dominant Species Across All Strata: 2 (B)
4						
5						Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size:	,		= Tota	l Cov	er	Prevalence Index worksheet:
1						Total % Cover of:Multiply by:
2.						OBL species x 1 =
3.						FACW species x 2 =
4.						FAC species x 3 =
5.						FACU species x 4 =
, F!			= Tota	l Cov	er	UPL species x 5 =
Herb Stratum (Plot size: r=5')	20				Column Totals: (A) (B)
Carex sp. Carex muskingumensis		$-\frac{30}{60}$	yes			Prevalence Index = B/A =
Z			yes		obl	Hydrophytic Vegetation Indicators:
3						1 - Rapid Test for Hydrophytic Vegetation
5						2 - Dominance Test is >50%
6						3 - Prevalence Index is ≤3.0¹
7.						4 - Morphological Adaptations ¹ (Provide supporting
8.						data in Remarks or on a separate sheet)
9.						Problematic Hydrophytic Vegetation¹ (Explain)
10						1
Woody Vine Stratum (Plot size:)	90	= Tota	l Cov	er	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1						Hydrophytic
2						Vegetation Present? Yes No
Demarke: /lackide shets sumbars have	0r 00 0 00		= Tota	l Cov	er	
Remarks: (Include photo numbers here		sneet.)				
Carex sp. likely FACW or OBL. Ph	1010 159 (11).					

l	ription: (Describe	to the depth r			dicator o	or confirm	the absence of	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Tyne ¹	_Loc ²	Texture	Remarks
(Inches)	Color (moist)		COIOI (IIIOISI)		1 400		Texture	Kemarks
							2	
	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS	S=Masked S	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I								or Problematic Hydric Soils ³ :
Histosol				Sleyed Matr	rix (S4)		_	rairie Redox (A16)
	oipedon (A2)			Redox (S5)				ırface (S7)
Black His				Matrix (S6				nganese Masses (F12)
	n Sulfide (A4)			Mucky Mine				allow Dark Surface (TF12) Explain in Remarks)
_	d Layers (A5) ick (A10)			Gleyed Mat d Matrix (F3			△ Other (E	explain in Remarks)
_	d Below Dark Surfac	o (A11)		a watrix (F. Dark Surfac				
	ark Surface (A12)	e (A11)	_	d Dark Surf			3Indicators	of hydrophytic vegetation and
_	fucky Mineral (S1)			epressions				hydrology must be present,
	icky Peat or Peat (S	3)		repressions	3 (1 0)			disturbed or problematic.
	Layer (if observed)						1	note bod of problements.
	zaye. (ii observed)							
			-				Hydric Soil F	Present? Yes X No No No
	ches):							
Remarks:	d not sample. Ass							
HYDROLO	GY							
	drology Indicators:							
1	cators (minimum of o		check all that ap	nlv)			Secondar	y Indicators (minimum of two required)
X Surface		nie io regairea.	Water-Sta		e /BO\			ce Soil Cracks (B6)
	iter Table (A2)		Aquatic Fa		5 (08)			age Patterns (B10)
Saturation	, ,				D14)		_	Geason Water Table (C2)
I —	, ,		True Aqua					fish Burrows (C8)
	arks (B1)		Hydrogen			Doots (
1 —	nt Deposits (B2)		Oxidized F					ration Visible on Aerial Imagery (C9)
	posits (B3)			of Reduced		,		ed or Stressed Plants (D1)
	at or Crust (B4)		_	n Reduction		Soils (Cb)	_	norphic Position (D2)
I — ·	oosits (B5)		Thin Muck	-			FAC-	Neutral Test (D5)
I —	on Visible on Aerial		Gauge or					
	Vegetated Concav	e Surface (B8)	Other (Exp	lain in Rem	narks)			
Field Observ		~						
Surface Wate			Depth (inc			_		
Water Table	Present? Y	es No	Depth (inc	ches):		_		
Saturation Pr	resent? Y	es No	Depth (in	ches):		Wetla	and Hydrology	Present? Yes X No
(includes cap	oillary fringe)							
Describe Red	corded Data (stream	gauge, monito	oring well, aerial p	photos, pre	vious ins	pections), i	if available:	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)	c	City/County: Macoupin Sampling Date: 12/1/1					
Applicant/Owner: UPRR				State: IL	Sampling Point: KS21		
Investigator(s): KR, KT, KS	s	Section, Township, Range: S28, T10N, R7W					
Landform (hillslope, terrace, etc.): RR DITCH			Local relief	CONCAVI	<u> </u>		
Slope (%): 0-2 Lat: 39.282144	L	.ong: _	89.887241		Datum: DD	(NAD 83)	
Soil Map Unit Name: 48A HERRICK SILT LOAM, 0-29	% SLOPES	3		NWI classific	ation: NON	E	
Are climatic / hydrologic conditions on the site typical for this	time of year	r? Yes	X No_	(If no, explain in Ro	emarks.)		
Are Vegetation, Soil, or Hydrology si	ignificantly d	listurbe	ed? Are	'Normal Circumstances" p	resent? Ye:	s_X No	
Are Vegetation, Soil, or Hydrology na	aturally prob	lematic	c? (If ne	eded, explain any answer	rs in Remark	s.)	
SUMMARY OF FINDINGS - Attach site map s	showing	samp	ling point le	ocations, transects	, importar	nt features	s, etc.
Hydrophytic Vegetation Present? Yes X No	0						
Hydric Soil Present? Yes No		- 1	s the Sampled				
Wetland Hydrology Present? Yes No		v	vithin a Wetlar	nd? Yes	No		
Remarks: WETLAND KS_U. PEMA. PH127-N AT WETLAN	ום אפ דו						
WETLAND RO_O. FEMA. FITT27-NAT WETLAN	ID N3_0						
VEGETATION – Use scientific names of plants.							
			ant Indicator	Dominance Test work	sheet:		
<u>Tree Stratum</u> (Plot size:) 1)			es? Status	Number of Dominant Sp That Are OBL, FACW, of			(A)
2				Total Number of Domina	ant		
3				Species Across All Stra			(B)
4				Percent of Dominant Sp	ecies		
5				That Are OBL, FACW, o	or FAC: 10	00	(A/B)
Sapling/Shrub Stratum (Plot size:)	=	- Total	Cover	Prevalence Index work	ksheet:		
1				Total % Cover of:	M	lultiply by:	_
2				OBL species			
3				FACW species			
4				FAC species			_
5				UPL species			
Herb Stratum (Plot size: 5				Column Totals:			
1. Cyperus esculentus	100						
2				Prevalence Index Hydrophytic Vegetation		2.	
3				1 - Rapid Test for H			
5.				X 2 - Dominance Tes		-9	
6				3 - Prevalence Inde			
7				4 - Morphological A	daptations1 (Provide supp	porting
8				data in Remarks Problematic Hydrop			n)
9				Problematic Hydrop	mytic vegeta	auon (Explaii	")
10	400			¹ Indicators of hydric soil	and wetland	hydrology m	nust
Woody Vine Stratum (Plot size:)	100=	= Total	Cover	be present, unless distu	rbed or prob	lematic.	
1				Hydrophytic			
2				Vegetation Present? Yes	s_ X N	lo	
Remarks: (Include photo numbers here or on a separate s		= Total	Cover				
ENDED ON CP21, SP20 WETLAND T	sieet./						
LIBER SIX OF ZI, OF ZO WEILAND I							

Sampling Point:	KS21
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SOIL

Depth	Matrix			x Featur	es			
(inches)	Color (moist)	%	Color (moist)	%_	_Type ¹	_Loc ²	Texture	Remarks
0-2	10YR 3/2	100					. <u>S</u>	GRIT IN SOIL; BALLAST
2-6	10YR 3/2	40	2.5YR 4/6	10	С	М	<u>L</u>	RIBBONS < 1 IN
2-6	10YR 6/6	40	2.5YR 4/6	10	С	М	L	
¹ Type: C=C	oncentration, D=D	epletion, RM	=Reduced Matrix, M	S=Maske	d Sand G	ains.		: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indicators	for Problematic Hydric Soils ³ :
Histosol	, ,				latrix (S4)		_	Prairie Redox (A16)
_	pipedon (A2)			Redox (S				Surface (S7)
_	istic (A3) en Sulfide (A4)			d Matrix (Mucky M	ວຣ) ineral (F1)			anganese Masses (F12) hallow Dark Surface (TF12)
	d Layers (A5)				fatrix (F2)			(Explain in Remarks)
_	ıck (A10)			d Matrix				,,
Deplete	d Below Dark Surf	ace (A11)	X Redox	Dark Sur	face (F6)			
_	ark Surface (A12)				urface (F7)		of hydrophytic vegetation and
	Mucky Mineral (S1)		Redox	Depressi	ons (F8)			d hydrology must be present,
	ucky Peat or Peat Layer (if observe						unless	disturbed or problematic.
_		-						
Type:							Hydric Soil	Present? Yes X No No
Depth (in	cnes):							
Remarks: CP KS22@								
HYDROLO								
_	drology Indicator							
		f one is requ	ired; check all that ap					ary Indicators (minimum of two required)
	Water (A1)		Water-Sta					face Soil Cracks (B6)
	ater Table (A2)		Aquatic Fa	,	,		_	inage Patterns (B10)
			True Aqua				_ ,	Season Water Table (C2)
	larks (B1)		Hydrogen			ina Posts		yfish Burrows (C8)
_	nt Deposits (B2) posits (B3)			-	eres on Liv ed Iron (C	_		uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1)
	at or Crust (B4)				tion in Tille	-		emorphic Position (D2)
	posits (B5)		Thin Muck	-		u 00113 (0	_	-Neutral Test (D5)
	on Visible on Aeria	al Imagery (B	_					, , , , , , , , , , , , , , , , , , ,
_	y Vegetated Conca							
Field Obser	vations:							
Surface Wat	er Present?	Yes_X_	No Depth (in	ches): 3		_		
Water Table	Present?	Yes X	No Depth (in	ches): 2				
Saturation P	resent?		No Depth (in			Wet	land Hydrolog	y Present? Yes X No
	pillary fringe) corded Data (strea	am gauge, m	onitoring well, aerial	nhotos r	revious in	spections)	if available:	
Describe No	corded Data (Siret	an gauge, m	orintoring wen, acriai	priotos, p	nevious iii.	эрсскопа	, ii avallabic.	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)	0	City/Co	ounty:	Macoupi	n	Sampling Date	<u>: 12/1/10</u>
Applicant/Owner: UPRR					Sampling Poin	t KS22	
Investigator(s): KR, KT, KS	8	Section, Township, Range: S32, T10N, R7W					
Landform (hillslope, terrace, etc.): RR DITCH			L	ocal relief (concave, convex, none):	CONCAVE	
			-89.9	902879		Datum: DD (N	VAD 83)
Soil Map Unit Name: 46A HERRICK SILY LOAM, 0-29	% SLOPES	s			NWI classifica	tion: NONE	
Are climatic / hydrologic conditions on the site typical for this	time of yea	ır? Ye	s_X	No	(If no, explain in Re	marks.)	
Are Vegetation, Soil, or Hydrology si	gnificantly d	disturb	ed?	Are "I	Normal Circumstances" pr	esent? Yes _	X No
Are Vegetation, Soil, or Hydrology na	aturally prob	olemat	ic?	(If ne	eded, explain any answers	s in Remarks.)	
SUMMARY OF FINDINGS - Attach site map s	showing	samı	pling	g point lo	cations, transects,	important	features, etc.
Hydrophytic Vegetation Present? Yes X No	·						
				Sampled			
Wetland Hydrology Present? Yes X No			withi	n a Wetlan	d? Yes	No	_
Remarks:	(0.) (10. D			\	ADEAG OF LIDI AND	0 14/57/ 41	ID.
WETLAND KS_V1 - KS_V7. PEMA. WETLAND R CHARACTERISTICS REMAINED SIMILAR THRO							
VEGETATION – Use scientific names of plants.							
Tree Stratum (Plot size:)	Absolute % Cover			Indicator	Dominance Test works		
1				Otatus	Number of Dominant Spo That Are OBL, FACW, or		(A)
2					Total Number of Domina	nt	
3					Species Across All Strata	a: <u>2</u>	(B)
4					Percent of Dominant Spe		
5			I Cov	 er	That Are OBL, FACW, or	FAC: 100	(A/B)
Sapling/Shrub Stratum (Plot size:)					Prevalence Index work	sheet:	
1					Total % Cover of:		
2					OBL species		
3					FACW species		
4					FAC species		
5		= Total			UPL species		
Herb Stratum (Plot size: 5	—	- Tota	II COV	er	Column Totals:		
1 Echinochloa crusgalli	70	yes		facw			(5)
Panicum dichotomiflorum	30	yes		facw-	Prevalence Index		
3					Hydrophytic Vegetation		
4				——	1 - Rapid Test for Hy		etation
5					2 - Dominance Test		
6				——	3 - Prevalence Index 4 - Morphological Ad		rouido aumostina
7					data in Remarks	or on a separa	ate sheet)
8					Problematic Hydropi	nytic Vegetatio	on ¹ (Explain)
9							
Woody Vine Stratum (Plot size:)	400	= Tota	l Cov	er	¹ Indicators of hydric soil be present, unless distur		
1					Undenbudia		
2.					Hydrophytic Vegetation		
		= Tota	l Cov	er	Present? Yes	No.	
Remarks: (Include photo numbers here or on a separate s	heet.)						

Profile Description: (Describe to the depth	n needed to document the indicator or co	onfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	oc² Texture Remarks
l — — — — — — — — — — — — — — — — — — —		
l		
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric 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)
1		
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	Very Shallow 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)	3
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Туре:	_	
Depth (inches):	_	Hydric Soil Present? Yes X No No
Remarks:		
No pit dug due to inundation. Assumed	Lhydria par Stan 12h of the 1097 Car	na Dalinaatian Manual
The pit day due to mandation. Assumed	Thyund per otop 125 of the 1507 oof	ps Delinication Manual.
HYDROLOGY		
Wetland Hydrology Indicators:	ad: check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6)Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 F	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4)	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary 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)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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) Field Observations:	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So 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) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes N	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (B) Field Observations: Surface Water Present? Yes X	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): >2	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B1) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present?	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (B) Field Observations: Surface Water Present? Yes X	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2 Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes X N Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes X N (includes capillary fringe)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2 Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2 Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes X N Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes X N (includes capillary fringe)	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2 Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2 Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (BField Observations: Surface Water Present? Yes X N Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2 Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No
Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Feresence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2 Depth (inches): 0	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ills (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes No

Project/Site: SPCSL 2A (Tier 2)		City	//County: Macoup	oin	1/10		
Applicant/Owner: UPRR				State: IL Sampling Point: KS23			
Investigator(s): KR, KT, KS		Sec	ction, Township, Ra	ange: S32, T10N, R7W			
Landform (hillslope, terrace, etc.): ROAD	SIDE DITCH		Local relief	(concave, convex, none):	CONCAVE		
Slope (%): 0-2 Lat: 39.259558	3	Lor	ng: <u>-89.902527</u>		Datum: DD (NAD 8	33)	
Soil Map Unit Name: 46A HERRICK SI	LT LOAM, 0-29	% SLOPES		NWI classific	ation: NONE		
Are climatic / hydrologic conditions on the	site typical for this	s time of year?					
Are Vegetation, Soil, or Hy	drologys	ignificantly dist	turbed? Are	"Normal Circumstances" p	resent? Yes X	No	
Are Vegetation, Soil, or Hy	drologyn	aturally proble	matic? (If n	eeded, explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS - Atta	ach site map	showing sa	ampling point	locations, transects	, important featu	ıres, etc.	
Hydrophytic Vegetation Present?	Yes X N	0					
Hydric Soil Present?	~	00	Is the Sample				
Wetland Hydrology Present?	YesX_ N	0	within a Wetla	nd? Yes_X	No		
Remarks:	44 0445155		4 AND 16000 TA		(0.14/0.014/1.45		
WETLAND KS_W1 - KS_W5. PEN CHARACTERISTICS THROUGHO							
VEGETATION – Use scientific na	mes of plants.						
			ominant Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size:			pecies? Status	Number of Dominant Sp That Are OBL, FACW, of		(A)	
2.				Total Number of Domini		_ ` '	
3				Species Across All Stra	4	(B)	
4				Percent of Dominant Sp			
5				That Are OBL, FACW, o		(A/B)	
Sapling/Shrub Stratum (Plot size:	,	=1	Total Cover	Prevalence Index work	ksheet:		
1				Total % Cover of:		r:	
2.				OBL species			
3.				FACW species	x 2 =		
4.				FAC species	x 3 =		
5				FACU species	x 4 =		
r_5'		=1	Total Cover	UPL species	x 5 =		
Herb Stratum (Plot size: r=5' 1. Eleocharis sp.)	100 v	res	Column Totals:	(A)	(B)	
2.		· — -		Prevalence Index	= B/A =		
3.				Hydrophytic Vegetation	on Indicators:		
4.				1 - Rapid Test for H	Hydrophytic Vegetation	n	
5.				X 2 - Dominance Tes			
6				3 - Prevalence Inde			
7				4 - Morphological A	daptations1 (Provide	supporting	
8				Problematic Hydrop	s or on a separate she		
9				Problematic Hydrop	onytic vegetation (Ex	piain)	
10				¹ Indicators of hydric soil	and wetland hydrolog	av must	
Woody Vine Stratum (Plot size:)	100 = 7	Total Cover	be present, unless distu		ay most	
1				Hydrophytic			
2				Vegetation Present? Yes	s_X No		
Demonstra (Include that		= 1	Total Cover	. 10001111			
Remarks: (Include photo numbers here		,	0.400 51 1	da an da 19 da 540			
PH-129-N, CP KS-23-CULVERT 22	25.13 FT W OF	- KK; PH 13	∪-133. Eleochar	is sp. is likely FAC or v	vetter.		

US Army Corps of Engineers

I	ription: (Describ	e to the depth			dicator or	r confirm	the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	K Features %	Type ¹	l oc²	Texture	Remarks
(IIICIICS)	Color (Illoist)		Coloi (Illoist)		1400	LUC	Texture	Kemarks
							2	
	oncentration, D=De	pletion, RM=R	educed Matrix, MS	=Masked S	and Grai	ns.		PL=Pore Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Soils ³ :
Histosol				Sleyed Matri	x (S4)		_	Prairie Redox (A16)
	pipedon (A2)			ledox (S5)				urface (S7)
_	stic (A3)			Matrix (S6)				anganese Masses (F12)
	n Sulfide (A4)			Mucky Miner				hallow Dark Surface (TF12)
	Layers (A5)			eleyed Matri			Other (Explain in Remarks)
_	ick (A10)	(844)		Matrix (F3)	-			
	d Below Dark Surfa	ce (A11)		ark Surface	, ,		3 ₁ and in a town	of hudeen hudio venetation and
_	ark Surface (A12)			d Dark Surfa epressions				of hydrophytic vegetation and
	fucky Mineral (S1) icky Peat or Peat (22)	Redox L	epressions	(FO)			I hydrology must be present, disturbed or problematic.
	Layer (if observed						uniess	disturbed or problematic.
		-						
			_				Hydric Soil	Present? Yes X No No
Depth (inc	ches):		_				,	
Remarks:								
HYDROLO	GY							
Wetland Hyd	drology Indicators	:						
Primary India	cators (minimum of	one is required	i; check all that ap	ply)			Seconda	ry Indicators (minimum of two required)
X Surface	Water (A1)		Water-Stai	ned Leaves	(B9)		Surfa	ace Soil Cracks (B6)
	ater Table (A2)		Aquatic Fa	una (B13)			Drain	nage Patterns (B10)
X Saturation	, ,			tic Plants (B	14)		_	Season Water Table (C2)
1 —	larks (B1)			Sulfide Odor				fish Burrows (C8)
	nt Deposits (B2)			hizospheres		a Roots (ration Visible on Aerial Imagery (C9)
1 —	posits (B3)			f Reduced				ted or Stressed Plants (D1)
	at or Crust (B4)		_	n Reduction				morphic Position (D2)
	oosits (B5)			Surface (C7		00113 (00)	_	-Neutral Test (D5)
	on Visible on Aeria	Imageny (B7)		Vell Data (D			_ 1/10	reduction (55)
_	Vegetated Conca			lain in Rema				
Field Observ	-	ve Suriace (Bo		all III Kelli	aiks/			
I		. X	D #- //-	5				
Surface Water			Depth (inc			-		
Water Table			Depth (inc			-		
Saturation Pr		Yes No	Depth (inc	:hes): <u>0</u>		Wetla	ind Hydrology	Present? Yes X No
(includes cap			laring well pariels	hataa nravi	ious inen	antiona) ii	f available:	
Describe Rec	corded Data (strea	n gauge, monii	toring well, aerial p	notos, prev	ious insp	ections), ii	r avallable:	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)		City/Co	ounty: Mac	coupin Sampling Date: 12/1/				/1/10
Applicant/Owner: UPRR	State: IL Sampling Point: KS24					324		
Investigator(s): KR, KT, KS		Section, Township, Range: <u>32, T10N, R7W</u>						
Landform (hillslope, terrace, etc.): ROADSIDE DITC	CH		Local	relief (c	concave, convex, non	e): <u>CON</u>	CAVE	
			-89.9009	66		Datum	DD (NAD	83)
Soil Map Unit Name: 46A HERRICK SILT LOAM,	0-2% SLOPE	S			NWI class	ification:	NONE	
Are climatic / hydrologic conditions on the site typical for	or this time of ye	ar? Ye	s_ X	No	(If no, explain in	n Remarks	i.)	
Are Vegetation, Soil, or Hydrology	significantly	disturb	ed?	Are "N	ormal Circumstances	s" present	? YesX	_ No
Are Vegetation, Soil, or Hydrology	naturally pro	blemat	ic?	(If nee	ded, explain any ans	wers in Re	emarks.)	
SUMMARY OF FINDINGS - Attach site m	ap showing	samı	pling po	int lo	cations, transec	ts, imp	ortant feat	ures, etc.
Hydrophytic Vegetation Present? Yes X	No							
Hydric Soil Present? Yes X	No		ls the San	npled A				
Wetland Hydrology Present? Yes X	No		within a W	Vetland	l? Yes	<u>×</u> ,	lo	
Remarks:								
WETLAND KS_W1 - KS_W5. PEMA. SAMPI SIMILAR CHARACTERISTICS THROUGHOL								.S_W2.
VEGETATION - Use scientific names of pla	ints.							
Trace Streetures (Bleet sines	Absolute		nant Indic		Dominance Test we	orksheet:		
<u>Tree Stratum</u> (Plot size:) 1	% Cover				Number of Dominan That Are OBL, FAC\		2	(A)
2					Total Number of Dor	minant		
3					Species Across All S		3	(B)
4					Percent of Dominant	Species		
5					That Are OBL, FAC	N, or FAC:	67	(A/B)
Sapling/Shrub Stratum (Plot size:	, —	= Tota	Cover	-	Prevalence Index w	orksheet	:	
1					Total % Cover o	ıf:	Multiply b	y:
2.					OBL species		x 1 =	
3					FACW species		x 2 =	
4					FAC species		x 3 =	
5					FACU species		x 4 =	
5	30	= Total	l Cover		UPL species		x 5 =	
Herb Stratum (Plot size: 5 1. Eleocharis sp.	20	VOC			Column Totals:		(A)	(B)
Carovica	20	yes yes			Prevalence Ind	lex = R/A	=	
Festuca sp.	$\frac{30}{30}$	yes		— ŀ	Hydrophytic Vegeta			
4.				_	1 - Rapid Test fo			on
5				_	Z 2 - Dominance			
6					3 - Prevalence I	ndex is ≤3	.O1	
7					4 - Morphologica	al Adaptati	ions1 (Provide	supporting
8.							a separate sh	-
9.					Problematic Hyd	Irophytic V	/egetation1 (E	xplain)
10					1			
Woody Vine Stratum (Plot size:)	100	= Tota	l Cover		¹ Indicators of hydric be present, unless d			
1					Hydrophytic			
2					Vegetation	v ¥	No	
		= Tota	l Cover		Present?	res	_ 140	
Remarks: (Include photo numbers here or on a separ	,							
Eleocharis sp. and Carex sp. are likely FAC or	wetter. Fest	uca sp	. is likely	FACL	J.			

Sampling Point:	KS24
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SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix										
(inches)	Color (moist)	%	Color (moist)	%_	_Type ¹	_Loc ²	Texture	Remarks			
0-4	10YR 4/2	70	7.5YR 6/8	30	_ <u>C</u>		Si	Ribbons 1-2 in without breaking.			
4-11	10YR 5/2	70	7.5YR 6/8	30	С	М	CL				
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.											
Hydric Soil								for Problematic Hydric Soils ³ :			
Histosol (A1) Sandy Gleyed Matrix (S4)								Prairie Redox (A16)			
Histic E	pipedon (A2)			Redox (S			Dark S	Surface (S7)			
_	istic (A3)			d Matrix (langanese Masses (F12)			
	en Sulfide (A4)			-	ineral (F1)			Shallow Dark Surface (TF12)			
_	d Layers (A5)			-	fatrix (F2)		Other	(Explain in Remarks)			
_	uck (A10) d Below Dark Surfac	o (A11)		d Matrix	(F3) face (F6)						
	ark Surface (A12)	æ (ATT)			urface (F6)	1	3Indicators	s of hydrophytic vegetation and			
_	Mucky Mineral (S1)			Depressi		,		d hydrology must be present,			
	icky Peat or Peat (S	3)		,	(/			s disturbed or problematic.			
Restrictive	Layer (if observed)	:									
Type:								· · · · · · · · · · · · · · · · · · ·			
Depth (in	ches):						Hydric Soil	Present? Yes X No			
Remarks:											
HYDROLO	GY										
	drology Indicators:	,									
			red; check all that ag	nlv)			Second	ary Indicators (minimum of two required)			
X Surface		zito io roqu	Water-Sta		vee (BQ)			, , , , , , , , , , , , , , , , , , , ,			
	ater Table (A2)		Aquatic Fa				Surface Soil Cracks (B6) Drainage Patterns (B10)				
X Saturati			True Aqua		-						
	larks (B1)		Hydrogen				X Cra	-Season Water Table (C2) yfish Burrows (C8)			
I —	nt Deposits (B2)		Oxidized F			vina Roots		uration Visible on Aerial Imagery (C9)			
1 —	posits (B3)		Presence			-	—	nted or Stressed Plants (D1)			
I —	at or Crust (B4)		Recent Iro					omorphic Position (D2)			
1	posits (B5)		Thin Muck			,	_	C-Neutral Test (D5)			
Inundati	on Visible on Aerial	Imagery (B	7) Gauge or	Well Data	a (D9)						
Sparsely	y Vegetated Concav	e Surface (B8) Other (Exp	olain in R	emarks)						
Field Obser	vations:										
Surface Wat	er Present? Y	es_X_	No Depth (in	ches): 1	-2	_					
Water Table	Present? Y	'es _X	No Depth (in	ches): <u>4</u>		_					
Saturation P			No Depth (in			Wet	land Hydrolog	y Present? Yes X No			
	pillary fringe)										
Describe Re	corded Data (stream	ı gauge, m	onitoring well, aerial	pnotos, p	revious in	spections)	, ir avaliable:				
Damester											
Remarks:											

Project/Site: SPCSL 2A (Tier 2)		City/Co	ounty: _	Macoupi	n Sampling Date: 12/1/10							
Applicant/Owner: UPRR					State: IL Sampling Point: KS25							
Investigator(s): KR, KT, KS			Section, Township, Range: S32, T10N, R7W									
Landform (hillslope, terrace, etc.): SWAL	E		Local relief (concave, convex, none): CONCAVE									
Slope (%): 0-2 Lat: 39.264298					9399	Datum: DD (NAD 83)						
Soil Map Unit Name: 50A- VIRDEN SIL	TY CLAY	LOAM, 0-2%	SLOP	ES		NWI classification: NONE						
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)												
Are Vegetation, Soil, or Hy	drology	significantly	disturb	ed?	Are "I	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			-							
Hydric Soil Present?	Yes X	No		Is the	Sampled							
Wetland Hydrology Present?	Yes X	No		within	a Wetlan	d? Yes X No						
Remarks:												
WETLAND KS_X1. PSSA/PEMA. WETLAND KS_X2 TO THE NORTH WAS IDENTIFIED SIMILARLY TO KS_X1. PH-134-N AT WETLAND X												
VEGETATION - Use scientific na	mes of pla	ants.										
		Absolute			ndicator	Dominance Test worksheet:						
Tree Stratum (Plot size:		% Cover				Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)						
2.						Total Number of Dominant						
3						Species Across All Strata: 3 (B)						
4						Percent of Dominant Species						
5						That Are OBL, FACW, or FAC: 67 (A/B)						
Sapling/Shrub Stratum (Plot size: r=15	5'		= Tota	al Cover		Prevalence Index worksheet:						
		30	yes	ol	bl	Total % Cover of: Multiply by:						
2						OBL species x 1 =						
3						FACW species x 2 =						
4						FAC species x 3 =						
5			_			FACU species x 4 =						
Herb Stratum (Plot size: r=5'	,	30	= Tota	al Cover	·	UPL species x 5 =						
Herb Stratum (Plot size: 1=3 1. Symphyotrichum sp.		20	yes			Column Totals: (A) (B)						
Spartina pectinata		$\frac{20}{70}$	yes		acw+	Prevalence Index = B/A =						
3.						Hydrophytic Vegetation Indicators:						
4.						1 - Rapid Test for Hydrophytic Vegetation						
5.						X 2 - Dominance Test is >50%						
6						3 - Prevalence Index is ≤3.01						
7						4 - Morphological Adaptations (Provide supporting						
8						data in Remarks or on a separate sheet)						
9						Problematic Hydrophytic Vegetation ¹ (Explain)						
10						¹ Indicators of hydric soil and wetland hydrology must						
Woody Vine Stratum (Plot size:)		= Tota	al Cover	·	be present, unless disturbed or problematic.						
1						Hydrophytic						
2						Vegetation Present? Yes X No						
			= Tota	al Cover	•	rieseliti ies NO						
Remarks: (Include photo numbers here	or on a sepa	arate sheet.)										

Soll Sampling Point: KS25

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)													
Depth Matrix (inches) Color (moist) % C			Color (moist)	x Feature %	_Type ¹	_Loc ²	Texture	Remarks					
(inches) 0-6	10YR 3/2	100	- Coloi (moist)		ype	LUC	S	BREAKS @ 1-2IN					
			7.5VD.5/0					BREART & 1211					
6-10	10YR 4/2	95	7.5YR 5/8	5	<u> </u>	<u> </u>	CL						
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Lydric Soil Indicators: Indicators for Problematic Hydric Soils 3:													
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Sandy Gleyed Matrix (S4) Coast Prairie Redox (A16)													
Histosol							_	Prairie Redox (A16)					
	Histic Epipedon (A2) Sandy Redox (S5)							Dark Surface (S7) Iron-Manganese Masses (F12)					
_	Black Histic (A3) Stripped Matrix (S6) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)							Very Shallow Dark Surface (TF12)					
	Lavers (A5)			-	atrix (F2)		Other (Explain in Remarks)						
_	ick (A10)			d Matrix (_	,,					
Depleted	d Below Dark Surfa	ace (A11)	X Redox	Dark Surfa	ace (F6)								
Thick Da	ark Surface (A12)		³ Indicators of hydrophytic vegetation and										
	lucky Mineral (S1)		Redox I	Depressio	ns (F8)		wetland hydrology must be present,						
	icky Peat or Peat (unless	unless disturbed or problematic.									
	Layer (if observed	1):											
Type:							Hydric Soil	Present? Yes X No No					
Depth (in	ches):						Tiyane con	1103CHL 1103 NO					
Remarks:													
HYDROLO	GY												
Wetland Hy	drology Indicator	s:											
Primary India	cators (minimum of	fone is requir	ed; check all that ap	ply)			Seconda	ary Indicators (minimum of two required)					
X Surface	Water (A1)		Water-Sta	ined Leav	res (B9)		Surf	face Soil Cracks (B6)					
	iter Table (A2)		Aquatic Fa				Drainage Patterns (B10)						
I — -								Dry-Season Water Table (C2)					
_	Water Marks (B1) Hydrogen Sulfide Odor (C1)							Crayfish Burrows (C8)					
	nt Deposits (B2)												
Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots Drift Deposits (B3) Presence of Reduced Iron (C4)								nted or Stressed Plants (D1)					
Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C								omorphic Position (D2)					
Iron Dep	osits (B5)			FAC	-Neutral Test (D5)								
Inundati	on Visible on Aeria	Imagery (B7											
Sparsely	Vegetated Conca	ve Surface (8	38) Other (Exp	olain in Re	emarks)								
Field Obser	vations:												
Surface Wat	er Present?	Yes_X_ I	No Depth (in	ches): 1		_							
Water Table	Present?	Yes_X_	No Depth (in	ches): 6									
Saturation Present? Yes X No Depth (inches): 0 Wet								Vetland Hydrology Present? Yes _X No					
(includes capillary fringe)													
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:													
Barrani													
Remarks:	14/	(O.)//											
Snipe seen	near Wetland k	λδ_X1.											

Project/Site: SPCSL 2A (Tier 2) City/Cou				City/County: Macoupin Sampling Date: 12/2/1				
Applicant/Owner: UPRR		State: IL Sampling Point: KS26						
Investigator(s): KR, KT, KS	;	Sectio	n, Tov	vnship, Ra	nge: S29, T10N, R7W			
Landform (hillslope, terrace, etc.): SWALE			L	ocal relief	(concave, convex, none):	CONC	AVE	
Slope (%): 0-2 Lat: 39.274952	ι	.ong:	-89.8	392519		Datum:	DD (NAD 83)	
Soil Map Unit Name: 46A HERRICK SILT LOAM, 0-29					NWI classifica	ation: NO	ONE	
Are climatic / hydrologic conditions on the site typical for this	time of yea	r? Ye	es_X					
Are Vegetation, Soil, or Hydrology si					"Normal Circumstances" p		_	0
Are Vegetation, Soil, or Hydrology na	aturally prob	olema	tic?	(If n	eeded, explain any answer	s in Rem	arks.)	
SUMMARY OF FINDINGS - Attach site map s				g point l	ocations, transects,	impor	tant feature	s, etc.
Hydrophytic Vegetation Present? Yes X No	o							
Hydric Soil Present? Yes No			ls the	Sample				
Wetland Hydrology Present? Yes No			withi	n a Wetla	nd? Yes X	_ No		
Remarks:								
WETLAND KS_V8. PEMA. CONTINUATION OF KS_V7. PH 135 S@ N END OF WETLAND KS_V		DKS	5_V A	PPROX	0.50 MILES NORTH C	F WET	LANDS KS_V	′1 -
VEGETATION – Use scientific names of plants.								
Tran Stratum (Blat size:	Absolute			Indicator	Dominance Test works	heet:		
<u>Tree Stratum</u> (Plot size:) 1	% Cover				Number of Dominant Sp That Are OBL, FACW, o		1	(A)
2					Total Number of Domina	ant		
3					Species Across All Strat			(B)
4		_			Percent of Dominant Sp	ecies		
5					That Are OBL, FACW, o	r FAC:	100	(A/B)
Sapling/Shrub Stratum (Plot size:)		= Tota	al Cov	er	Prevalence Index work	sheet:		
1					Total % Cover of:		Multiply by:	_
2.					OBL species	x	1 =	_
3.					FACW species	x	2 =	_
4					FAC species	x	3 =	_
5					FACU species	x	4 =	_
5		= Tota	I Cov	er	UPL species	x	5 =	_
Herb Stratum (Plot size: 5 1. Typha latifolia	100	yes		obl	Column Totals:	(A)	_ (B)
				<u> </u>	Prevalence Index	= B/A =		
3.					Hydrophytic Vegetatio			
4					1 - Rapid Test for H			
5.					X 2 - Dominance Test		-	
6					3 - Prevalence Inde	x is ≤3.0	1	
7					4 - Morphological A	daptation	ns1 (Provide sup	porting
8.					data in Remarks	or on a s	separate sheet)	
9.					Problematic Hydrop	hytic Ve	getation¹ (Explai	n)
10					4			
Woody Vine Stratum (Plot size:)	100	= Tota	al Cov	er	¹ Indicators of hydric soil be present, unless distu			nust
1		_			Hydrophytic			
2					Vegetation	¥	No	
		= Tota	al Cov	er	Present? Yes		No	
Remarks: (Include photo numbers here or on a separate s	heet.)							
Wetland KS_V8 is approx. 6-ft wide.								

SOIL Sampling Point KS26

Profile Description: (Describe to the depth	needed to document the indicator or co	nfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	c ² Texture Remarks
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix MS=Masked Sand Grains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	reduced matrix, mo-masted out a Granis.	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)	Other (Explain in Remarks)
2 cm Muck (A10)	Depleted Matrix (F3)	
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)	3to discount of books about a constant of the
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Type:	_	Hydric Soil Present? Yes X No
Depth (inches):	_	nyunc son Fresentr Tes No
Remarks:		
' '	,,	os Delineation Manual.
	7	
HYDROLOGY		
HYDROLOGY		Secondary Indicators (minimum of two required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		Secondary Indicators (minimum of two required)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	d: check all that apply) Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	d; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) X Saturation (A3)	d; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1)	d: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	d: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) — Oxidized Rhizospheres on Living R	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) coots (C3) Saturation Visible on Aerial Imagery (C9)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	d: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
HYDROLOGY Wetland Hydrology Indicators: Primary 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 apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soi	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary 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 apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
HYDROLOGY Wetland Hydrology Indicators: Primary 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)	d; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (B)	d; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (B) Field Observations:	d: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (Bit Field Observations: Surface Water Present? Yes X	d: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (Bit Field Observations: Surface Water Present? Yes X	d: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes X N Water Table Present? Yes X	d: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5)
HYDROLOGY Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes X N Water Table Present? Yes X	d: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Coots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Is (C6) Geomorphic Position (D2)
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (Bit image) Field Observations: Surface Water Present? Water Table Present? Yes X N Saturation Present? Yes X N	d; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (Bitel Observations: Surface Water Present? Yes N Water Table Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	d; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
HYDROLOGY Wetland Hydrology Indicators: Primary 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) Field Observations: Surface Water Present? Yes X N Water Table Present? Yes X N Saturation Present? Yes X N (includes capillary fringe)	d; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (Bitel Observations: Surface Water Present? Yes N Water Table Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	d; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X 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 (Bitel Observations: Surface Water Present? Yes N Water Table Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, mon	d; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living R Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 2 Depth (inches): 2	Secondary Indicators (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) Is (C6) Geomorphic Position (D2) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No

Project/Site: SPCSL 2A (Tier 2)	Cit	y/County: Macoupi	<u>n</u>	Sampling Date: 12/2/10
Applicant/Owner: UPRR			State: <u>IL</u>	Sampling Point: KS27
Investigator(s): KR, KT, KS	Se	ction, Township, Rar	nge: S32, T10N, R7W	
Landform (hillslope, terrace, etc.): SWALE/ROAD DI	тсн	Local relief	(concave, convex, none):	CONCAVE
Slope (%): 0-2 Lat: 39.269665	Loc	ng: <u>-89.895768</u>		Datum: DD (NAD 83)
Soil Map Unit Name: 50A VIRDEN SILTY CLAY LO	DAM, 0-2% SL0	OPES	NWI classifica	ation: NONE
Are climatic / hydrologic conditions on the site typical for	this time of year?			
Are Vegetation, Soil, or Hydrology	_ significantly dis	turbed? Are "	Normal Circumstances" pr	resent? Yes X No No
Are Vegetation, Soil, or Hydrology	_ naturally proble	ematic? (If ne	eded, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing s	ampling point lo	ocations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes X	No			
	No	is the Sampled		
Wetland Hydrology Present? Yes X	No	within a Wetlan	d? Yes	No
Remarks: WETLAND KS_X2. PSSA/PEMA. CONTINUA	TION OF WET	I AND KO V4 C		A OF LIDI ANDS CIMILAD
CHARACTERISTICS.	TION OF WEI	LAND NS_X1. S	EPARATED BY AREA	OF OPLANDS. SIMILAR
VEGETATION – Use scientific names of plan	nts.			
Tree Stratum (Plot size:)		lominant Indicator species? Status	Dominance Test works	
1			Number of Dominant Sp That Are OBL, FACW, o	
2			Total Number of Domina	
3			Species Across All Strat	ta: <u>1</u> (B)
4			Percent of Dominant Sp	
5		Total Cover	That Are OBL, FACW, o	or FAC: 100 (A/B)
Sapling/Shrub Stratum (Plot size:)			Prevalence Index work	
1				Multiply by:
2				x 1 =
3				x 2 = x 3 =
4				x 4 =
5		Total Cover		x =
Herb Stratum (Plot size: 5		I otal Cover		(A)(B)
1. Carex sp.	<u>100</u> <u></u>	/es		
2			Prevalence Index	
3			Hydrophytic Vegetatio	
4				lydrophytic Vegetation
5			2 - Dominance Test	
6			3 - Prevalence Inde	
7			data in Remarks	daptations ¹ (Provide supporting or on a separate sheet)
8			Problematic Hydrop	ohytic Vegetation ¹ (Explain)
9				
Woody Vine Stratum (Plot size:)	400	Total Cover	¹ Indicators of hydric soil be present, unless distu	and wetland hydrology must rbed or problematic.
1			Hydrophytic	
2			Vegetation	v
	=	Total Cover	Present? Yes	×No
Remarks: (Include photo numbers here or on a separa	-			
Carex sp. is likely FACW or OBL. No shrubs pr	esent at Samp	le Point.		

Sampling	Point:	KS27
Sampling	Point:	NOZI

SOIL

	ription: (Describ	e to the dep	th needed to docur			or confirm	the absence o	f indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Featur %	es Type ¹	Loc²	Texture	Remarks
0-2	10YR 3/2	100	Color (moist)	70		LOC	rexture	Remarks
2-6	10YR 3/2	40	10YR 6/8	10	_ _ _			
2-6	10YR 4/2	- 10 40	10111 0/0	10	- c			
				10		IVI		
6-12	10YR 3/1	100		_				
		epletion, RM	=Reduced Matrix, M	S=Maske	ed Sand G	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil I								or Problematic Hydric Soils ³ :
Histosol					fatrix (S4)			rairie Redox (A16)
	pipedon (A2)			Redox (S d Matrix (rface (S7)
Black His	n Sulfide (A4)				(36) lineral (F1)			nganese Masses (F12) allow Dark Surface (TF12)
	Layers (A5)				Matrix (F2)			Explain in Remarks)
2 cm Mu				d Matrix			00101 (0	April III Normality
_	Below Dark Surfa	ace (A11)			face (F6)			
	ark Surface (A12)	, ,			Surface (F7)	3Indicators	of hydrophytic vegetation and
Sandy M	lucky Mineral (S1)		Redox I	Depressi	ons (F8)	-	wetland	hydrology must be present,
5 cm Mu	cky Peat or Peat (S3)					unless o	disturbed or problematic.
Restrictive L	ayer (if observed	d):						
Type:							Undria Sail E	Present? Yes X No No
Depth (inc	ches):						Hydric Soil F	resentr resNo
Remarks:							•	
HYDROLO	GY							
Wetland Hyd	drology Indicator	s:						
			red; check all that ag	oply)			Secondar	y Indicators (minimum of two required)
Surface	Water (A1)		Water-Sta	ined Lea	ives (B9)		Surfa	ce Soil Cracks (B6)
X High Wa	ter Table (A2)		Aquatic Fa					age Patterns (B10)
X Saturation	on (A3)		True Aqua	tic Plant	s (B14)		Dry-S	Season Water Table (C2)
	arks (B1)		Hydrogen	Sulfide (Odor (C1)		Crayf	ish Burrows (C8)
	t Deposits (B2)					ing Roots (ation Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)		Presence	of Reduc	ced Iron (C	4)	Stunt	ed or Stressed Plants (D1)
Algal Ma	t or Crust (B4)		Recent Iro	n Reduc	tion in Tille	d Soils (C6) X Geon	norphic Position (D2)
	osits (B5)		Thin Muck					Neutral Test (D5)
Inundation	on Visible on Aeria	l Imagery (B	7) Gauge or	Well Dat	a (D9)			
Sparsely	Vegetated Conca	ve Surface (B8) Other (Exp	olain in R	Remarks)			
Field Observ	vations:							
Surface Water	er Present?	Yes	No X Depth (in	ches): _		_		
Water Table	Present?	Yes	No Depth (in	ches): 8		_		
Saturation Pr	resent?		No Depth (in			Wetla	and Hydrology	Present? Yes X No
(includes cap	illary fringe)							
Describe Red	corded Data (strea	m gauge, m	onitoring well, aerial	photos, p	previous in	spections),	if available:	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)		City/Co	ounty:	Macoupir	า	Samplin	ig Date: 12/2	210
Applicant/Owner: UPRR		State: IL Sampling Point: KS28						28
Investigator(s): KR, KT, KS	{	Sectio	n, Tow	nship, Ran	ge: <u>S6, T9N, R7W</u>			
Landform (hillslope, terrace, etc.): ROAD DITCH			Lo	ocal relief (concave, convex, none)	CONC	AVE	
			-89.9	21070		Datum:	DD (NAD 8	3)
Soil Map Unit Name: 17A KEOMAH SILT LOAM, 0-2%	6 SLOPES	3			NWI classific	cation: N	ONE	
Are climatic / hydrologic conditions on the site typical for this	time of yea	r? Ye	es _X	No	(If no, explain in F	(emarks.)		
Are Vegetation, Soil, or Hydrology si	gnificantly of	disturb	ed?	Are *N	Normal Circumstances"	present?	Yes X	No
Are Vegetation, Soil, or Hydrologyn	aturally prob	olema	tic?	(If nee	eded, explain any answe	rs in Rem	narks.)	
SUMMARY OF FINDINGS - Attach site map	showing	sam	pling	point lo	cations, transects	, impoi	tant featu	res, etc.
Hydrophytic Vegetation Present? Yes X No	·	П						
			Is the	Sampled .				
Wetland Hydrology Present? Yes X No			withir	n a Wetlan	d? Yes X	No		
Remarks:		DO 11		T TD 4 01	(OIDE DITOLINATIO	011.411.4	_	
WETLAND KS_Y1 - KS_Y6. PEMA. SERIES OF CHARACTERISTICS. PH 144-SW AT WETLAND		DS II	N EAS	STIRACI	KSIDE DITCH WITH	SIMILA	К	
VEGETATION – Use scientific names of plants.								
Tree Stratum (Plot size:)	Absolute % Cover			Indicator	Dominance Test work			
1				Status	Number of Dominant S That Are OBL, FACW,		2	_ (A)
2					Total Number of Domin		2	
3					Species Across All Stra	ata:	2	(B)
5					Percent of Dominant S		100	(A (D)
0			al Cove	er	That Are OBL, FACW,	or FAC:	100	(A/B)
Sapling/Shrub Stratum (Plot size:)		1010	0010		Prevalence Index wo	ksheet:		
1					Total % Cover of:			
2					OBL species			
3					FACW species			
4		_	—	——	FACULARIANIA			
5					FACU species			
Herb Stratum (Plot size: r=5')	30	= Tota	al Cove	er	UPL species Column Totals:			
1. Scirpus atrovirens	80	yes		obl	Column Totals.	(^		(B)
2. Carex sp.	20	yes			Prevalence Index	= B/A =		
3					Hydrophytic Vegetati	on Indica	tors:	
4					1 - Rapid Test for			1
5					X 2 - Dominance Te			
6					3 - Prevalence Ind			
7					4 - Morphological / data in Remark	Adaptation	ns¹ (Provide s separate she	supporting et)
8				——	Problematic Hydro			-
9			—	——		priyate ve	gotation (Exp	, idin'i
10	400			——	¹ Indicators of hydric so	il and wet	land hydrolog	y must
Woody Vine Stratum (Plot size:)	100	= Tota	al Cove	er	be present, unless dist	urbed or p	roblematic.	,,
1					Hydrophytic			
2				——	Vegetation Present? Ye	s X	No	
Remarks: (Include photo numbers here or on a separate s		= Tota	al Cove	er				-
Carex sp. is likely FAC or wetter.	neet.)							
Carex Sp. is linely FAC OF Weller.								

Sampling Point:	KS28
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0	\sim		
3	u	ч	ᆫ

epth nches)	Color (moist)	%	Color (moist)	- %	Type1	_Loc ²	Texture	Remarks
-5	10YR 4/2	100	-	-	-	-	S	RIBBONS 1IN
-8	10YR 6/3	80	7.5 YR 5/8	20	_ <u>C</u>		C	BEFORE BREAKING
-16	10YR 6/4	80	7.5 YR 5/8	20	_ <u>C</u>		L	11
/pe: C=Co	oncentration, D=D	epletion, RM	I=Reduced Matrix, N	S=Maske	ed Sand Gr	ains.	2Location	: PL=Pore Lining, M=Matrix.
dric Soil I	ndicators:							for Problematic Hydric Soils ³ :
_ Histosol	(A1)		Sandy	Gleyed M	fatrix (S4)		Coast	Prairie Redox (A16)
-	ipedon (A2)			Redox (S				Surface (S7)
_ Black His	. ,			d Matrix	. ,			anganese Masses (F12)
	n Sulfide (A4)			-	lineral (F1)			Shallow Dark Surface (TF12)
_ Stratified _ 2 cm Mu	Layers (A5)				Matrix (F2)		Other	(Explain in Remarks)
-	ck (A10) I Below Dark Surfa	ace (A11)		ed Matrix Dark Sur				
	rk Surface (A12)	ace (ATT)			Surface (F7)	3Indicators	of hydrophytic vegetation and
_	lucky Mineral (S1)			Depressi		,		d hydrology must be present,
. ,	cky Peat or Peat (disturbed or problematic.
	ayer (if observed							
Туре:								- × · ·
	ches):						Hydric Soil	Present? Yes No
emarks:	· —							
DROLO	· —							
DROLOG	GY drology Indicator ators (minimum o	s :	ired; check all that a	pply)			Seconda	ary Indicators (minimum of two require
DROLOG	GY drology Indicator ators (minimum o	s :	ired; check all that a		ves (B9)			ary Indicators (minimum of two require lace Soil Cracks (B6)
DROLOG etland Hyd mary Indic Surface V High Wa	GY drology Indicator ators (minimum o	s :		ained Lea			Sur	
DROLOG etland Hyd mary Indic Surface V High Wat Saturatio	GY drology Indicator ators (minimum o Water (A1) ter Table (A2) on (A3)	s :	Water-Str Aquatic F True Aqu	ained Lea auna (B1 atic Plant	3) s (B14)		Suri	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2)
DROLOG etland Hyd mary Indic Surface \ High Wa	GY drology Indicator ators (minimum o Water (A1) ter Table (A2) on (A3)	s :	Water-St: Aquatic F True Aqu Hydroger	ained Lea auna (B1 atic Plant Sulfide (3) s (B14) Odor (C1)		Surl Drai Dry- Crai	face Soil Cracks (B6) inage Patterns (B10)
DROLOG etland Hyd mary Indic Surface V High War Saturation Water Mary	GY drology Indicator sators (minimum o Water (A1) ter Table (A2) on (A3) arks (B1) tt Deposits (B2)	s :	Water-St: Aquatic F True Aqu Hydroger Oxidized	ained Lea auna (B1 atic Plant Sulfide (Rhizosph	3) s (B14) Odor (C1) eres on Liv	-	Surf Drai Crai Crai (C3) Sati	face Soil Cracks (B6) inage Patterns (B10) -Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9)
DROLOG etland Hyd mary Indic Surface V High Wai Saturatio Water May Sedimen Drift Dep	GY drology Indicator sators (minimum o Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) losits (B3)	s :	Water-St: Aquatic F True Aqu Hydroger Oxidized Presence	ained Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc	3) s (B14) Odor (C1) eres on Liv ced Iron (C	4)	Suri Drai Crai Crai (C3) Satu Sturi	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1)
DROLOG etland Hyd mary Indic Surface V High Wat Saturatio Water Mark Sediment Drift Dep	GY Irology Indicator Lators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) t or Crust (B4)	s :	Water-St: Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc on Reduc	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille	4)	Surl Drai Dry Crai Sturl Sturl	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) emorphic Position (D2)
DROLOG etland Hyd imary Indic Surface V High War Saturatio Water Mar Sedimen Drift Dep Algal Mar Iron Dep	GY Irology Indicator ators (minimum o Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2) posits (B3) it or Crust (B4) osits (B5)	s: f one is requ	Water-Str Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir	ained Lea fauna (B1 atic Plant n Sulfide (Rhizosph of Reduc on Reduc k Surface	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille	4)	Surl Drai Dry Crai Sturl Sturl	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1)
DROLOG etland Hyd imary Indic Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Inundatio	GY Irology Indicator ators (minimum o Water (A1) ter Table (A2) on (A3) arks (B1) it Deposits (B2) it or Crust (B4) osits (B5) on Visible on Aeria	s: f one is requ	Water-Str Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc	ained Lea auna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9)	4)	Surl Drai Dry Crai Sturl Sturl	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) emorphic Position (D2)
DROLOG etland Hyd imary Indic Surface V High War Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely	GY Irology Indicator Lators (minimum o Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) losits (B3) at or Crust (B4) osits (B5) on Visible on Aeria Vegetated Conca	s: f one is requ	Water-Str Aquatic F True Aqu Hydroger Oxidized Presence Recent Ir Thin Muc	ained Lea auna (B1 atic Plant a Sulfide (Rhizosph of Reduc on Reduc k Surface	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9)	4)	Surl Drai Dry Crai Sturl Sturl	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) emorphic Position (D2)
DROLOG etland Hyd imary Indic Surface N High Water M Saturatio Water M Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely	GY drology Indicator cators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) at Deposits (B2) osits (B3) at or Crust (B4) osits (B5) on Visible on Aeria volume of Vegetated Concavations:	s: f one is requ al Imagery (E ave Surface	Water-Str Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc 37) Gauge or (B8) Other (Ex	ained Lea auna (B1 atic Plant Sulfide (Rhizosph of Reduc on Reduc k Surface Well Dat	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) demarks)	4)	Surl Drai Dry Crai Sturl Sturl	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) emorphic Position (D2)
DROLOG etland Hyd imary Indic Surface V High Water Mater Mat	GY drology Indicator lators (minimum of water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aeria vegetated Concavations: er Present?	s: f one is requal Imagery (Eave Surface	Water-St: Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gar) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant in Sulfide (Rhizosph of Reduction Reduction k Surface Well Dat splain in R	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9)	4)	Surl Drai Dry Crai Sturl Sturl	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) emorphic Position (D2)
DROLOG etland Hyd imary Indic Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observ urface Water	GY Irology Indicator ators (minimum o Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) oosits (B3) ot or Crust (B4) oosits (B5) on Visible on Aeria Vegetated Conca vations: er Present? Present?	s: If one is requal Imagery (Eave Surface Yes	Water-Sti Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc G7) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant in Sulfide (Rhizospherof Reduce in Reduce in Sulface in Well Date (Plain in Reduce in	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) Remarks)	4) d Soils (C	Suri Drai Dry- Crar (C3) Satu Sturi 6) FAC	inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2) C-Neutral Test (D5)
DROLOG etland Hyd imary Indic Surface V High Water Ma Sedimen Drift Dep Algal Ma Iron Dep Inundation Sparsely eld Observ arface Water aturation Pr	GY Irology Indicator ators (minimum o Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) oosits (B3) ot or Crust (B4) oosits (B5) on Visible on Aeria Vegetated Conca vations: er Present? Present?	s: If one is requal Imagery (Eave Surface Yes	Water-St: Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Gar) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant in Sulfide (Rhizospherof Reduce in Reduce in Sulface in Well Date (Plain in Reduce in	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) Remarks)	4) d Soils (C	Suri Drai Dry- Crar (C3) Satu Sturi 6) FAC	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) nted or Stressed Plants (D1) emorphic Position (D2)
DROLOG etland Hyd imary Indic Surface V High Wat Saturatio Water Mi Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observer ater Table of	GY drology Indicator lators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concavations: er Present? Present? ersent?	s: If one is required in the second in the s	Water-Sti Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc G7) Gauge or (B8) Other (Ex	ained Lea fauna (B1 atic Plant in Sulfide (B) Reduction	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) demarks)	4) d Soils (Co	Suri Drai Dry Crar (C3) Satu Sturi 6) FAC	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2) C-Neutral Test (D5)
DROLOG etland Hyd imary Indic Surface V High Wat Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Dep Inundatio Sparsely eld Observer ater Table of	GY drology Indicator lators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concavations: er Present? Present? ersent?	s: If one is required in the second in the s	Water-Str Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Thin Muc Gauge or (B8) Other (Ex No Depth (in No Depth (in	ained Lea fauna (B1 atic Plant in Sulfide (B) Reduction	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) demarks)	4) d Soils (Co	Suri Drai Dry Crar (C3) Satu Sturi 6) FAC	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2) C-Neutral Test (D5)
DROLOGETIAND HIGH	GY drology Indicator lators (minimum of Water (A1) ter Table (A2) on (A3) arks (B1) ot Deposits (B2) osits (B3) ot or Crust (B4) osits (B5) on Visible on Aeria Vegetated Concavations: er Present? Present? ersent?	s: If one is required in the second in the s	Water-Str Aquatic F Aquatic F True Aqu Hydroger Oxidized Presence Recent In Thin Muc Thin Muc Gauge or (B8) Other (Ex No Depth (in No Depth (in	ained Lea fauna (B1 atic Plant in Sulfide (B) Reduction	3) s (B14) Odor (C1) eres on Liv ced Iron (C tion in Tille (C7) a (D9) demarks)	4) d Soils (Co	Suri Drai Dry Crar (C3) Satu Sturi 6) FAC	face Soil Cracks (B6) inage Patterns (B10) Season Water Table (C2) yfish Burrows (C8) uration Visible on Aerial Imagery (C9) inted or Stressed Plants (D1) imorphic Position (D2) C-Neutral Test (D5)

Project/Site: SPCSL 2A (Tier 2) City/County:				unty: Macoupin Sampling Date: 1			
Applicant/Owner: UPRR		State: IL Sampling Point: KS29					
Investigator(s): KR, KT, KS		Section, Township, Range: S6, T9N, R7W					
Landform (hillslope, terrace, etc.): SWALE		ı	ocal relief (concave, convex, none): CC	ONCAVE		
Slope (%): 0-2 Lat: 39.245664	ι	Long:89.	920523	Dat	tum: DD (NAD 83))	
Soil Map Unit Name: 17A KEOMAH SILT LOAM				NWI classification	n: NONE		
Are climatic / hydrologic conditions on the site typical			_				
Are Vegetation, Soil, or Hydrology				Normal Circumstances" prese		lo	
Are Vegetation, Soil, or Hydrology	naturally prob	blematic?	(If ne	eded, explain any answers in	Remarks.)		
SUMMARY OF FINDINGS - Attach site			g point lo	cations, transects, in	nportant feature	s, etc.	
Hydrophytic Vegetation Present? Yes X	No						
Hydric Soil Present? Yes X	No	ls th	e Sampled				
Wetland Hydrology Present? YesX	No	with	in a Wetlan	d? Yes	No		
Remarks:							
WETLAND KS_Z1 - KS_Z4. PFO1A/PSSA/I CHARACTERISTICS. SEPARATED BY AR					TCH WITH SIMIL	.AR	
VEGETATION – Use scientific names of pl	lants.						
Tree Stratum (Plot size: r=30'	Absolute % Cover	Dominant Species?		Dominance Test workshe	et:		
1. Salix sp.	20	Species? yes	Status	Number of Dominant Specia		(A)	
2. Celtis sp. (dead)	5			That Are OBL, FACW, or F	AG. <u>2</u>	(^)	
Julius americana	70	yes	facw-	Total Number of Dominant	2	(B)	
4				Species Across All Strata:		(B)	
5				Percent of Dominant Specie		(A (D)	
o	0.5	= Total Cov	er er	That Are OBL, FACW, or FA	AG: 100	(A/B)	
Sapling/Shrub Stratum (Plot size:		- 10101 004	01	Prevalence Index workship	eet:		
1				Total % Cover of:	Multiply by:	_	
2				OBL species	_ x 1 =	_	
3				FACW species	_ x 2 =	_	
4				FAC species	_ x 3 =	_	
5				FACU species	_ x 4 =	_	
r=5'	:	= Total Cov	er	UPL species	_ x 5 =	_	
Herb Stratum (Plot size: r=5') 1. Polygonum sp.	100	VOS		Column Totals:	_ (A)	(B)	
		_yes		Prevalence Index = E	R/Δ =		
2				Hydrophytic Vegetation Ir			
3				1 - Rapid Test for Hydr			
4				X 2 - Dominance Test is			
5				3 - Prevalence Index is			
6				4 - Morphological Adap		norting	
7				data in Remarks or	on a separate sheet)	portang	
8 9				Problematic Hydrophyt	ic Vegetation ¹ (Expla	iin)	
10							
Woody Vine Stratum (Plot size:	100	= Total Cov	er	¹ Indicators of hydric soil and be present, unless disturbed		must	
1.				Hydrophytic			
2.				Vegetation	•		
		= Total Cov		Present? Yes	X No		
Remarks: (Include photo numbers here or on a sep							
Phalaris arundinacea observed within wetlan	ds. Polygonum	sp. is like	ely FAC or	wetter.			
		-					

Sampling Point: K	S29
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SOIL

Profile Desc	ription: (Describe	to the dep	th needed to docur	ment the	indicator	or confire	n the absence	of indicators.)
Depth	Matrix			x Feature				
(inches)	Color (moist)	%	Color (moist)	%_	_Type ¹	_Loc ²	Texture	Remarks
0-5	10YR 5/6	100	-	-	-		SCL	Layer of trackbed mat in sample
5-11	10YR 7/3	70	5YR 5/8	30	С	M	S/C/L	
l								
<u> </u>							2	
		pletion, RM:	=Reduced Matrix, M	S=Maske	d Sand Gr	ains.		: PL=Pore Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Soils ³ :
Histosol	1 /				atrix (S4)			Prairie Redox (A16)
	pipedon (A2)			Redox (S				Surface (S7)
_	stic (A3)			d Matrix (anganese Masses (F12)
	en Sulfide (A4) d Layers (A5)				ineral (F1) latrix (F2)			Shallow Dark Surface (TF12) (Explain in Remarks)
_	ick (A10)			d Matrix			_ Officer	(Explain in Remarks)
_	d Below Dark Surfac	ce (A11)		Dark Surf				
	ark Surface (A12)	oc (****)			urface (F7)	3Indicators	of hydrophytic vegetation and
_	flucky Mineral (S1)		_	Depression		,		d hydrology must be present,
	icky Peat or Peat (S	33)	_	,	, ,			disturbed or problematic.
	Layer (if observed)							
Type:								v
Depth (in	ches):						Hydric Soil	Present? Yes X No No
Remarks:								
HYDROLO	GY							
Wetland Hy	drology Indicators	:						
Primary India	cators (minimum of	one is requi	red; check all that ap	oply)			Seconda	ary Indicators (minimum of two required)
	Water (A1)		Water-Sta	ined Lea	ves (B9)		Sur	face Soil Cracks (B6)
	ater Table (A2)		Aquatic Fa	auna (B1	3)		Drai	inage Patterns (B10)
X Saturation	on (A3)		True Aqua	atic Plants	(B14)		Dry-	-Season Water Table (C2)
Water M	larks (B1)		Hydrogen	Sulfide C	dor (C1)		Cra	yfish Burrows (C8)
Sedimer	nt Deposits (B2)		Oxidized F	Rhizosph	eres on Liv	ing Roots	(C3) Sati	uration Visible on Aerial Imagery (C9)
Drift Dep	posits (B3)		Presence	of Reduc	ed Iron (C	4)	Stur	nted or Stressed Plants (D1)
Algal Ma	at or Crust (B4)		Recent Iro	n Reduct	tion in Tille	d Soils (C	6) <u>X</u> Geo	morphic Position (D2)
Iron Dep	oosits (B5)		Thin Muck	Surface	(C7)		FAC	C-Neutral Test (D5)
Inundati	on Visible on Aerial	Imagery (B	7) Gauge or	Well Data	a (D9)			
Sparsely	y Vegetated Concav	ve Surface (B8) Other (Exp	plain in R	emarks)			
Field Obser								
Surface Wat	er Present?	Yes	No Depth (in	ches):	5	_		
Water Table	Present?	Yes _X	No Depth (in	ches): <u>5</u>		_		
Saturation P		Yes _X_	No Depth (in	ches): <u>0</u>		Wet	land Hydrolog	y Present? Yes X No No
		n gauge, mo	onitoring well, aerial	photos, p	revious in:	spections),	if available:	
Damorto								
Remarks:								
MP227								
I								

Project/Site: SPCSL 2A (Tier 2)			City/Co	ounty:	Macoupii	<u>1</u>	Sampling	g Date: <u>6/13/2</u>	<u>2011 </u>
Applicant/Owner: UPRR						State: IL	Sampling	Point: KS37	•
Investigator(s): KT, KS		;	Section	n, Tov	vnship, Ran	ge: S16. T12N, R6V	V		
Landform (hillslope, terrace, etc.): RR DITC	Н			L	ocal relief (concave, convex, none)	: CONCA	4VE	
Slope (%): 0-2 Lat: 39.480043					768908		_ Datum: _	DD (NAD 83)
Soil Map Unit Name: 50A VIRDEN SILTY	CLAY LOAN	1, 0-2% S	LOPE	ES		NWI classifi	cation:		
Are climatic / hydrologic conditions on the site	typical for this	time of yea	r? Ye	s _X	No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hydrol	logy si	gnificantly o	disturb	ed?	Are "N	Normal Circumstances"	present?	Yes _X N	No
Are Vegetation, Soil, or Hydrol	logy na	turally prob	olemat	tic?	(If nee	eded, explain any answ	ers in Rema	arks.)	
SUMMARY OF FINDINGS - Attach	site map s	howing	sam	pling	g point lo	cations, transects	s, impor	tant feature	es, etc.
Hydrophytic Vegetation Present? Ye	s_X_No								
Hydric Soil Present? Ye	~				Sampled				
Wetland Hydrology Present? Ye	s_X_ No			withi	n a Wetlan	d? Yes	No.		
Remarks:	0.0 51144105			DEDI	DECCION		44 10 051		DOM.
WETLAND KS_44. PEMA. P1 N, P WETLAND MP-4 BY A SIX FOOT WIL			Eυ. 1	DEPI	RESSION	AL. WETLAND KS_	44 IS SEI	PARATED F	ROM
VEGETATION - Use scientific name	s of plants.								
Tree Stratum (Plot size:	`	Absolute % Cover			Indicator	Dominance Test wor			
1					Otatus	Number of Dominant S That Are OBL, FACW,		1	(A)
2						Total Number of Domi	nant		
3						Species Across All Str	ata:	1	_ (B)
4				_		Percent of Dominant S		100	(A.ID)
5				l Cov	 er	That Are OBL, FACW,	or FAC:	100	(A/B)
Sapling/Shrub Stratum (Plot size:)					Prevalence Index wo			
1						Total % Cover of:			
2						OBL species			
3						FACW species FAC species			
4						FACU species			
5						UPL species			
Herb Stratum (Plot size: 5')				-	Column Totals:			
1. Echinochloa crusgalli		80	yes		facw				_ (-)
2						Prevalence Inde			
3					——	Hydrophytic Vegetati			
4					——	X 1 - Rapid Test for X 2 - Dominance Te			
5						3 - Prevalence Inc			
6					——	4 - Morphological			pporting
7					——	data in Remark	s or on a s	separate sheet)
8 9						Problematic Hydro	phytic Veg	getation ¹ (Expla	ain)
10.									
Woody Vine Stratum (Plot size:		80	= Tota	l Cov	er	¹ Indicators of hydric so be present, unless dist			must
1						Hydrophytic			
2.						Vegetation	×		
			= Tota	l Cov	er	Present? Yo)s	No	
Remarks: (Include photo numbers here or o	n a separate s	heet.)							

SOIL Sampling Point KS37

Frome Description. (Describe to the dept	h needed to document the indicator or co	nfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	c ² Texture Remarks
l — — — — — — — — — — — — — — — — — — —		
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix MS=Masked Sand Grains	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:	reduced matrix, mo-masted out of aris.	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Gleyed Maint (34) Sandy Redox (S5)	Dark Surface (S7)
Black Histic (A3)	Stripped Matrix (S6)	Iron-Manganese Masses (F12)
_ ' '		Very Shallow Dark Surface (TF12)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1)	
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)	31
Thick Dark Surface (A12)	Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	wetland hydrology must be present,
5 cm Mucky Peat or Peat (S3)		unless disturbed or problematic.
Restrictive Layer (if observed):		
Type:		Hydric Soil Present? Yes X No
Depth (inches):	_	Hydric Soil Fresent? Tes No
Remarks:		
HYDROLOGY		
HYDROLOGY Wetland Hydrology Indicators:		
Wetland Hydrology Indicators:	ed; check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1)	Water-Stained Leaves (B9)	Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2)	Water-Stained Leaves (B9) Aquatic Fauna (B13)	Surface Soil Cracks (B6) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) 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)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) 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) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) 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 R	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require X Surface Water (A1) High Water Table (A2) 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 R	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes No Saturation Present? Yes No Saturation Present? Yes No Saturation Present?	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Reference of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 1 Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) X Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Reference of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 1 Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) X Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Reference of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): 1 Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) X Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required in its image) 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 (B7) Field Observations: Surface Water Present? Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes N (includes capillary fringe) Describe Recorded Data (stream gauge, more	Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Represence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soil Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) X Crayfish Burrows (C8) oots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) s (C6) X Geomorphic Position (D2) X FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No

Project/Site: SPCSL 2A (Tier 2)		(City/C	ounty:	Macoupi	in	Sampling	Date: 6/13/2	2011
Applicant/Owner: UPRR						State: _IL			
Investigator(s): KT, KS			Sectio	n, Tov	wnship, Rar	nge: S16, T12N, R6W	1		
Landform (hillslope, terrace, etc.): RR D						(concave, convex, none):		VE	
Slope (%): 0-2 Lat: 39.48268	2	।	ong:	-89.7	768417		Datum: D	D (NAD 83)
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY LO	OAM, 0-2% S	LOP	ES		NWI classific	ation: NO	NE	
Are climatic / hydrologic conditions on the	site typical for	this time of yea	r? Y	es	No _	(If no, explain in R	(emarks.)		
Are Vegetation, Soil, or H	ydrology	significantly	disturt	oed?	Are *	Normal Circumstances" p	oresent? Y	res_X N	lo
Are Vegetation, Soil, or H	ydrology	_ naturally prol	blema	tic?	(If ne	eded, explain any answe	rs in Rema	rks.)	
SUMMARY OF FINDINGS - Att	ach site ma	ap showing	sam	pling	g point lo	ocations, transects	, import	ant feature	es, etc.
Hydrophytic Vegetation Present?	Yes X	No							
Hydric Soil Present?	YesX	No		ls the	e Sampled				
Wetland Hydrology Present?	Yes	No		withi	n a Wetlan	id? Yes	No_		
Remarks: WETLAND KS_45. PFOC/PEMC. 5 S (n end of PFOC wetland), P 6									ide). P
VEGETATION – Use scientific na	mes of plar	nts.							
Tree Stratum (Plot size:	`	Absolute % Cover			Indicator	Dominance Test work			
1		% Cover				Number of Dominant S That Are OBL, FACW,		2	(A)
2.						Total Number of Domin	ant		
3						Species Across All Stra	ata:	2	(B)
4			_			Percent of Dominant S	pecies		
5			_			That Are OBL, FACW,		100	(A/B)
Sapling/Shrub Stratum (Plot size:	,		= Tota	al Cov	er	Prevalence Index wor	ksheet:		
1						Total % Cover of:		Multiply by:	_
2.						OBL species			_
3.						FACW species	x 2	=	_
4.						FAC species	x 3	=	_
5						FACU species	x 4	=	_
r-5'			= Tota	al Cov	er	UPL species	x 5	=	_
Herb Stratum (Plot size: r=5' 1 Carex vulpinoidea)	50	VOC		obl	Column Totals:	(A)		(B)
Leptochloa fascicularis		— 50 —	yes yes		obl	Prevalence Index	= R/A =		
					ODI	Hydrophytic Vegetation			
3 4						X 1 - Rapid Test for I			
5.						X 2 - Dominance Tes			
6						3 - Prevalence Inde			
7.						4 - Morphological A	Adaptations	1 (Provide su	pporting
8						data in Remark			
9.						Problematic Hydro	phytic Vege	etation1 (Expla	ain)
10						4			
Woody Vine Stratum (Plot size:	,	100	= Tota	al Cov	er	¹ Indicators of hydric so be present, unless disti			must
1						Hydrophytic			
2.						Vegetation			
				al Cov	er	Present? Ye	s_X	No	
Remarks: (Include photo numbers here	or on a separa								
PFOC-Salix exigua dominates. Cul CHANNEL 6' WIDE, 6" DEEP. Cha						Populus deltoides. N	ONWETL	AND PORT	TION

SOIL Sampling Point: KS38

I	ription: (Describe	to the depth			ator or co	nfirm the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features % Tv	pe ¹ Loc	c ² Texture	Remarks
(Inches)	COIOI (IIIOISI)		Coloi (moist)		<u></u>	o Texture	Kemarks
							
	oncentration, D=De	pletion, RM=R	educed Matrix, MS	S=Masked San	d Grains.		n: PL=Pore Lining, M=Matrix.
Hydric Soil I							for Problematic Hydric Soils ³ :
Histosol	1 /			Gleyed Matrix (S4)		Prairie Redox (A16)
	oipedon (A2)			Redox (S5)			Surface (S7)
Black His				Matrix (S6)	(E4)		langanese Masses (F12)
	n Sulfide (A4)			Mucky Mineral			Shallow Dark Surface (TF12)
	Layers (A5)			Gleyed Matrix ((FZ)	△ Other	(Explain in Remarks)
_	ick (A10) d Below Dark Surfa	oo (A11)		d Matrix (F3) Dark Surface (F	-61		
	ark Surface (A12)	ce (ATT)	_	d Dark Surface (r	,	3Indicators	s of hydrophytic vegetation and
_	fucky Mineral (S1)			epressions (F			d hydrology must be present,
	icky Peat or Peat (§	:3)	Nedox t	repressions (r	0)		s disturbed or problematic.
	Layer (if observed					diffess	distance of problematic.
" —			_			Hydric Soil	Present? Yes X No No
Depth (inc	ches):		_				
Remarks:							
HYDROLO	GY						
Wetland Hyd	drology Indicators	:					
Primary Indic	ators (minimum of	one is required	f; check all that ap	ply)		Seconda	ary Indicators (minimum of two required)
Surface	Water (A1)		Water-Stai	ned Leaves (B	9)	Sur	face Soil Cracks (B6)
High Wa	iter Table (A2)		Aquatic Fa	una (B13)		Dra	inage Patterns (B10)
X Saturation				tic Plants (B14)	_	-Season Water Table (C2)
1 —	arks (B1)			Sulfide Odor (0			yfish Burrows (C8)
	nt Deposits (B2)			hizospheres o		nots (C3) Sat	uration Visible on Aerial Imagery (C9)
1 —	oosits (B3)			of Reduced Iro			nted or Stressed Plants (D1)
	at or Crust (B4)			n Reduction in			omorphic Position (D2)
1	osits (B5)		_	Surface (C7)	rinca com		C-Neutral Test (D5)
I — ·	on Visible on Aerial	Imageny (B7)	_	Well Data (D9)		- 170	ontoural rost (50)
I —	Vegetated Concav			lain in Remark			
Field Observ	-	re Surface (Bo	Other (EXP	all III Kellian	.5/		
			D # //-				
Surface Water			Depth (inc				
Water Table			Depth (inc				
Saturation Pr		Yes No	Depth (inc	:hes): <u>0</u>	\	Wetland Hydrolog	y Present? Yes X No
(includes cap		m aauga manit	taring well parials	hotos proviou	o incocatio	ne) if available:	
Describe Rec	corded Data (strear	n gauge, monii	toring well, aerial p	notos, previou	is inspectio	ons), if available:	
Remarks:							

Project/Site: SPCSL 2A (Tier 2)		c	City/County	/: Macoupi	<u>in</u>	Sampling D	Date: 6/13/2011	
Applicant/Owner: UPRR					State: <u>IL</u>	Sampling P	oint: KS39	
Investigator(s): KT, KS		s	Section, To	wnship, Rai	nge: S4, T12N, R6W			
Landform (hillslope, terrace, etc.): SWAL	_E			Local relief	(concave, convex, none):	CONCAV	<u>′E</u>	
Slope (%): 0-2 Lat: 39.51206		L	.ong: <u>-89</u>	.762098		Datum: DE) (NAD 83)	
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY L				NWI classific	ation:		
Are climatic / hydrologic conditions on the	site typical fo	r this time of yea	r? Yes _	X No_	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or H	ydrology	significantly d	listurbed?	Are *	Normal Circumstances"	resent? Ye	es_X No	
Are Vegetation, Soil, or H	ydrology	naturally prob	olematic?	(If ne	eded, explain any answe	rs in Remark	ks.)	
SUMMARY OF FINDINGS - Att	ach site m	ap showing	samplin	g point k	ocations, transects	, importa	nt features, et	tc.
Hydrophytic Vegetation Present?	Yes_X	No						\neg
Hydric Soil Present?	Yes X	No	ls th	ne Sampled				
Wetland Hydrology Present?	Yes X	No	with	nin a Wetlan	id? Yes X	No		
Remarks:								\neg
WETLAND KS_46A (PFOA) & KS_								
END PEMC WETLAND). DEPRES	SSIONAL. (Sample Point I	MP 9 and	d Sample F	Point KS 39 were take	n in Wetla	nd KS_46A.)	
VEGETATION - Use scientific na	mes of pla	nts.						
r-30'		Absolute		Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size: r=30')	<u>% Cover</u> . 100		Status facw	Number of Dominant S	pecies		
1. Acer saccharinum			yes		That Are OBL, FACW,	or FAC:	(A)	
2					Total Number of Domin			
3					Species Across All Stra	ıta: 2	(B)	
4					Percent of Dominant S	pecies		
5		400			That Are OBL, FACW,	or FAC: 1	00 (A/B	3)
Sapling/Shrub Stratum (Plot size:			= Total Co	ver	Prevalence Index wor	ksheet:		\dashv
1					Total % Cover of:		Multiply by:	
2.					OBL species			
					FACW species			
3								
4 5					FACU species			
o			= Total Co	ver	UPL species			
Herb Stratum (Plot size: r=5')		Total Go	***	Column Totals:			ا ه
1. Toxicodendron radicans		20	yes	fac+			(5)	´
2. bare ground		80			Prevalence Index	= B/A =		
3					Hydrophytic Vegetation	on Indicator	s:	
4					1 - Rapid Test for I		Vegetation	
5					X 2 - Dominance Tes			
6					3 - Prevalence Ind			
7					4 - Morphological /	\daptations ¹	(Provide supportin	ng
8					data in Remark			
9					Problematic Hydro	pnytic Veget	ation (Explain)	
10					1			
		20=	= Total Co	ver	¹ Indicators of hydric so be present, unless distr			
Woody Vine Stratum (Plot size:								\neg
1					Hydrophytic			
2					Vegetation Present? Ye	s_X_ 1	No	
Remarks: (Include photo numbers here	or on a core		= Total Co	ver				\dashv
, ,		,	or forcet	احمالهما	along tracks. Other a	nagica in a	ludo: Corov	
PEMC wetland dominated by Scirp brevior (FAC), Juncus tenuis (FAC				o welland	along tracks. Other s	Peries IIICI	uue. Calex	

Sampling Point:	KS39
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o	\sim			
J	u	1	ᆫ	

Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the	indicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo	x Feature				
(inches)	Color (moist)	%	Color (moist)	%_	_Type ¹	_Loc ²	Texture	Remarks
0-5	10YR 4/2	100	2.5YR 5/8	25	С	M	SCL	
5-12	10YR 3/1							Reddish ballast material.
12-16	10YR 4/2							
12-10	10111 4/2							
17	tti D-D	olotion DM-	Dadwood Motric M	C-Masks			21	DI - Dara Linia - Mattatria
Hydric Soil	oncentration, D=Dep	pletion, RM=	Reduced Matrix, Ma	S=Maske	d Sand Gr	ains.	Location	: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
			O and a	21	-t-: (O.1)			•
Histosol				Gleyed Ma				Prairie Redox (A16)
	pipedon (A2)			Redox (St			_	surface (S7)
Black Hi	n Sulfide (A4)			d Matrix (3 Mucky Mi	neral (F1)		_	anganese Masses (F12) hallow Dark Surface (TF12)
	Layers (A5)			-	atrix (F2)			(Explain in Remarks)
_	ick (A10)			d Matrix (_ Olifer	(Explain in Kemarks)
_	Below Dark Surfac	se (A11)		Dark Surf				
	ark Surface (A12)	20 (111)	_		urface (F7)	3Indicators	of hydrophytic vegetation and
_	lucky Mineral (S1)		X Redox			,		d hydrology must be present,
	icky Peat or Peat (S	(3)		- op. 000.0	(1 0)			disturbed or problematic.
	ayer (if observed)	-					T	
Type:	, , , , , , , , , , , , , , , , , , , ,							
Depth (inc			_				Hydric Soil	Present? Yes X No No
Remarks:								
HYDROLO	GY							
Wetland Hyd	drology Indicators	:						
Primary India	ators (minimum of	one is requir	ed; check all that ap	oply)			Seconda	ary Indicators (minimum of two required)
Surface	Water (A1)		X Water-Sta	ined Leav	res (B9)		Surf	ace Soil Cracks (B6)
High Wa	ter Table (A2)		Aquatic Fa	auna (B13	3)		Drai	nage Patterns (B10)
Saturation	on (A3)		True Aqua	tic Plants	(B14)		Dry-	Season Water Table (C2)
Water M	arks (B1)		Hydrogen					yfish Burrows (C8)
	nt Deposits (B2)		Oxidized F			ing Roots		uration Visible on Aerial Imagery (C9)
Drift Dep	osits (B3)		Presence					nted or Stressed Plants (D1)
Algal Ma	it or Crust (B4)		Recent Iro	n Reduct	ion in Tille	d Soils (C		morphic Position (D2)
Iron Dep	osits (B5)		Thin Muck	Surface	(C7)	,		-Neutral Test (D5)
Inundation	on Visible on Aerial	Imagery (B7) Gauge or	Well Data	(D9)			
X Sparsely	Vegetated Concav	e Surface (B						
Field Obser								
Surface Wate	er Present?	/es N	loX Depth (in	ches):				
Water Table			lo X Depth (in					
Saturation Pr			lo X Depth (in				and Hydrolog	y Present? Yes X No
(includes cap		res r	o Deptii (iii	cries)		_ ••••	and Hydrolog	y Fresent? Tes No
	corded Data (stream	n gauge, mo	nitoring well, aerial	photos, p	revious ins	spections),	if available:	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)	City/0	County: Macoupin	<u>1</u>	Sampling Date: 6/13/2011
Applicant/Owner: UPRR			State: <u>IL</u>	Sampling Point: KS40
Investigator(s): KT, KS	Secti	on, Township, Ran	ge: S4, T12N, R6W	
Landform (hillslope, terrace, etc.): DITCH		Local relief (concave, convex, none):	CONCAVE
	Long	-89.760267		Datum: DD (NAD 83)
Soil Map Unit Name: 43A AND 50A			NWI classifica	ation:
Are climatic / hydrologic conditions on the site typical for the	his time of year? Y	es_XNo	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology				resent? Yes X No No
Are Vegetation, Soil, or Hydrology	naturally problem	atic? (If nee	eded, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS - Attach site map			cations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes X	No			
	No	Is the Sampled		
Wetland Hydrology Present? YesX	No	within a Wetlan	d? Yes	No
Remarks:				(1 1 0 - 1 1. 1. 1. 1.
WETLAND KS_47A & KS_47B. PFO1A/PEMC. PHOTO 12N (S END OF WETLAND). SHORT U				
VEGETATION – Use scientific names of plant	s.			
Tree Stratum (Plot size: r=30')		ninant Indicator	Dominance Test works	sheet:
1. Acer saccharinum	30 yes	s facw	Number of Dominant Sp. That Are OBL, FACW, of	
2				
3.			Total Number of Domina Species Across All Strat	2
4.				
5			Percent of Dominant Sp That Are OBL, FACW, of	
	20	tal Cover		
Sapling/Shrub Stratum (Plot size:)			Prevalence Index work	
1			Total % Cover of:	
2		I		x 1 =
3		I		x 2 =
4				x 3 =
5				x 4 =
Herb Stratum (Plot size: r=5')	= To	tal Cover		x 5 =
1 Leersia oryzoides	60 ye:	s obl	Column Totals:	(A) (B)
Carex sp.	40 ye:	— — I	Prevalence Index	= B/A =
3			Hydrophytic Vegetatio	n Indicators:
4.			1 - Rapid Test for H	ydrophytic Vegetation
5			2 - Dominance Test	
6		I	3 - Prevalence Inde	
7			4 - Morphological A	daptations ¹ (Provide supporting
8		I		or on a separate sheet)
9			Problematic Hydrop	hytic Vegetation ¹ (Explain)
10			Undinators of budge sail	and wattend budgetons awat
Woody Vine Stratum (Plot size:)	100 = To	tal Cover	be present, unless distu	and wetland hydrology must rbed or problematic.
1			Hydrophytic	
2			Vegetation	. X No
		tal Cover	Present? Yes	NO
Remarks: (Include photo numbers here or on a separate	,			
Photo 13N (S end of wetland continued). Carex	sp. is likely FAC	W or OBL.		

Soll Sampling Point: KS40

l		e to the depth	needed to docun		tor or conf	irm the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features % Tvr	e ¹ Loc ²	Texture	Remarks
(inches)	Color (moist)		Color (Illoist)		<u> </u>	rexture	Remarks
l 							
		pletion, RM=R	Reduced Matrix, MS	S=Masked Sand	d Grains.		PL=Pore Lining, M=Matrix.
Hydric Soil I							for Problematic Hydric Soils ³ :
Histosol				Sleyed Matrix (S	64)		Prairie Redox (A16)
	pipedon (A2)			Redox (S5)			urface (S7)
Black His				Matrix (S6)	=43		anganese Masses (F12)
	n Sulfide (A4)			Mucky Mineral (hallow Dark Surface (TF12)
	Layers (A5)			Bleyed Matrix (I	-2)	△ Other (Explain in Remarks)
_	ck (A10)	(444)		d Matrix (F3)	6)		
	Below Dark Surfa	ce (A11)		ark Surface (F	,	3Indicators	of hydrophytic vegetation and
_	ark Surface (A12)			d Dark Surface			of hydrophytic vegetation and I hydrology must be present,
	lucky Mineral (S1) cky Peat or Peat (631	Redox L	epressions (F8)		disturbed or problematic.
	ayer (if observed					unless	disturbed of problematic.
		-					
			_			Hydric Soil	Present? Yes X No No
Depth (inc	ches):		_			.,,	
Remarks:							
HYDROLO	GY						
Wetland Hyd	drology Indicators	\$:					
Primary Indic	ators (minimum of	one is require	d; check all that ap	ply)		Seconda	ry Indicators (minimum of two required)
× Surface	Water (A1)		Water-Stai	ned Leaves (B	9)	Surfa	ace Soil Cracks (B6)
	ter Table (A2)		Aquatic Fa	-	,		nage Patterns (B10)
Saturation	, ,			tic Plants (B14)			Season Water Table (C2)
I —	arks (B1)			Sulfide Odor (C			rfish Burrows (C8)
	t Deposits (B2)			hizospheres or	-		ration Visible on Aerial Imagery (C9)
_	osits (B3)			of Reduced Iron			ited or Stressed Plants (D1)
I — ·	t or Crust (B4)		_	n Reduction in			morphic Position (D2)
	osits (B5)		_	Surface (C7)	rinca cons (-Neutral Test (D5)
	on Visible on Aeria	Imageny (B7)	_	Well Data (D9)			ricular rest (50)
_	Vegetated Conca			lain in Remarks	-1		
Field Observ	9	ve Suriace (Bo	5) Other (Exp	iain in Remark	*/		
l		. X	D - # 6	1			
Surface Water			Depth (inc		—		
Water Table			Depth (inc				
Saturation Pr		Yes No	Depth (inc	:hes):	w	etland Hydrology	Present? Yes X No
(includes cap		m gauge mon	itoring well, aerial p	hotoe previous	inenection	e) if available:	
Describe Rec	corded Data (Sirea	n gauge, mon	itoring well, aeriai p	priotos, previous	sinspection	s), ii avallable.	
Remarks:							

Project/Site: SPCSL 2A (Tier 2)		(City/Co	ounty: Macou	ıpin	Sampling Date	6/16/2011
Applicant/Owner: UPRR					State: <u> L</u>	Sampling Point	KS62
Investigator(s): KT, KS		;	Section	n, Township, R	tange: S35, T11N, R7W	1	
Landform (hillslope, terrace, etc.): SLIGH	HTLY ROLLI	NG PLAIN		Local relie	ef (concave, convex, none):	CONCAVE	
Slope (%): 0-2 Lat: 39.34815	9		Long: _	-89.842274		Datum: DD (N	NAD 83)
Soil Map Unit Name: 46A HERRICK S	ILT LOAM, C)-2% SLOPE	S		NWI classific	ation: NONE	
Are climatic / hydrologic conditions on the	site typical for	this time of yea	ar? Ye	s X No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hy	ydrology	_ significantly	disturb	ed? Are	e "Normal Circumstances" p	oresent? Yes _	X No
Are Vegetation, Soil, or H	ydrology	_ naturally pro	blemat	ic? (If	needed, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS - Att	ach site ma	p showing	samı	pling point	locations, transects	, important	features, etc.
Hydrophytic Vegetation Present?	YesX	No					
Hydric Soil Present?	Yes X	No		is the Sample			
Wetland Hydrology Present?		No		within a Wetl	and? Yes	No	_
Remarks: WETLAND KS_69A & KS_69B. P 218.35.	EMF. TWO	POLYGONS	IN OI	PPOSITE TF	RACKSIDE DITCHES.	LOCATED AT	CULVERT
VEGETATION – Use scientific na	ames of plan						
Tree Stratum (Plot size:)	Absolute % Cover		nant Indicator ies? Status			
1					 Number of Dominant S That Are OBL, FACW, 		(A)
2					Total Number of Domin	ant	
3					_ Species Across All Stra	2	(B)
4					Percent of Dominant S		
5			= Tota	L Cover	- That Are OBL, FACW,	or FAC: 100	(A/B)
Sapling/Shrub Stratum (Plot size:)		- rota	COVE	Prevalence Index wor	ksheet:	
1					Total % Cover of:		iply by:
2					OBL species		
3					FACW species		
4			_		FACU species		
5			- Tota	1.00000	UPL species		
Herb Stratum (Plot size: r=5')		= Tota	l Cover	Column Totals:		
1. Typha latifolia		20	yes	obl	- Column Totals.	(^,	(5)
2. Leersia oryzoides			yes	<u>obl</u>	Prevalence Index	= B/A =	
3. Rumex altissimus		10		facw-	Hydrophytic Vegetation		
4					1 - Rapid Test for I		etation
5					2 - Dominance Tes		
6					3 - Prevalence Inde		
7					4 - Morphological A	Adaptations' (Pro s or on a separa	ovide supporting
8					Problematic Hydro		
9			_		-	priyate regetatio	(Explain)
10			_		Indicators of hydric soi	il and wetland hy	ydrology must
Woody Vine Stratum (Plot size:)	100	= Tota	l Cover	be present, unless distr		
1					_ Hydrophytic		
2					Vegetation Present? Ye	s_X_ No	
December (Include the Include			= Tota	l Cover	. 1000111		
Remarks: (Include photo numbers here	or on a separa	ite sneet.)					

Soll Sampling Point: KS62

Profile Description: (Describe to the depti	h needed to document the indicator or co	onfirm the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type ¹ Lo	oc² Texture Remarks
l — — — — — — — — — — — — — — — — — — —		
l		
¹ Type: C=Concentration, D=Depletion, RM=I	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators:		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16)
Histic Epipedon (A2)	Sandy Gleyed Matrix (34) 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 and
Sandy Mucky Mineral (S1)	Redox Depressions (F8)	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:		
I		of the 1987 Corps Delineation Manual.
HYDROLOGY		
Wetland Hydrology Indicators:		
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require	ed; check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	ed; check all that apply) Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	ed; check all that apply)	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1)	ed; check all that apply) Water-Stained Leaves (B9)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2)	ed; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) X Saturation (A3)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2)	ed; check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres on Living F	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres on Living Foundation (C4)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require Surface Water (A1) High Water Table (A2) X Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres on Living Formula (C4) Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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)	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres on Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (BField Observations: Surface Water Present? Yes N	ed: check all that apply) — Water-Stained Leaves (B9) — Aquatic Fauna (B13) — True Aquatic Plants (B14) — Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres on Living For the expension of Reduced Iron (C4) — Recent Iron Reduction in Tilled Some of Thin Muck Surface (C7) (a) Gauge or Well Data (D9) (b) Other (Explain in Remarks)	Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (BField Observations: Surface Water Present? Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes N	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres on Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Secondary Indicators (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) Secondary Indicators (minimum of two required) Acron Surface Soil Cracks (B6) Stunted (C2) Surface Soil Cracks (B6) Stunted (C2) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
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Wetland Hydrology Indicators: Primary Indicators (minimum of one is require 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 (BField Observations: Surface Water Present? Water Table Present? Yes N Saturation Present? Yes N Saturation Present? Yes N	ed: check all that apply) Water-Stained Leaves (B9) Aquatic Fauna (B13) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) X Oxidized Rhizospheres on Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Gauge or Well Data (D9) Other (Explain in Remarks) Depth (inches): Depth (inches):	Secondary Indicators (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) Secondary Indicators (minimum of two required) Acron Surface Soil Cracks (B6) Stunted (C2) Surface Soil Cracks (B6) Stunted (C2) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) FAC-Neutral Test (D5) Wetland Hydrology Present? Yes X No
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Project/Site: SPCSL 2A (Tier 2)		(City/Co	ounty:	Macoupi	<u>n</u>	Sampling	g Date: <u>6/16/</u>	2011
Applicant/Owner: UPRR						State: <u>IL</u> S	Sampling	Point: KS63	3
Investigator(s): KT, KS		;	Sectio	n, Tow	nship, Rar	nge: NE 1/4 of S10, T10)N, R7	W	
Landform (hillslope, terrace, etc.): LEVEL	_ PLAIN			L	ocal relief (concave, convex, none):	CONC	AVE	
Slope (%): 0-2 Lat: 39.332864		เ	ong:	-89.8	52510		Datum:	DD (NAD 83	3)
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY LC	OAM, 0-2% S	SLOPES NWI classification: NONE						
Are climatic / hydrologic conditions on the	site typical for	this time of yea	ır? Ye	es_X					
Are Vegetation, Soil, or Hy						Normal Circumstances" pre		Yes_X	No
Are Vegetation, Soil, or Hy	drology	_ naturally prob	blema	tic?	(If ne	eded, explain any answers	in Rem	arks.)	
SUMMARY OF FINDINGS - Atta					point lo	ocations, transects,	impor	tant featur	es, etc.
Hydrophytic Vegetation Present?	YesX_	No							
Hydric Soil Present?	~	No		Is the	Sampled				
Wetland Hydrology Present?		No		withir	n a Wetlan	d? Yes X	_ No		
Remarks:									
WETLAND KS_70A - KS_70C. PEMF. CONNECTED BY CULVERT UNDER TRACKS. ADJACENT/ABUTTING THREE FOOT WIDE INTERMITTENT RIVERINE CHANNEL.									
VEGETATION – Use scientific na	mes of plan	ts.							
Trac Stratum (Blat size:	`	Absolute % Cover			Indicator	Dominance Test works	heet:		
Tree Stratum (Plot size:		% Cover				Number of Dominant Spe That Are OBL, FACW, or		1	(A)
2.						Total Number of Domina	nt		
3						Species Across All Strata		1	_ (B)
4						Percent of Dominant Spe	cies		
5						That Are OBL, FACW, or		100	_ (A/B)
Sapling/Shrub Stratum (Plot size:)		= Tota	al Cove	er	Prevalence Index works	sheet:		
1						Total % Cover of:		Multiply by:	
2.						OBL species			
3.						FACW species	x	2 =	
4.						FAC species	x	3 =	_
5.						FACU species	x	4 =	_
, F!			= Tota	al Cove	er	UPL species	x	5 =	_
Herb Stratum (Plot size: r=5')	00				Column Totals:	(A))	(B)
1. Eleocharis sp. Leersia oryzoides			yes		obl	Description of Index	- D/A -		
Scirpus sp.		$-\frac{5}{5}$	_		obl obl	Prevalence Index =			
open water		$-\frac{3}{60}$		—	- I	1 - Rapid Test for Hy			
			_	—		Z 2 - Dominance Test			
5						3 - Prevalence Index			
6						4 - Morphological Ad			pporting
7				—		data in Remarks	or on a s	separate sheet	t)
8 9						Problematic Hydroph	ıytic Veç	getation ¹ (Expl	ain)
10									
Woody Vine Stratum (Plot size:			= Tota	al Cove	er	¹ Indicators of hydric soil a be present, unless distur			must
1						Hydrophytic			
2.						Vegetation	~		
			= Tota	al Cove	er	Present? Yes		No	
Remarks: (Include photo numbers here	or on a separa	te sheet.)							

Soll Sampling Point: KS63

I	ription: (Describe	to the depth r			dicator o	or confirm	the absence	of indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Tyne ¹	_Loc ²	Texture	Remarks
(IIICIICS)	Color (moist)		COIDI (IIIOISI)		1400		Texture	Kemarks
							2	
	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS	S=Masked S	Sand Gra	ains.		PL=Pore Lining, M=Matrix.
Hydric Soil								for Problematic Hydric Soils ³ :
Histosol	1 7			Sleyed Matr	rix (S4)		_	Prairie Redox (A16)
	pipedon (A2)			Redox (S5)				urface (S7)
_	stic (A3)			Matrix (S6				anganese Masses (F12)
	n Sulfide (A4)			Mucky Mine				hallow Dark Surface (TF12)
	Layers (A5)			Gleyed Mat			△ Other (Explain in Remarks)
_	ick (A10)	- (844)		d Matrix (F3				
	d Below Dark Surface	e (A11)	_	ark Surfac			3 _{1-dicaters}	of hudsonhulis uppotation and
_	ark Surface (A12)			d Dark Surf				of hydrophytic vegetation and hydrology must be present,
	lucky Mineral (S1) icky Peat or Peat (S	3)	Redox I	Depressions	s (FO)			disturbed or problematic.
	Layer (if observed)						uniess	disturbed or problematic.
			-				Hydric Soil	Present? Yes X No
Depth (inc	ches):		_				11,411.0 0011.1	
Remarks:								
HYDROLO	GY							
Wetland Hyd	drology Indicators:							
Primary India	cators (minimum of o	ne is required;	check all that ap	ply)			Seconda	ry Indicators (minimum of two required)
X Surface	Water (A1)		Water-Sta	ned Leaves	s (B9)		Surfa	ace Soil Cracks (B6)
	ater Table (A2)		Aquatic Fa	una (B13)			Drain	nage Patterns (B10)
Saturation			True Aqua		B14)			Season Water Table (C2)
I —	larks (B1)		Hydrogen		,			fish Burrows (C8)
	nt Deposits (B2)		Oxidized F			ina Roots (ration Visible on Aerial Imagery (C9)
1 —	posits (B3)			of Reduced				ted or Stressed Plants (D1)
	at or Crust (B4)			n Reduction		,		morphic Position (D2)
1	osits (B5)		Thin Muck			2 00113 (00	_	-Neutral Test (D5)
I — ·	on Visible on Aerial	Imageny (R7)	_	Well Data (I				redual rest (50)
I —	Vegetated Concav							
	-	e Surface (Bo)	Other (Exp	iain in Ren	iarks)			
Field Obser		. 🗴		1				
Surface Wate			Depth (in			-		
Water Table	Present? Y	'es No	Depth (in	ches):				
Saturation Pr	resent? Y	'es No	Depth (in	ches):		_ Wetla	and Hydrology	Present? Yes X No
(includes cap		dalice menit	oring well conic!	hotoe ===	vious inc	nections)	if available:	
Describe Rec	corded Data (stream	gauge, monito	oring well, aerial p	onotos, pre	vious ins	pections),	if available:	
Remarks:								

Project/Site: SPCSL 2A (Tier 2)		City/County	y: <u>Macoupi</u>	Macoupin Sampling Date: 11/2/201				
Applicant/Owner: UPRR				State: IL Sampling Point: MP4				
Investigator(s): MP		Section, To	ownship, Rar	nge: S7, T11N, R6W				
Landform (hillslope, terrace, etc.): DITCH			Local relief	(concave, convex, none):	CONCAVE			
Slope (%): 0-2 Lat: 39.415621		Long: <u>-89</u>	.795987		Datum: DD (NAD 83)			
Soil Map Unit Name: 50A VIRDEN SILTY CLAY LOAI	M, 0-2% S	SLOPES NWI classification: NONE						
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Yes_						
Are Vegetation, Soil, or Hydrology s					resent? Yes X No			
Are Vegetation, Soil, or Hydrology n				eded, explain any answer	s in Remarks.)			
SUMMARY OF FINDINGS - Attach site map				ocations, transects	, important features, etc.			
Hydrophytic Vegetation Present? Yes X N	0							
	0		he Sampled					
Wetland Hydrology Present? Yes X N	o	with	hin a Wetlan	id? Yes	No			
Remarks:								
WETLAND WIF-2. FFOTA. WEST TRACKSIDE L	WETLAND MP-2. PFO1A. WEST TRACKSIDE DITCH NORTH OF CULVERT 213.30.							
VEGETATION – Use scientific names of plants.								
Tree Stratum (Plot size: r=30')	Absolute % Cover		t Indicator Status	Dominance Test works				
1 Populus deltoides	30	yes	fac+	Number of Dominant Sp. That Are OBL, FACW, of				
2. Salix nigra	25	yes	obl	Total Number of Domina				
3				Species Across All Strat				
4				Percent of Dominant Sp	peries			
5				That Are OBL, FACW, o				
Sapling/Shrub Stratum (Plot size: r=15')	55	= Total Co	ver	Prevalence Index work	sheet:			
1. Acer sp.	20	yes		Total % Cover of:				
2.				OBL species	x 1 =			
3.				FACW species	x 2 =			
4				FAC species	x 3 =			
5					x 4 =			
Herb Stratum (Plot size: r=5')	20	= Total Co	ver		x 5 =			
1. Carex sp.	1			Column Totals:	(A) (B)			
Ambrosia trifida	5	yes	fac+	Prevalence Index	= B/A =			
3. Aster sp.	2	yes		Hydrophytic Vegetatio	n Indicators:			
4.					lydrophytic Vegetation			
5				X 2 - Dominance Test				
6				3 - Prevalence Inde				
7				4 - Morphological A	daptations ¹ (Provide supporting or on a separate sheet)			
8				I	phytic Vegetation ¹ (Explain)			
9					,,			
10		= Total Co			and wetland hydrology must			
Woody Vine Stratum (Plot size:)	<u> </u>	= Total Co	ver	be present, unless distu	rbed or problematic.			
1				Hydrophytic				
2				Vegetation Present? Yes	s_X No			
Remarks: (Include photo numbers here or on a separate s		= Total Co	ver					
Remarks: (include photo numbers here or on a separate s	sileet.)							

Sampling Point: MP4

		e to the dept	th needed to docur			or confirm	n the absence	of indicators.)			
Depth (inches)	Color (moist)	%	Color (moist)	x Feature %	Type ¹	Loc ²	Texture	Remarks			
0-14	10YR 3/1	100	7.5 YR 4/6	60	С	M	SCL	Redox 0-8"			
		epletion, RM=	Reduced Matrix, M	S=Maske	d Sand Gr	ains.		: PL=Pore Lining, M=Matrix.			
Hydric Soil	Indicators:							for Problematic Hydric Soils ³ :			
Histosol				-	atrix (S4)		_	Prairie Redox (A16)			
Histic Epipedon (A2) Sandy Redox (S5) Dark Surface (S7) Black Histic (A3) Stripped Matrix (S6) Iron-Manganese Masses (F											
								-			
Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) Stratified Layers (A5) Loamy Gleved Matrix (F2)							hallow Dark Surface (TF12) (Explain in Remarks)				
Stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (Expl 2 cm Muck (A10) Depleted Matrix (F3)							(Explain in Remarks)				
_	d Below Dark Surfa	ice (A11)									
Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Depleted Dark Surface (F7)							3Indicators	of hydrophytic vegetation and			
Sandy Mucky Mineral (S1) — Redox Depressions (F8)							wetland	d hydrology must be present,			
5 cm Mucky Peat or Peat (S3)							unless	disturbed or problematic.			
Restrictive Layer (if observed):											
Type:								- X			
Depth (inc	ches):						Hydric Soil	Present? Yes X No No			
Remarks:											
HYDROLO	GY										
Wetland Hyd	drology Indicators	s:									
Primary India	cators (minimum of	one is requir	ed; check all that ar	oply)			Seconda	ary Indicators (minimum of two required)			
Surface	Water (A1)		Water-Sta	ined Leav	ves (B9)		Surf	ace Soil Cracks (B6)			
	ater Table (A2)		Aquatic Fa		, ,		Drainage Patterns (B10)				
Saturation	, ,		True Aqua		,		Drainage Patients (B10) Dry-Season Water Table (C2)				
_	larks (B1)		Hydrogen					yfish Burrows (C8)			
	nt Deposits (B2)		Oxidized F			ing Roots		uration Visible on Aerial Imagery (C9)			
Drift Dep	posits (B3)		Presence					nted or Stressed Plants (D1)			
l .	at or Crust (B4)		Recent Iro				6) X Geo	emorphic Position (D2)			
Iron Dep	oosits (B5)		Thin Muck	Surface	(C7)		FAC	-Neutral Test (D5)			
Inundation	on Visible on Aeria	I Imagery (B7) Gauge or	Well Data	(D9)						
X Sparsely	Vegetated Conca	ve Surface (E	38) Other (Ex	olain in R	emarks)						
Field Obser	vations:										
Surface Wate	er Present?	Yes 1	No X Depth (in	ches):		_					
Water Table			No X Depth (in								
Saturation P			No X Depth (in				and Hydrology	y Present? Yes X No			
	oillary fringe)		10 0 op (_		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Describe Re	corded Data (strea	m gauge, mo	nitoring well, aerial	photos, p	revious ins	pections),	if available:				
Remarks:											

Project/Site: SPCSL 2A (Tier 2)				City/Co	ounty:	Macoupi	n Sampling	Date: 11/3/2010)	
Applicant/Owner: UPRR				State: IL Sampling Point: MP7						
Investigator(s): MP			;	Section	n, To	wnship, Rar	nge: S16, T12N, R6W			
Landform (hillslope, terrace, etc.): DITCH	1				ι	ocal relief	concave, convex, none): CONCA	VE		
Slope (%): <u>0-2</u> Lat: <u>39.47969</u>				-		769112	Datum: D	D (NAD 83)		
Soil Map Unit Name: 50A VIRDEN SIL	TY CLAY	/ LOAN	1, 0-2% S	LOPE	ES_		NWI classification: NO	NE		
Are climatic / hydrologic conditions on the	site typica	I for this	time of yea	ar? Ye	es_	No	(If no, explain in Remarks.)			
Are Vegetation, Soil, or Hy	drology _	si	gnificantly o	disturb	ed?	Are *	Normal Circumstances" present? Y	es X No _		
Are Vegetation, Soil, or Hy	drology _	na	aturally prol	blemat	tic?	(If ne	eded, explain any answers in Rema	rks.)		
SUMMARY OF FINDINGS - Atta	ach site	map s	howing	sam	plin	g point le	ocations, transects, importa	ant features, e	etc.	
Hydrophytic Vegetation Present?	Yes	No)							
Hydric Soil Present?	Yes	No			ls th	e Sampled	_			
Wetland Hydrology Present?					with	in a Wetlan	d? Yes No _			
Remarks:										
WETLAND MP-4. PEMC. THIS WETLAND WAS COMBINED WITH WETLAND KR_33. IT WAS DETERMINED TO BE ONE WETLAND.										
VEGETATION - Use scientific na	mes of p	olants.								
T 01-1 (Dist.)			Absolute			Indicator	Dominance Test worksheet:			
Tree Stratum (Plot size:			% Cover				Number of Dominant Species That Are OBL, FACW, or FAC:	5 (A		
2									′	
3							Total Number of Dominant Species Across All Strata:	5 (B)	
4							Persont of Dominant Species			
5							Percent of Dominant Species That Are OBL, FACW, or FAC: _	100 (A	/B)	
Sapling/Shrub Stratum (Plot size: r=15	5'	,		= Tota	al Cov	er er	Prevalence Index worksheet:			
1. Morus alba)		3	ves		fac		Multiply by:		
2.							OBL species x 1			
3							FACW species x 2	-		
4.							FAC species x 3	=		
5.							FACU species x 4	=		
r_E'			3	= Tota	al Cov	er	UPL species x 5	=		
Herb Stratum (Plot size: r=5' 1. Spartina pectinata)		20			foour	Column Totals: (A)	(B)	
Polygonum amphibium			20	yes		facw+_	Prevalence Index = B/A =			
Carex sp.			20 20	yes		<u>obl</u>	Hydrophytic Vegetation Indicato		_	
Panicum dichotomiflorum			20	yes		facw-	1 - Rapid Test for Hydrophytic			
5.							2 - Dominance Test is >50%			
6.							3 - Prevalence Index is ≤3.0 ¹			
7							4 - Morphological Adaptations	1 (Provide support	ting	
8							data in Remarks or on a se	eparate sheet)		
9							Problematic Hydrophytic Vege	tation¹ (Explain)		
10							1		_	
Woody Vine Stratum (Plot size:		_)	80	= Tota	al Cov	er	¹ Indicators of hydric soil and wetla be present, unless disturbed or pro		t	
1							Hydrophytic			
2							Vegetation Present? Yes X	No		
				= Tota	al Cov	er	riesentr fes	NO		
Remarks: (Include photo numbers here	or on a se	parate s	heet.)							
Carex sp. is likely FACW or OBL.										

US Army Corps of Engineers

SOIL	Sampling Point: M	1P7

Profile Desc	cription: (Describe	to the dept	th needed to docur	ment the	indicator	or confirm	n the absence of indicato	rs.)			
Depth	Matrix		Redo	x Feature	es						
(inches)	Color (moist)	%	Color (moist)	%_	_Type ¹	_Loc ²	Texture	Remarks			
0-10	10 YR 4/2	100	2.5YR 5/8	25	<u>C</u>	PL/M	<u>CL</u>				
10-14	2.5YR 7/1	100	10YR 5/6	50	С	M	CL				
l ———											
l											
¹Type: C=C	oncentration, D=De	nletion RM=	Reduced Matrix M	S=Macka	d Sand G	aine	² Location: PL=Pore	Lining M=Matrix			
Hydric Soil		piction, raw	reduced matrix, in	O-MIGSING	a cana ci	unio.	Indicators for Problem				
Histosol			Sandy (Gleved M	atrix (S4)		Coast Prairie Red				
I —	pipedon (A2)			Redox (S			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)					
Stratifie	d Layers (A5)			Gleyed M	latrix (F2)		Other (Explain in Remarks)				
_	uck (A10)			d Matrix							
	d Below Dark Surfa	ce (A11)		Dark Surf			9				
Thick Dark Surface (A12) Depleted Dark Surface (F7)							3Indicators of hydroph				
Sandy Mucky Mineral (S1) Redox Depressions (F8) 5 cm Mucky Peat or Peat (S3)							wetland hydrology				
	Layer (if observed)						unless disturbed o	r problematic.			
l _											
Type:	ah aa k		_				Hydric Soil Present?	Yes No			
_ ' '	ches):										
Remarks:											
HYDROLO	GY										
Wetland Hy	drology Indicators	:									
Primary Indi	cators (minimum of	one is requir	ed: check all that ar	oply)			Secondary Indicator	s (minimum of two required)			
	Water (A1)		Water-Sta		/es (B9)		Surface Soil Cra				
_	ater Table (A2)		Aquatic Fa					, ,			
Saturati	, ,		True Aqua	-	-		Drainage Patterns (B10) Dry-Season Water Table (C2)				
l —	farks (B1)		Hydrogen		,,		X Crayfish Burrow				
	nt Deposits (B2)		Oxidized F		, ,	ing Roots		le on Aerial Imagery (C9)			
1 —	posits (B3)		Presence					ssed Plants (D1)			
1 —	at or Crust (B4)		Recent Iro		-	-					
	posits (B5)		Thin Muck				X FAC-Neutral Te				
1 —	ion Visible on Aerial	Imagery (B7						(/			
I —	y Vegetated Concav		. — -								
Field Obser		,			,						
Surface Wat		Yes N	NoX_ Depth (in	ches):							
Water Table			No Depth (in								
Saturation P			No Depth (in			_	land Hydrology Present?	Yes X No			
	pillary fringe)	168 1	40 Deptil (iii	cries)		_ we	iand nydrology Present?	res NO			
	corded Data (stream	n gauge, mo	nitoring well, aerial	photos, p	revious in:	spections),	if available:				
Remarks:											

Project/Site: SPCSL 2A (Tier 2)			City/Co	ounty: Maco	upin	Sampling Date: 11/3	3/2010	
Applicant/Owner: UPRR					State: IL Sampling Point: MP9			
Investigator(s): MP			Section	n, Township,	wnship, Range: S4, T12N, R6W			
Landform (hillslope, terrace, etc.): DITC					ef (concave, convex, none):	CONCAVE		
Slope (%): 0-2 Lat: 39.51198			Lona:				 3)	
Soil Map Unit Name: 50A VIRDEN SIL								
Are climatic / hydrologic conditions on the								
Are Vegetation, Soil, or H					re "Normal Circumstances" p		No	
Are Vegetation, Soil, or H					needed, explain any answe			
SUMMARY OF FINDINGS - Att							res, etc.	
Hydrophytic Vegetation Present?	Yes X	No	Т					
Hydric Soil Present?	Yes X	No		Is the Samp	_			
Wetland Hydrology Present?	Yes X	No		within a Wet	land? Yes X	No		
Remarks:								
WETLAND MP-5 (labeled as KS_46A). PFOA. WETLAND MP-5 IS THE SAME WETLAND AS WETLAND KS_46A. SP MP9 AND SP KS 39 REPRESENT THE SAME WETLAND. PHOTO 225 (NE).								
VEGETATION - Use scientific na	ames of plar							
Tree Stratum (Plot size: r=30')	Absolute % Cover		inant Indicato				
1 Ulmus americana		25	yes	facw-	 Number of Dominant S That Are OBL, FACW, 6 		(A)	
2 Salix nigra		20	yes	obl			_ (//	
3. Acer saccharinum		10		facw	 Total Number of Domin Species Across All Stra 	^	(B)	
4. Celtis occidentalis				fac-	_ Species Across Air Stra	id.	_ (b)	
5. Morus alba		10		fac	Percent of Dominant Sp		(A (D)	
		 	= Tota	I Cover	 That Are OBL, FACW, or 	or FAC:	(A/B)	
Sapling/Shrub Stratum (Plot size: r=1	5'		- 1014		Prevalence Index wor	ksheet:		
1. Lonicera sp.		30	yes		Total % Cover of:	Multiply by:		
2. Quercus rubra		2		facu	OBL species	x 1 =		
3. Ulmus americana		10	yes	facw-	FACW species	x 2 =		
4					FAC species	x 3 =		
5					FACU species	x 4 =		
. 51		42	= Tota	l Cover	UPL species	x 5 =		
Herb Stratum (Plot size: r=5')	400			Column Totals:	(A)	(B)	
1. bare ground		100			-			
2						= B/A =		
3					Hydrophytic Vegetation			
4					_	Hydrophytic Vegetation	1	
5					_ _ 2 - Dollin lance 168			
6					3 - Prevalence Inde			
7					4 - Morphological A	Adaptations' (Provide s s or on a separate she	upporting et)	
8					Problematic Hydro			
9					_	prijate regetation (En	J.C.I.,	
10					Indicators of hydric soi	l and wetland hydrolog	ny must	
Woody Vine Stratum (Plot size:	`	100	= Tota	l Cover	be present, unless distu		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Woody Vine Stratum (Plot size: 1. Vitis sp.		1	yes					
2 Toxicodendron radicans		— † —	yes		 Hydrophytic Vegetation 			
2.			_	l Cover	Present? Yes	s_X No	_	
Remarks: (Include photo numbers here	or on a separa		1014	50701				
Lonicera sp. ranges from FACU to		,						

SOIL Sampling Point: MP9

Depth Matrix Redox Features Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks	
(inches) Color (moist) % Color (moist) % Type ¹ Loc ² Texture Remarks	
0-10 10 YR 5/1 100	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix.	
Hydric 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) Other (Family in Remode)	
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) Indicators of hydrophytic vegetation and	
Sandy Mucky Mineral (S1) Redox Depressions (F8) wetland hydrology must be present, 5 cm Mucky Peat or Peat (S3) unless disturbed or problematic.	
Restrictive Layer (if observed):	
Type: Hydric Soil Present? Yes X No	
Depth (inches): No	'——
Remarks:	
HYDROLOGY	
HYDROLOGY Wetland Hydrology Indicators:	
	required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two	required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Water-Stained Leaves (B9) Secondary Indicators (minimum of two Surface Soil Cracks (B6)	required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two Indicators (Minimum of In	required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) X Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2)	required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) X High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) X Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Water Marks (B1) Crayfish Burrows (C8)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) X High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) X Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imager	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) X High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) X Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imager Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two minimum of two mi	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two minimum of two mi	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) X High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) X Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imager Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Secondary Indicators (minimum of two Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two minimum of two mi	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two minimum of two mi	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) X High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) X Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imager Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Stunted or Stressed Plants (D2) Iron Deposits (B5) Thin Muck Surface (C7) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks)	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two minimum of two mi	
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two of t	y (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two minimum of two mi	y (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two of	y (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) X High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) X Saturation (A3) Drainage Patterns (B10) Water Marks (B1) X Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imager Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) X Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Dep	y (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Secondary Indicators (minimum of two minimum of two mi	y (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) X High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) X Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) X Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imager Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) FAC-Neutral Test (D5) X Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Obscribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: <td>y (C9)</td>	y (C9)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Secondary Indicators (minimum of two Surface Water (A1) Water-Stained Leaves (B9) Surface Soil Cracks (B6) X High Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10) X Saturation (A3) True Aquatic Plants (B14) Dry-Season Water Table (C2) Water Marks (B1) X Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imager Drift Deposits (B3) Presence of Reduced Iron (C4) Stunted or Stressed Plants (D1) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (D2) Inundation Visible on Aerial Imagery (B7) Gauge or Well Data (D9) FAC-Neutral Test (D5) X Sparsely Vegetated Concave Surface (B8) Other (Explain in Remarks) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Obscribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: <td>y (C9)</td>	y (C9)

Project/Site: SPCSL 2A (Tier 2)		City/County: Macoupin Sampling Date: 10/28/					
Applicant/Owner: UPRR				State: <u>IL</u>	Sampling Point: NVM43		
Investigator(s): NVM, MP	;	Section, T	ownship, Rar	nge: <u>S5, T11N, R6W</u>			
Landform (hillslope, terrace, etc.): RR DITCH DEPRESS	SION		Local relief ((concave, convex, none):	CONCAVE		
Slope (%): 0 Lat: 39.423630	ו	Long:89	9.790725		Datum: DD (NAD 83)		
Soil Map Unit Name: 50A VIRDEN SILTY CLAY LOAN	/I, 0-2% S	SLOPES NWI classification: NONE					
Are climatic / hydrologic conditions on the site typical for this	time of yea	ar? Yes_					
Are Vegetation, Soil, or Hydrology signature.					resent? Yes X No		
Are Vegetation, Soil, or Hydrology na				eded, explain any answer	s in Remarks.)		
SUMMARY OF FINDINGS - Attach site map s	howing	sampli	ng point lo	ocations, transects,	important features, etc.		
Hydrophytic Vegetation Present? Yes X No							
			the Sampled				
Wetland Hydrology Present? Yes X No		wit	thin a Wetlan	d? Yes	No		
Remarks:			,				
WETLAND NVM_16. PEMA. ISOLATED. HYDRO	JLUG I I	5 WEAN	٠.				
VEGETATION – Use scientific names of plants.							
Tree Stratum (Plot size:)	Absolute		nt Indicator ? Status	Dominance Test works	sheet:		
1				Number of Dominant Sp That Are OBL, FACW, o			
2.				Total Number of Domina			
3				Species Across All Strat	0		
4				Percent of Dominant Sp	ecies		
5				That Are OBL, FACW, o			
Sapling/Shrub Stratum (Plot size:)		= Total C	over	Prevalence Index work	sheet:		
1				Total % Cover of:			
2.					x 1 =		
3.				FACW species	x 2 =		
4				FAC species	x 3 =		
5					x 4 =		
Herb Stratum (Plot size: r=5')		= Total C	over		x 5 =		
1. Carex sp.	50	ves		Column Totals:	(A) (B)		
2.				Prevalence Index	= B/A =		
3 Eleocharis compressa	50	yes	facw	Hydrophytic Vegetation	n Indicators:		
Apocynum cannabinum	10		fac	_ :	lydrophytic Vegetation		
5. Silphium laciniatum	5		upl	X 2 - Dominance Test			
6				3 - Prevalence Inde			
7				4 - Morphological A	daptations ¹ (Provide supporting or on a separate sheet)		
8					hytic Vegetation ¹ (Explain)		
9					Try to regulation (Explain)		
10	115			¹ Indicators of hydric soil	and wetland hydrology must		
Woody Vine Stratum (Plot size:)	113	= Total C	over	be present, unless distu	rbed or problematic.		
1				Hydrophytic			
2				Vegetation	. X No		
		= Total C	over	Present? Yes	, NO		
Remarks: (Include photo numbers here or on a separate s	heet.)						
PHOTO 71-SW. Carex sp. is likely FAC or wetter.							

SOIL Sampling Point: NVM43

Profile Des	cription: (Describe	to the depth	needed to docu	ment th	e indicator	or confirm	n the absence	of indicators.)			
Depth	Matrix		Red	ox Featu	ires						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹ _	_Loc ²	Texture	Remarks			
0-8	10YR 3/1	100					SiL	LOTS OF ROCK AND			
8-16	2.5YR 2.5/1	100	7.5YR 4/4					GRAVEL THRU LAYER			
¹Type: C=C	oncentration, D=Dep	lation DM-E	Paducad Matrix N	AS=Mack	ed Sand Gr		2l contion	: PL=Pore Lining, M=Matrix.			
	Indicators:	iletion, rivi-r	veduced matrix, iv	io-iviasi	ieu Sanu Gre	all io.		for Problematic Hydric Soils ³ :			
Histoso			Sandy	Gleved	Matrix (S4)			Prairie Redox (A16)			
_	pipedon (A2)			Redox (Dark Surface (S7)				
_	Black Histic (A3) Stripped Matrix (S6)					Dark Surface (57) Iron-Manganese Masses (F12)					
1 —	Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1)						hallow Dark Surface (TF12)				
	d Layers (A5)				Matrix (F2)			(Explain in Remarks)			
_	uck (A10)			ed Matri	x (F3)						
	d Below Dark Surfac	e (A11)			ırface (F6)						
Thick Dark Surface (A12) Depleted Dark Surface (F7)						³ Indicators of hydrophytic vegetation and					
	Sandy Mucky Mineral (S1) Redox Depressions (F8)							d hydrology must be present,			
	ucky Peat or Peat (S						unless	disturbed or problematic.			
l _	Layer (if observed):										
Type:			_				Hydric Soil	Present? Yes X No			
Depth (in	iches):		_				11,411.000.1				
Remarks:											
HYDROLO	GY										
Wetland Hy	drology Indicators:										
1	cators (minimum of c		d: check all that a	nnlv)			Seconda	ary Indicators (minimum of two required)			
	Water (A1)	nio io rogano			aves (B9)			, , , , , , , , , , , , , , , , , , , ,			
	ater Table (A2)		Aquatic F				Surface Soil Cracks (B6)				
1	ion (A3)		True Aqu				Drainage Patterns (B10) Dry-Season Water Table (C2)				
_	Marks (B1)		_		Odor (C1)			yfish Burrows (C8)			
	nt Deposits (B2)				heres on Livi	ing Poots		uration Visible on Aerial Imagery (C9)			
_	posits (B3)			-	iced Iron (C4	_		nted or Stressed Plants (D1)			
ı —	at or Crust (B4)		_		ction in Tilled	-		emorphic Position (D2)			
	posits (B5)					2 30113 (00		C-Neutral Test (D5)			
_	ion Visible on Aerial	magani (R7)	Thin Muc Gauge or					-ivedital rest (D5)			
ı —	y Vegetated Concav										
Field Obser		e Suriace (Do	5) Other (E)	kpiairi iri	rtemarks)						
		N	Depth (ii								
						-					
Water Table			Depth (i			-		~			
Saturation P		esN	Depth (i	nches): _	10 16"	_ Wetl	and Hydrolog	y Present? Yes No			
	pillary fringe) ecorded Data (stream	gauge, mon	itoring well, aerial	l photos.	previous ins	pections).	if available:				
Docomoo iii	oorada bata (ondan	gaage, mon	ntorning from, dornar	priotoo,	provious mo	pootionoy,	ii draiidolo.				
Remarks:											
Ixomaiks.											

Project/Site: SPCSL 2A (Tier 2)		City/County	Macoup	in	Sampling Date: 10/28/2010		
Applicant/Owner: UPRR				Sampling Point: NVM44			
Investigator(s): NVM, MP		Section, Township, Range: S5, T11N, R6W					
Landform (hillslope, terrace, etc.): RR DITCH DEPRES	SION		Local relief	(concave, convex, none):	CONCAVE		
Slope (%): 0 Lat: 39.424284			790299		Datum: DD (NAD 83)		
Soil Map Unit Name: 50A VIRDEN SILTY CLAY LOAI	M, 0-2% S	LOPES		NWI classific	ation: NONE		
Are climatic / hydrologic conditions on the site typical for this	s time of yea	ar? Yes	No _	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hydrology s	ignificantly	disturbed?	Are *	Normal Circumstances" p	oresent? Yes X No		
Are Vegetation, Soil, or Hydrology n	aturally pro	blematic?	(If ne	eded, explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	showing	samplin	g point le	ocations, transects	, important features, etc.		
Hydrophytic Vegetation Present? Yes X N	0						
4.4	0		e Sampled				
Wetland Hydrology Present? YesX N	o	with	in a Wetlar	nd? Yes	No		
Remarks: WETLAND NVM_17A - NVM_17C. PEMA. THRE	E DOI V	CONC C	AMDLE D	OINTS NIVMAA and Ni	VM45 DEDDESENT		
WETLAND NVM_17A - NVM_17C. PEMA. THRE	IE POLIC	30NS. 3/	HIVIPLE F	OINTS INVIVI44 and IN	VIVI43 REFRESEINT		
VEGETATION – Use scientific names of plants.							
Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?		Dominance Test work			
1. Ulmus americana	5	yes	facw-	Number of Dominant S That Are OBL, FACW,			
2				Total Number of Domin			
3				Species Across All Stra			
4				Percent of Dominant Sp	pecies		
5	_			That Are OBL, FACW,			
Sapling/Shrub Stratum (Plot size:)		= Total Cov	/er	Prevalence Index wor	ksheet:		
1				Total % Cover of:	Multiply by:		
2					x 1 =		
3					x 2 =		
4					x 3 =		
5		= Total Cov			x 4 = x 5 =		
Herb Stratum (Plot size: r=5')		- Total Cov	ver		(A) (B)		
1. Carex vulpinoidea		yes	<u>obl</u>				
2. Polygonum coccineum	20	yes	obl	Prevalence Index			
3. Vitis riparia			facw-	Hydrophytic Vegetatio			
4				2 - Dominance Tes	Hydrophytic Vegetation		
5 6				3 - Prevalence Inde			
7				4 - Morphological A	Adaptations ¹ (Provide supporting		
8				data in Remarks	s or on a separate sheet)		
9.				Problematic Hydro	phytic Vegetation ¹ (Explain)		
10				1 Indicators of hydric soi	I and wetland hydrology must		
Woody Vine Stratum (Plot size:)	105	= Total Cov	/er	be present, unless distu			
1				Hydrophytic			
2		= Total Cov		Vegetation Present? Yes	s_X No		
Remarks: (Include photo numbers here or on a separate :		- 10tai C01	rei	l .			
PHOTO 72-NE	-						

SOIL Sampling Point: NVM44

Profile Des	cription: (Describe	to the depth				or confirm	n the absence	of indicators.)			
Depth	Matrix			x Feature		1 2	T	Domesto			
(inches)	Color (moist)	<u>%</u> _	Color (moist)		Type ¹	_Loc²	Texture	Remarks			
0-16	2.5YR 2.5/1	100 7	.5YR 5/8	5%	<u> </u>	<u>M</u>	SiL	LOTS OF ROCK/GRAVEL			
								THRU PROFILE REDOX ONLY			
								0-12" LAYER			
	oncentration, D=Dep	oletion, RM=Re	educed Matrix, M	S=Masked	d Sand Gr	ains.		: PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :			
,	Indicators:		Condu	Claused Ma	atria (CA)			-			
Histosol (A1) Sandy Gleyed Matrix (S4)							Coast Prairie Redox (A16)				
_	Histic Epipedon (A2) Sandy Redox (S5) Black Histic (A3) Stripped Matrix (S6)							Dark Surface (S7) Iron-Manganese Masses (F12)			
_	en Sulfide (A4)				neral (F1)			Shallow Dark Surface (TF12)			
	d Layers (A5)			Gleyed M				(Explain in Remarks)			
2 cm M	uck (A10)			ed Matrix (
	d Below Dark Surfac	e (A11)	_ Redox	Dark Surfa	ace (F6)						
	ark Surface (A12))	³ Indicators of hydrophytic vegetation and							
	Mucky Mineral (S1)		Redox	Depressio	ns (F8)		wetland hydrology must be present,				
	ucky Peat or Peat (S						unless	disturbed or problematic.			
	Layer (if observed)										
Type:			_				Hydric Soil	Present? Yes X No No			
	iches):						<u> </u>				
Remarks:											
HYDROLO											
	drology Indicators										
	cators (minimum of	one is required						ary Indicators (minimum of two required)			
	Water (A1)		Water-Sta		, ,			face Soil Cracks (B6)			
1	ater Table (A2)		Aquatic Fa				Drainage Patterns (B10)				
	ion (A3)		True Aqua		,,		Dry-Season Water Table (C2)				
I —	Marks (B1)		Hydrogen					yfish Burrows (C8)			
_	nt Deposits (B2)		_			ing Roots	—	uration Visible on Aerial Imagery (C9)			
I	posits (B3)		Presence					nted or Stressed Plants (D1)			
-	at or Crust (B4)					d Soils (C6	_	omorphic Position (D2)			
_	posits (B5)	(27)	Thin Muck				FAC	C-Neutral Test (D5)			
1—	ion Visible on Aerial		Gauge or								
	y Vegetated Concav	e Surface (B8)	Other (Ex	plain in Re	emarks)						
Field Obser		/ N-	_X_ Depth (in	-1							
) 16"	-					
Water Table			Depth (in			- I		- · · · · · · ·			
Saturation F	resent? \ pillary fringe)	es No	Depth (in	ches): _L	J 16"	_ Wetl	and Hydrolog	y Present? Yes No			
	ecorded Data (stream	gauge, monit	oring well, aerial	photos, pr	revious ins	pections),	if available:				
Remarks:											
I											

Project/Site: SPCSL 2A (Tier 2)			City/C	ounty:	Macoupi	n	Sampling Dat	te: 10/28/2	:010
Applicant/Owner: UPRR						State: IL	Sampling Poi	nt: NVM46	3
Investigator(s): NVM, MP			Sectio	n, Tov	vnship, Rar	nge: S5, T11N, R6W			
Landform (hillslope, terrace, etc.): DITC	H			L	ocal relief ((concave, convex, none):	CONCAVE		
Slope (%): 0 Lat: 39.4248	49	ι	_ong:	-89.7	789709		Datum: DD ((NAD 83)	
Soil Map Unit Name: 50A VIRDEN SI	LTY CLAY LO	DAM, 0-2% S	LOP	ES		NWI classific	ation: NONE		
Are climatic / hydrologic conditions on the	e site typical for	this time of yea	ır? Y	es_X	No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or H	lydrology	_ significantly of	disturt	ed?	Are "I	Normal Circumstances" p	present? Yes	_X No	
Are Vegetation, Soil, or H	lydrology	_ naturally prob	olema	tic?	(If ne	eded, explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS - At	tach site ma	ap showing	sam	pling	g point k	ocations, transects	, important	features	, etc.
Hydrophytic Vegetation Present?	Yes X	No	\Box						
Hydric Soil Present?		No			e Sampled				
Wetland Hydrology Present?	Yes	No		withi	n a Wetlan	d? Yes	No		
Remarks: WETLAND NVM_17. PEMC. NC CP-NUM11 @ CULVERT-W-SIDE						LAND. SP NVM46 is	s within Wetla	and KR_1	5.
VEGETATION - Use scientific n	ames of plar	nts.							
Trace Street are (Diet sine)		Absolute			Indicator	Dominance Test work	sheet:		
Tree Stratum (Plot size:		% Cover				Number of Dominant S That Are OBL, FACW,			(A)
1									(^)
3.						Total Number of Domin Species Across All Stra	ant ata: 1		(B)
4.						· .			(-)
5						Percent of Dominant Sp That Are OBL, FACW,)	(A/B)
See line (Sheet) Steet on (Steet size)	,	:	= Tota	al Cov	er	Prevalence Index wor	kehoot:		
Sapling/Shrub Stratum (Plot size:						Total % Cover of:		Itinly by:	
1						OBL species			_
3.						FACW species			
4.						FAC species			
5.						FACU species			
			= Tota	al Cov	er	UPL species			
)					Column Totals:			
Leersia oryzoides Polygonum coccineum			yes		obl	December of the december of	- D/A -		
Ambrosia trifida		— <u>5</u>			obl facw	Prevalence Index Hydrophytic Vegetation			
·		_ <u> </u>			iacw	1 - Rapid Test for I			
4					——	X 2 - Dominance Tes		getation	
5									
6						3 - Prevalence Inde		rovide supr	orting
7			_			data in Remark	s or on a separ	ate sheet)	
8 9						Problematic Hydro	phytic Vegetati	on¹ (Explain	1)
10									
Woody Vine Stratum (Plot size:		440	= Tota	al Cov	er	¹ Indicators of hydric soi be present, unless dist			ust
1			_			Hydrophytic			
2						Vegetation	s_X_ No		
			= Tota	al Cov	er	Present? Ye	s No	<u>'——</u>	
Remarks: (Include photo numbers here		-							
PHOTO 74-NE-UP TRACK ALON DITCH. 77-NW	G WETLAND), 75-SE-TOW	/ARE	OS CI	JLVERT (UNDER TRACK, 76-9	3W-DOWN T	RACK SI	DE

US Army Corps of Engineers

SOIL Sampling Point: NVM46

Depth	cription: (Describe Matrix	to the dep		iox Feature		or commi	ii tile absence oi	mulcators.)				
(inches)	Color (moist)	- %	Color (moist)	%	_Type ¹	_Loc ²	Texture	Remarks				
0-8	2.5YR 2.5/2	100					SiL					
8-16	2.5YR 2.5/1	100	10YR 5/1	 15			SiL					
				_								
¹ Type: C=C	oncentration, D=De	oletion, RM=	Reduced Matrix, N	MS=Maske	d Sand G	rains.	² Location: F	PL=Pore Lining, M=Matrix.				
Hydric Soil								r Problematic Hydric Soils³:				
Histosol	(A1)		Sandy	Gleyed M	atrix (S4)		Coast Pra	airie Redox (A16)				
Histic E	pipedon (A2)		Sandy	Redox (S	5)		Dark Surface (S7)					
_	istic (A3)			ed Matrix (Iron-Manganese Masses (F12)					
	en Sulfide (A4)			y Mucky Mi				llow Dark Surface (TF12)				
_	d Layers (A5)			y Gleyed M			Other (E)	plain in Remarks)				
_	uck (A10) d Below Dark Surfac	ce (A11)		ted Matrix (Dark Surf								
	ark Surface (A12)	JC (/117)		ted Dark Si	4 2)	3Indicators of	hydrophytic vegetation and				
_	Sandy Mucky Mineral (S1) Redox Depressions (F8)							wetland hydrology must be present,				
5 cm Mu	ucky Peat or Peat (S	3)		unless disturbed or problematic.								
Restrictive	Layer (if observed)):										
Type:							Hydric Soil Pr	resent? Yes X No				
Depth (in	ches):						Hydric 30ii Fi	esentr resNo				
Remarks:												
HYDROLO	GY											
Wetland Hy	drology Indicators	:										
Primary Indi	cators (minimum of	one is requir	red; check all that a	apply)			Secondary	Indicators (minimum of two required)				
Surface	Water (A1)		Water-St	tained Leav	ves (B9)		Surfac	e Soil Cracks (B6)				
High Wa	ater Table (A2)		Aquatic F	Fauna (B13	3)			ge Patterns (B10)				
Saturati			_	uatic Plants				eason Water Table (C2)				
	farks (B1)			n Sulfide O				sh Burrows (C8)				
_	nt Deposits (B2)			Rhizosphe				tion Visible on Aerial Imagery (C9)				
	posits (B3)			e of Reduc			_	d or Stressed Plants (D1)				
	at or Crust (B4)		_	ron Reduct		ed Soils (Ce		orphic Position (D2)				
	posits (B5)	I(D3	_	ck Surface	, ,		FAC-N	eutral Test (D5)				
_	ion Visible on Aerial y Vegetated Concav		. — -	r Well Data xplain in Re								
Field Obser	, ,	e ouriace (t	Other (L	xpiaiii iii ix	emarks)							
Surface Wat		/es I	No X Depth (i	inches).								
Water Table			No X Depth (i		O 16"	_						
Saturation P			No X Depth (i			- Wetl	and Hydrology P	Present? Yes X No				
	pillary fringe)		to bepair (_ '''	and riyarology r	103 III 103 III 110 III III				
Describe Re	corded Data (stream	n gauge, mo	nitoring well, aeria	l photos, p	revious in	spections),	if available:					
Remarks:												
	Y MOIST BUT NO	OT SATUR	RATED									
33.2 (21)		2 . 0 01 .	· ·									

Project/Site: SPCSL 2A (Tier 2)	Cit	ty/County:	Macoupir	<u>1</u>	Sampling Date	<u>10/28/10</u>		
Applicant/Owner: UPRR				State: IL	Sampling Point: NVM48			
Investigator(s): NVM, MP	Se	Section, Township, Range: S5, T11N, R6W						
Landform (hillslope, terrace, etc.): RR DITCH DEPRESS	ION	ι	ocal relief (concave, convex, none):	CONCAVE			
			788718		Datum: DD (N	VAD 83)		
Soil Map Unit Name: 46A HERRICK SILT LOAM, 0-2%	SLOPES			NWI classific	ation: NONE			
Are climatic / hydrologic conditions on the site typical for this	time of year?	? Yes	No	(If no, explain in Re	emarks.)			
Are Vegetation, Soil, or Hydrology sig	gnificantly dis	sturbed?	Are *N	Normal Circumstances" p	resent? Yes _	X No		
Are Vegetation, Soil, or Hydrology na	turally proble	ematic?	(If nee	eded, explain any answer	rs in Remarks.)			
SUMMARY OF FINDINGS - Attach site map s	howing s	ampling	g point lo	cations, transects	, important	features, etc.		
Hydrophytic Vegetation Present? Yes X No								
		Is the	e Sampled					
Wetland Hydrology Present? Yes X No		withi	n a Wetlan	d? Yes_X	No	_		
Remarks:	(D0			d				
WETLAND NVM-18. PFOA. SP NVM48 and SP K	R9 repres	ent the s	ame wetta	ına.				
\								
VEGETATION – Use scientific names of plants.	Absolute 1	Dan-in-ant	Indianta.	Daminana Tashusah	-1			
Tree Stratum (Plot size: r=30'	Absolute [% Cover 5	Dominant Species?		Dominance Test works Number of Dominant Sp				
1. Acer saccharinum			facw	That Are OBL, FACW, of		(A)		
2				Total Number of Domina	ant			
3			——	Species Across All Stra		(B)		
4			——	Percent of Dominant Sp				
5	75 =	Total Cov		That Are OBL, FACW, o	or FAC: 100	(A/B)		
Sapling/Shrub Stratum (Plot size: r=15')				Prevalence Index work	ksheet:			
1. Acer saccharinum			facw	Total % Cover of:				
2				OBL species				
3				FACW species FAC species				
5				FACU species				
0.		Total Cov	er er	UPL species				
Herb Stratum (Plot size:)				Column Totals:				
1			——	Describeres Index	- D/A -			
2			—— l	Prevalence Index Hydrophytic Vegetation				
3			——	1 - Rapid Test for H		etation		
5				X 2 - Dominance Tes				
6.				3 - Prevalence Inde				
7				4 - Morphological A	daptations1 (Pro	ovide supporting		
8.				data in Remarks				
9				Problematic Hydrop	inytic Vegetatio	n (Explain)		
10			——	¹ Indicators of hydric soil	and wetland h	vdrology must		
Woody Vine Stratum (Plot size:)	=	Total Cov	er	be present, unless distu				
1				Hydrophytic				
2				Vegetation	. No			
	=	Total Cov	er	Present? Yes	s No.			
Remarks: (Include photo numbers here or on a separate si	heet.)							

SOIL Sampling Point: NVM48

Profile Desc	ription: (Describe	to the dept	h needed to docum	ent the indicator	or confirm	the absence	of indicators.)	
Depth	Matrix Color (color)			x Features	12	T	Domesto	
(inches)	Color (moist) 10YR 2/1	400	Color (moist)	%Type¹	_Loc ²	Texture SI/LO	Remarks	
0-16	101K 2/1	100				31/LU		
¹Type: C=Co	oncentration, D=Der	letion, RM=	Reduced Matrix, MS	S=Masked Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.	
Hydric Soil							for Problematic Hydric Soils ³ :	
Histosol	(A1)		Sandy G	Gleyed Matrix (S4)		Coast F	Prairie Redox (A16)	
Histic Ep	pipedon (A2)		Sandy R	Redox (S5)		Dark St	urface (S7)	
Black Hi	stic (A3)		Stripped	Matrix (S6)		Iron-Ma	anganese Masses (F12)	
	n Sulfide (A4)			Mucky Mineral (F1)			hallow Dark Surface (TF12)	
	Layers (A5)			Gleyed Matrix (F2)		Other (Explain in Remarks)	
2 cm Mu	. ,			d Matrix (F3)				
	Below Dark Surfac	e (A11)		ark Surface (F6)		31	of hudenshutia constation and	
_	rk Surface (A12) lucky Mineral (S1)			d Dark Surface (F7) Depressions (F8)			of hydrophytic vegetation and hydrology must be present,	
	cky Peat or Peat (S	3)	Redox D	repressions (Fo)			disturbed or problematic.	
	ayer (if observed)					uniess	disturbed of problematic.	
Type:	ayer (ii observed)							
Depth (inc			_			Hydric Soil	Present? Yes X No	
	nes).							
Remarks:		B. B 4411				5	12-14 disappear when soil is	
moistened.							dric per Step 12b of the 1987	
HYDROLO	GY							
	drology Indicators:							
			ed; check all that app	nlu)		Secondar	ry Indicators (minimum of two required)	
		nie is requir						
	Water (A1) ter Table (A2)			ned Leaves (B9)			ace Soil Cracks (B6)	
- "	, ,		Aquatic Fa	tic Plants (B14)		_	nage Patterns (B10)	
Saturatio	, ,			Dry-Season Water Table (C2) Crayfish Burrows (C8)				
Water M				Sulfide Odor (C1)	an Basta /		, ,	
_	t Deposits (B2)		_	thizospheres on Liv of Reduced Iron (C4		—	ration Visible on Aerial Imagery (C9)	
	osits (B3)						ted or Stressed Plants (D1) morphic Position (D2)	
	t or Crust (B4) osits (B5)		_	n Reduction in Tille Surface (C7)	a Solis (Co	_	-Neutral Test (D5)	
	on Visible on Aerial	lmaganı (B7		Well Data (D9)		_ FAC	-Neutral Test (D5)	
l —	Vegetated Concav			lain in Remarks)				
Field Observ	-	e Suriace (E	Other (Exp	iairi iri Remarks)				
		es N	la X Donth (inc	sheet.				
Surface Wate					-			
Water Table			lo X Depth (inc		-		~	
Saturation Projection (includes cap		'es N	lo X Depth (inc	:hes): <u>>16"</u>	_ Wetla	and Hydrology	Present? Yes X No	
		gauge, mo	nitoring well, aerial p	hotos, previous ins	pections), i	if available:		
Remarks:								

Wetland Plant Species Lists

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orum
ım

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

Wetland KR_35	Wetland KR_36	Wetland KR_33
Conium maculatum	0 - Acer saccharinum	Carex sp.
2 - Populus deltoides	Carex sp.	Carex sp.
2 - Rumex altissimus	2 - Rumex altissimus	
$\overline{C} = 4/2 = 2.00$	$\overline{C} = 2/2 = 1.00$	$\overline{C} = 0/0 = 0.00$
$I = (2.00)(\sqrt{2}) = 2.83$	$I = (1.00)(\sqrt{2}) = 1.41$	$I = (0.00)(\sqrt{0}) = 0.00$
1 - (2.00)(42) - 2.83	1 - (1.00)(02) - 1.41	1 - (0.00)(00) - 0.00
Wetland KR_37	Wetland KR_30	Wetland KR_29
0 - Acer saccharinum	0 - Acer saccharinum	3 - Ulmus americana
2 - Populus deltoides	Carex sp.	4 - Salix nigra
Salix sp.	2 - Rumex altissimus	5 - Lemna minor
3 - Ulmus americana	3 - Ulmus americana	
$\overline{C} = 5/3 = 1.67$	$\overline{C} = 5/3 = 1.67$	$\overline{C} = 12/3 = 4.00$
I = (1.67)(v3) = 2.89	I = (1.67)(√3) = 2.89	$I = (4.00)(\sqrt{3}) = 6.93$
Wetland KR_31	Wetland KR_32	Wetland KR_26
Asclepias sp.	0 - Acer saccharinum	0 - Acer saccharinum
Carex sp.	Carex sp.	unidentified grass
4 - Spartina pectinata	0 - Juncus tenuis	
$\bar{C} = 4/1 = 4.00$	$\bar{C} = 0/2 = 0.00$	$\bar{C} = 0/1 = 0.00$
I = (4.00)(V1) = 4.00	$I = (0.00)(\sqrt{2}) = 0.00$	I = (0.00)(V1) = 0.00
Wetland KR_28	Wetland KR_27	Wetland KR_16
0 - Acer saccharinum	Carex sp.	0 - Acer saccharinum
2 - Carex vulpinoidea	·	
Polygonum sp.		
$\overline{C} = 2/2 = 1.00$	$\bar{C} = 0/0 = 0.00$	$\bar{C} = 0/1 = 0.00$
$I = (1.00)(\sqrt{2}) = 1.41$	$I = (0.00)(\sqrt{0}) = 0.00$	$I = (0.00)(\sqrt{1}) = 0.00$
		, ,,
Wetland KR_17	Wetland KR_18	Wetland KR_19
0 - Acer saccharinum	7 - Acer rubrum	0 - Acer negundo
0 - Ambrosia trifida	0 - Acer saccharinum	0 - Acer saccharinum
	7 - Acorus calamus	3 - Celtis occidentalis
	9 - Asimina triloba	4 - Elymus virginicus
	3 - Aster simplex	5 - Lemna minor
	Carex sp.	10-Morus rubra
	3 - Celtis occidentalis	2 - Populus deltoides
	5 - Fagus grandefolia	5 - Salix amygdaloides
	Maclura pomifera	3 - Ulmus americana
	5 - Muhlenbergia mexicana	
	4 - Salix nigra	
	1 - Typha latifolia	
	3 - Ulmus americana	
	2 - Vitis riparia	
$\overline{C} = 0/2 = 0.00$	¯ =49/12 = 4.08	C̄ = 32/9 = 3.56
$I = (0.00)(\sqrt{2}) = 0.00$	$I = (4.08)(\sqrt{12}) = 14.13$	I = (3.56)(v9) = 10.68
1 - (U.UU)(VZ) - U.UU	1 - (4.00)(V12) - 14.13	- (2.30)(v3) - 10.00

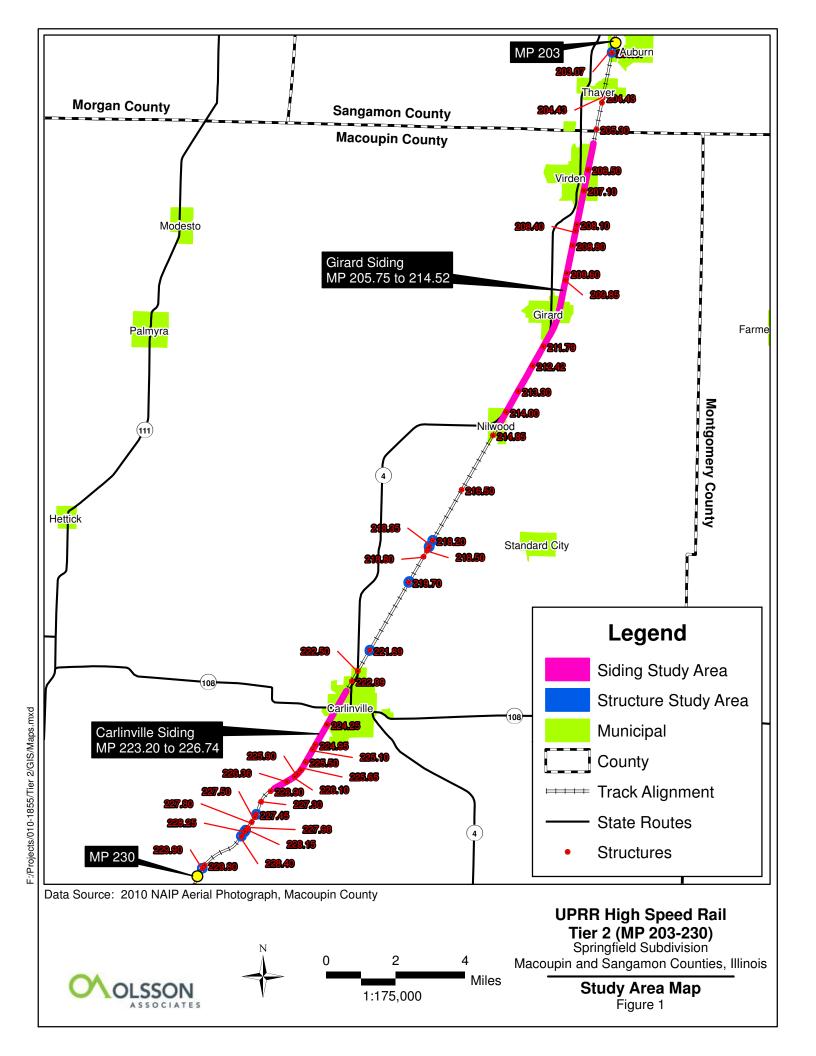
Taxa without C values were not included in the calculations (C value not applicable (non-native species)) or species classification not determined.

Wetland NVM_17A - NVM_17C	Wetland NVM_16	Wetland DP_V
2 - Carex vulpinoidea	4 - Apocynum cannabinum	1 - Phragmites australis
4 - Polygonum coccineum	Carex sp.	
3 - Ulmus americana	8 - Eleocharis compressa	
2 - Vitis riparia	5 - Silphium laciniatum	
¯ = 11/4 = 2.75	C = 17/3 = 5.67	$\overline{C} = 1/1 = 1.00$
I = (2.75)(v4) = 5.50	I = (5.67)(√3) = 9.82	I = (1.00)(V1) = 1.00
Wetland KR_20	Wetland KR_21	Wetland KR_22
1 - Typha latifolia	2 - Equisetum laevigatum 0 - Juncus tenuis	0 - Acer saccharinum
$\overline{C} = 1/1 = 1.00$	$\overline{C} = 2/2 = 1.00$	$\overline{C} = 0/1 = 0.00$
I = (1.00)(V1) = 1.00	I = (1.00)(√2) = 1.41	$I = (0.00)(\sqrt{1}) = 0.00$
Wetland KR_15	Wetland KR_23	Wetland KR_24
0 - Ambrosia trifida	0 - Ambrosia trifida	2 - Carex vulpinoidea
4 - Leersia oryzoides	4 - Carex brevior	Phalaris arundinacea
4 - Polygonum coccineum	Carex sp.	4 - Scirpus atrovirens
2 - Populus deltoides	2 - Carex vulpinoidea	1 - Typha sp.
3 - Ulmus americana	Conium maculatum	
Vitis sp.	0 - Juncus tenuis	
	2 - Rumex altissimus	
$\overline{C} = 13/5 = 2.60$	$\overline{C} = 8/5 = 1.60$	C̄ = 7/3 = 2.33
I = (2.60)(V5) = 5.81	I = (1.60)(V5) = 3.58	I = (2.33)(√3) = 4.04
Wetland KR_13	Wetland KR_12	Wetland KR_14
Asclepias sp.	2 - Equisetum laevigatum	Phalaris arundinacea
Carex sp.	10-Morus rubra	
Phalaris arundinacea	2 - Rumex altissimus	
4 - Scirpus atrovirens	4 - Solidago gigantea	
4 - Scirpus fluviatilis		
$\overline{C} = 8/2 = 4.00$	$\overline{C} = 18/4 = 4.50$	$\overline{C} = 0/0 = 0.00$
I = (4.00)(v2) = 5.66	I = (4.50)(V4) = 9.00	$I = (0.00)(\sqrt{0}) = 0.00$
Wetland KR_11	Wetland MP-2	Wetland KR_8
Carex sp.	Acer sp.	0 - Acer saccharinum
Equisetum sp.	0 - Ambrosia trifida	2 - Carex vulpinoidea
2 - Rumex altissimus	Aster sp.	Morus sp.
4 - Scirpus fluviatilis	Carex sp.	2 - Toxicodendron radicans
2 - Toxicodendron radicans	2 - Populus deltoides	
3 - Ulmus americana	4 - Salix nigra	
Urtica dioica		
¯ = 11/4 = 2.75	$\overline{C} = 6/3 = 2.00$	¯ = 4/3 = 1.33
I = (2.75)(v4) = 5.50	$I = (2.00)(\sqrt{3}) = 3.46$	I = (1.33)(v3) = 2.30
. (=1/5/(1-7) = 5150	· (=.55)(+5) = 5.45	· (1.55)(15) - 2.50

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

Wetland KR_6	Wetland KR_7	Wetland KS_69A & KS_69B
0 - Acer negundo	0 - Acer negundo	4 - Leersia oryzoides
0 - Acer saccharinum	0 - Acer saccharinum	2 - Rumex altissimus
4 - Carex lanuginosa	4 - Carex lanuginosa	1 - Typha latifolia
Morus sp.	2 - Toxicodendron radicans	
Phalaris arundinacea	3 - Ulmus americana	
2 - Rumex altissimus		
$\overline{C} = 6/4 = 1.50$	$\bar{C} = 9/5 = 1.80$	C̄ = 7/3 = 2.33
I = (1.50)(V4) = 3.00	I = (1.80)(V5) = 4.02	I = (2.33)(√3) = 4.04
Wetland KS_70A - KS_70C	Wetland KR_25A & KR_25B	Wetland KS_U
Eleocharis sp.	6 - Ranunculus sceleratus	0 - Cyperus esculentus
4 - Leersia oryzoides	1 - Typha latifolia	
Scirpus sp.		
$\overline{C} = 4/1 = 4.00$	¯ = 7/2 = 3.50	$\overline{C} = 0/1 = 0.00$
$I = (4.00)(\sqrt{1}) = 4.00$	I = (3.50)(v2) = 4.95	$I = (0.00)(\sqrt{1}) = 0.00$
Wetland KS_V1 - KS_V8	Wetland KS_X1 & KS_X2	Wetland KS_W1 - KS_W5
0 - Echinochloa crusgalli	Carex sp.	Carex sp.
0 - Panicum dichotomiflorum	5 - Cephalanthus occidentalis	Eleocharis sp.
1 - Typha latifolia	4 - Spartina pectinata Symphyotrichum sp.	Festuca sp.
¯ = 1/3 = 0.33	$\overline{C} = 9/2 = 4.50$	<u>C</u> = 0/0 = 0.00
I = (0.33)(√3) = 0.57	I = (4.50)(v2) = 6.36	$I = (0.00)(\sqrt{0}) = 0.00$
Wetland KS_Y1 - KS_Y6	Wetland KS_Z1 - KS_Z4	
Carex sp.	Celtis sp.	
4 - Scirpus atrovirens	Phalaris arundinacea	
	Polygonum sp.	
	Salix sp.	
	3 - Ulmus americana	
$\overline{C} = 4/1 = 4.00$	$\overline{C} = 3/1 = 3.00$	
$I = (4.00)(\sqrt{1}) = 4.00$	$I = (3.00)(\sqrt{1}) = 3.00$	

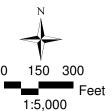
Figures Study Area Map Wetland Delineation Maps





Sample Point

Structures



UPRR High Speed Rail Girard Siding Springfield Subdivision

Springfield Subdivision Macoupin County, Illinois

Wetland Delineation Map Figure 2A



Merged Wetlands_Tier2

Track Alignment Sample Point

Structures



1:5,000

Girard Siding Springfield Subdivision

Macoupin County, Illinois

Wetland Delineation Map Figure 2B



Data Source: 2010 NAIP Aerial Photograph, Macoupin County



Study Area

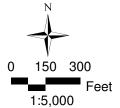
County



Merged Wetlands_Tier2



Sample Point Structures



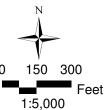
UPRR High Speed Rail Girard Siding Springfield Subdivision Macoupin County, Illinois

Wetland Delineation Map Figure 2C



Sample Point

Structures



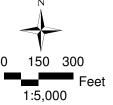
Girard Siding
Springfield Subdivision
Macoupin County, Illinois

Wetland Delineation Map Figure 2D



Sample Point

Structures



Girard Siding Springfield Subdivision

Macoupin County, Illinois

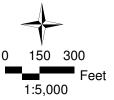
Wetland Delineation Map Figure 2E





Sample Point

Structures



Macoupin County, Illinois

Wetland Delineation Map Figure 2G

Sample Point

Structures

Wetland Delineation Map

Figure 2H

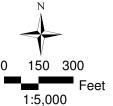
Feet

1:5,000



Sample Point





Girard Siding
Springfield Subdivision
Macoupin County, Illinois

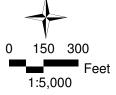
Wetland Delineation Map Figure 2I



Merged Wetlands_Tier2 Track Alignment

Sample Point

Structures

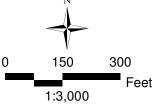


Macoupin County, Illinois

Wetland Delineation Map Figure 2J



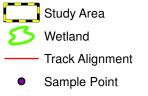
Sample PointStructures



UPRR High Speed Rail Culvert 218.35

Springfield Subdivision Macoupin County, Illinois

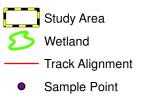
Wetland Delineation Map Figure 2



Structures

Feet 1:3,000

Wetland Delineation Map Figure 2



Structures

0 150 300 Feet UPRR High Speed Rail Culvert 221.89 Springfield Subdivision

Springfield Subdivision Macoupin County, Illinois

Wetland Delineation Map Figure 2



Data Source: 2010 NAIP Aerial Photograph, Macoupin County

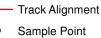


Study Area

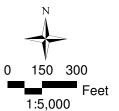
County



Wetland



Structures



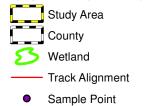
UPRR High Speed Rail Carlinville Siding Springfield Subdivision Macoupin County, Illinois

Wetland Delineation Map

Figure 2A



Data Source: 2010 NAIP Aerial Photograph, Macoupin County

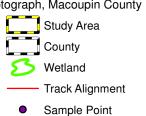


Structures

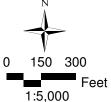
150 300 Feet 1:5,000

UPRR High Speed Rail Carlinville Siding
Springfield Subdivision
Macoupin County, Illinois

Wetland Delineation Map Figure 2B



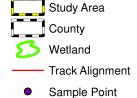
Structures



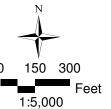
Carlinville Siding Springfield Subdivision Macoupin County, Illinois

Wetland Delineation Map Figure 2C

Structures



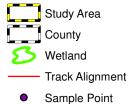
Structures



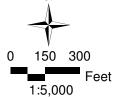
Carlinville Siding
Springfield Subdivision
Macoupin County, Illinois

Wetland Delineation Map Figure 2E

OLSSON ASSOCIATES



Structures



Carlinville Siding
Springfield Subdivision
Macoupin County, Illinois

Wetland Delineation Map

Figure 2F