Waterbody Data C	JIICCL									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Project	t					2020-06-09			sase1022e	
State:		County/	Parish:			USGS Wate	rbody Name	:		
Wisconsin		Ashland	I			None				
Company:		Crew Mo	ember Init	ials:		Latitude:			Longitude:	
Enbridge		DMP/AF	RK			46.406834			-90.825081	
Survey Type:	Centerl	ine	☐ Re-Ro	ute	□A	Access Road	□Facility	□Other		
Waterbody Type:	River		☐ Stream	1	<b>V</b> (	Ditch	☐ Swale	☐ Canal		Other
Water Appearance:	No Wat	er	☐ Clear		□Т	urbid	☐Sheen on Surface	□Surfac	e Scum □A	Algal Mats □Other
	Highly	Function	al Stream	□ M	loderately	Functional S		Functionally	Impaired Stre	am
Feature Description:	Natural		✓ Artificia	al, man-ma	ade 🗆 l	Manipulated				
Flow Regime: (check one)	Ephem	eral	☐ Interm	ittent		Perennial	☐ Connec	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	☐ Meano	lering						
Description Notes: There was no flowing wa	ter durir	ng the su	ırvey.							
Measurements										
Depth of Water: 0 f	t.	N/A□	Unknov	vn 🗆   Wa	ater Edge	to Water Ed	<b>ge:</b> 0 ft.	N/A□	OHWM Widtl	<b>n:</b> 1 ft.
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line o	on bank	□Shelv	ing	□Wrested v	egetation	□Scouring		□Water staining
		nt, matte		□Wrack	k line	□Litter and	debris	□Abrupt plan change	t community	□Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	drock	□ Во	ulder	<b>☑</b> Cobbl	le 🗆 G	Gravel	☐ Sand	<b>⊻</b> Silt/ clay	√ □ Organic
Observations										
Riparian Zone Present:	□Ye	es .	<b>U</b> 1	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	V S	Saplings/S	Shrubs	☐ Herbs				
Dominant Bank Vegetat Acer rubrum, Populus gra	<b>ion</b> (list andiden	): tata, Cor	rnus alba,	Bromus in	nermis					
Aquatic Habitats (ex: subr No aquatic habitat was o	merged or bserved	emerged a	quatic vegetal	tion, overhanç	ging banks/ro	oots, leaf packs, la	irge submerged w	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obs No aquatic organisms we	served ( ere obse	list): erved.								
Disturbances (ex: livestor The feature has been filled	ck access ed with r	s, manure ocks at t	in waterboothe easteri	dy, waste di n end.	scharge pi	pes):				
Observation Notes: The ephemeral stream fleeastern end.	ows eas	t through	n a roadsid	de ditch. T	he feature	e is artificial a	nd begins at	wase1058e. Th	ne feature flov	vs into sase1023e at the



sase1022e\_S (across)



sase1022e\_SE (downstream)



sase1022e\_W (upstream)

Waterbody Date	a Silect										
Description											
Project Name:						Date:			Waterbody	y Survey ID:	
Line 5 Relocation Pro	ject					2020-06-09			sase1024e	Э	
State:		County/	Parish:			USGS Wate	rbody Name	):			
Wisconsin		Ashland	l			None					
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude	:	
Enbridge		DMP/AF	RK			46.406780			-90.82479	6	
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		☐ Stream	n	V	Ditch	☐ Swale	☐ Canal	[	☐ Other	
Water Appearance: (check one)	✓ No Wa	ter	☐ Clear			Turbid	☐Sheen or Surface	n □Surfac	e Scum [	□Algal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☑ Highly	Function	al Stream	ı 🗆 N	Moderately	y Functional S		Functionally	Impaired St	tream	
Feature Description: (check one)	☐ Natural		✓ Artificia	al, man-m	nade 🗆	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	ittent		Perennial	☐ Connec	ting			
Sinuosity within Survey Corridor: (check one)	<b>☑</b> Straigh	t	☐ Meano	dering							
<b>Description Notes:</b> There was no flowing	water durii	ng the fie	eld survey.								
Measurements											
Depth of Water: 0	ft.	N/A□	Unknov	wn□ W	/ater Edge	e to Water Ed	lge: 0 ft.	N/A□	OHWM Wi	idth: 1 1	ft.
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line o	on bank	□Shel	ving	□Wrested v	egetation	□Scouring		□Water	staining
		nt, matte		□Wrad	ck line	□Litter and	debris	□Abrupt plan change	t communit	ty □Soil ch change	aracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	<b>☑</b> Cobb	ole 🗆 (	Gravel	□ Sand	<b>☑</b> Silt/ c	lay □	Organic
Observations											
Riparian Zone Preser	nt: 🗆 Ye	es		No							
Vegetation Layers:	<b>☑</b> Tr	ees		Saplings/	Shrubs	✓ Herbs	,				
Dominant Bank Vege Salix bebbiana, Popul	etation (list	): ides, Tox	xicodendro	on rydber	gii, Cornus	s alba, Bromu	ıs inermis				
<b>Aquatic Habitats</b> (ex: No aquatic habitat wa	submerged or s observed	emerged ad	quatic vegeta	tion, overha	nging banks/r	roots, leaf packs, l	arge submerged v	wood, riffles, deep po	ools, etc.):		
Aquatic Organisms ( No aquatic organisms	Observed were observed	(list): erved.									
<b>Disturbances</b> (ex: live The feature has been	stock acces filled with	s, manure rocks.	in waterbo	dy, waste o	discharge p	ipes):					
Observation Notes: The feature flows wes	st through a	a roadside	e ditch an	d drains i	into sase1	023e.					



sase1024e\_N (across)



sase1024e\_W (downstream)



sase1024e\_E (upstream)

valerbody Data 3	HICCL									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project						2020-06-09			sase1023e	
State:		County/	Parish:			USGS Wate	body Name			
Wisconsin		Ashland	I			None				
Company:		Crew Mo	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		DMP/AF	RK			46.406584			-90.825028	
Survey Type:	Centerl	ine	☐ Re-Ro	ute	□A	ccess Road	□Facility	□Other		
Waterbody Type:	River		✓ Strean	n		Ditch	☐ Swale	☐ Canal		Other
' '	No Wat	ter	☐ Clear		□Т	urbid	✓Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition a:	Highly	Function	nal Stream	<b>⊻</b> Mo	oderately	Functional S		☐ Functionally	Impaired Strea	am
Feature Description: 🗹	Natural		☐ Artificia	al, man-ma	ade 🗆 l	Manipulated				
Flow Regime: (check one)	Ephem	eral	☐ Interm	ittent		Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Mean	dering						
Measurements										
Depth of Water: 0.5 ft		N/A□	Unknov	wn□ <b>W</b> a	ter Edge	to Water Ed	<b>ge:</b> 2 ft.	N/A□	OHWM Widtl	n: <u>2</u> ft.
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line	on bank	□Shelvi	ng	<b>☑</b> Wrested v	egetation	□Scouring		☐Water staining
(спеск ан шасарру)		nt, matte		□Wrack	line	□Litter and o	lebris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Вє	edrock	□ Во	ulder	☐ Cobbl	le 🗆 G	iravel	□ Sand	<b>☑</b> Silt/ clay	□ Organic
Observations										
Riparian Zone Present:	□ Ye	es		No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Saplings/S	hrubs	☐ Herbs				
Dominant Bank Vegetati Fraxinus nigra, Tsuga car	<b>on</b> (list nadens	): is, Acer r	negundo, (	Circaea lut	etiana, R	ibes triste, Ca	arex gracillima	a		
Aquatic Habitats (ex: subm Standing water and wood	nerged or y debri	emerged ac S.	quatic vegeta	tion, overhang	jing banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obse No aquatic organisms we	erved ( re obse	(list): erved.								
Disturbances (ex: livestoc The feature flows underne	k access eath a r	s, manure oad thro	in waterboo ugh a culv	dy, waste dis ⁄ert.	scharge pi	pes):				
Observation Notes: The ephemeral stream flo flowing at the time of surv							standing wate	er throughout th	ne northern en	d and the feature was not



sase1023e\_W (across)



sase1023e\_N (downstream)



sase1023e\_S (upstream)

Waterbody Data s	Jiicci									
Description										
Project Name:						Date:			Waterbody \$	Survey ID:
Line 5 Relocation Project	t					2020-07-01			sasd1020e	
State:		County/	Parish:			USGS Wate	rbody Name	):		
Wisconsin		Ashland	I			UNT to Mare	engo River			
Company:		Crew M	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		DMP/AC	3G			46.406739			-90.826535	
Survey Type:	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:	River		✓ Strean	n		Ditch	☐ Swale	☐ Canal		Other
(check one)	No Wat		☐ Clear		□⊺	urbid	☐Sheen or Surface	n □Surfac	e Scum 🗆	Algal Mats □Other
Existing Condition <sup>a</sup> :	Highly	Function	nal Stream	ı 🗆 N	Moderately	/ Functional S		Functionally	Impaired Stre	am
Feature Description:  (check one)	Natural		✓ Artificia	al, man-m	nade 🗆 I	Manipulated				
Flow Regime: (check one)	Ephem	eral	☐ Interm	ittent		Perennial	☐ Connec Swale	ting		
Sinuosity within Survey Corridor: (check one)	Straigh (	t	☐ Meano	dering						
Description Notes: There was no flowing wa	iter withi	n the str	eam durin	g the surv	vey.					
Measurements										
Depth of Water: 0 1	ft.	N/A□	Unknov	wn 🗆   W	ater Edge	to Water Ed	<b>ge:</b> 0 ft.	N/A□	OHWM Widt	<b>h:</b> <u>1</u> ft.
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line	on bank	□Shelv	ving	□Wrested v	egetation	□Scouring		☐Water staining
(oroon an trut appry)		nt, matte		□Wrac	ck line	□Litter and	debris	□Abrupt plan	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	<b>☑</b> Bo	ulder	□ Cobb	le 🗆 G	Gravel	☐ Sand	☐ Silt/ cla	y 🗆 Organic
Observations										
Riparian Zone Present:	□ Үе	es	<b>V</b> 1	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>v</b> :	Saplings/S	Shrubs	✓ Herbs				
Dominant Bank Vegetat Vitis riparia, Cornus alba	t <b>ion</b> (list , Bromu	): s inermis	s, Acer ne	gundo						
Aquatic Habitats (ex: sub None.	merged or	emerged a	quatic vegeta	tion, overhan	nging banks/ro	oots, leaf packs, la	irge submerged v	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obs None.	served (	(list):								
<b>Disturbances</b> (ex: livesto The feature has been fille	ck access ed with r	s, manure ocks.	in waterboo	dy, waste d	discharge pi	pes):				
Observation Notes: The ephemeral stream fl stream eventually leads					The featur	e begins at th	e east end of	f wasd1047e ar	nd has been f	illed with rocks. The



sasd1020e\_S (across)



sasd1020e\_SE (downstream)



sasd1020e\_W (upstream)

Waterbody Date	JIICCL										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Proj	ect					2020-07-08			sasd1022p		
State:		County/	Parish:			USGS Wate	rbody Name	:			
Wisconsin		Ashland	i			UNT to Mare	engo River				
Company:		Crew Mo	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		AGG/DI	MP			46.406349			-90.826521		
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	oute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Strear	n		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance: (check one)	☐ No Wa	ter	✓ Clear		□Т	Turbid	☐Sheen on Surface	□Surfac	e Scum 🛚	Algal Mats	□Other
Existing Condition a: (check one)	✓ Highly	Function	nal Stream	n 🗆	Moderately	y Functional S		☐ Functionally	Impaired Stre	eam	
Feature Description: (check one)	☐ Natural		☐ Artifici	al, man-r	made <b>√</b> l	Manipulated					
Flow Regime: (check one)	☐ Ephem	eral	☐ Interm	nittent	✓	Perennial	☐ Connect	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	it	<b>☑</b> Mean	dering							
The feature is a small	perennial	stream fo	ollowing th	nrough a	swale with	steep banks.	The floodplai	in of the feature	e takes up th	e whole swal	e.
Measurements											
Depth of Water: 0.5	ft.	N/A□	Unkno	wn 🗆 🛚 🗸	Vater Edge	to Water Ed	<b>ge:</b> <u>4</u> ft.	N/A□	OHWM Wid	<b>th</b> : <u>8</u> ft	
OHWM Indicator:	□ CI	ear line	on bank	□She	lving	□Wrested v	egetation	Scouring		□Water s	taining
(check all that apply)		ent, matte ing veget			ck line	□Litter and		✓Abrupt plan change	t community		ıracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	oulder	□ Cobb	le 🗆 G	Gravel	<b>☑</b> Sand	☑ Silt/ cla	у 🗆 С	Organic
Observations											
Riparian Zone Presen	it: 🗹 Ye	es		No							
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Saplings	/Shrubs	☑ Herbs					
Dominant Bank Vege Fraxinus nigra, Impatio	<b>tation</b> (list ens capen	'): sis									
Aquatic Habitats (ex: s Pools.	submerged or	emerged ad	quatic vegeta	ation, overha	anging banks/ro	oots, leaf packs, la	irge submerged w	vood, riffles, deep po	ools, etc.):		
Aquatic Organisms C Insects.	bserved (	(list):									
<b>Disturbances</b> (ex: lives There is a road culver	stock acces t on the no	s, manure orthern ed	in waterbo dge of the	dy, waste feature.	discharge pi	ipes):					
<b>Observation Notes:</b> The floodplain is domi	nated by a	ı near co	mplete co	ver of Im	patiens cap	pensis. The ca	anopy consis	ts of almost ex	clusively blac	k ash.	



sasd1022p\_W (across)



sasd1022p\_N (downstream)



sasd1022p\_S (upstream)

**Open Waterbody Data Sheet** 

Open waterbody D	ala Si	ICCI						
Description								
Project Name:				Date:			Waterbody St	ırvey ID:
Line 5 Relocation Project				2020-07-02			oasd1004	
State:	Co	unty/Parish:		USGS Water	body Name	:		
Wisconsin	As	hland		None				
Company:	Cre	ew Member Initials:		Latitude:			Longitude:	
Enbridge	DN	MP/AGG		46.406233			-90.816858	
Survey Type:  (check one)	Centerline	☑ Re-Route		Access Road	□Facility	□Other		
Waterbody Type: S (check one)	Stock Pon	d ☐ Natural Pond		Fishing Pond	☐ Lake	☐ Other		
'	lo Water	☐ Clear	V	Turbid	☐Sheen on Surface	□Surfac	e Scum	gal Mats □Other
Feature Quality:	ligh	✓ Moderate		Low	Ouridoc			
Feature Description: \( \subseteq \text{N} \)	latural	Artificial, man-made		Manipulated				
Description Notes:								
Measurements								
Depth of Water: 3 ft.	N/A	A□ Unknown□	<u> </u>			<del></del>		
OHWM Indicator: (check all that apply)	☑ Clear	line on bank		□Wrested ve	egetation	□Scouring		□Water staining
		matted, or □Wrack line vegetation	е	□Litter and o	lebris	✓ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Bedro	ock   Boulder   (	Cobb	ole 🗆 G	Gravel	□ Sand	<b>☑</b> Silt/ clay	□ Organic
Observations								
Riparian Zone Present: (check one)	☐ Yes	<b>☑</b> No						
Vegetation Layers: (check all that apply)	✓ Trees	S ☑ Saplings/Shrul	bs	✓ Herbs				
Dominant Bank Vegetatio	n (list):							
**	•	remuloides, Salix interior, Pinu						
Aquatic Habitats (ex: subme Open water and emergent		erged aquatic vegetation, overhanging b on.	anks/r	oots, leaf packs, la	rge submerged w	wood, riffles, deep po	pols, etc.):	
Aquatic Organisms Obse	rved (list,	):						
Aquatic insects, frogs.								
· ·		nanure in waterbody, waste discha	irge p	ipes):	-			
The feature is an artificial s	tock pond	d located near a crop field.						
Observation Notes:								
The artificial stock pond is I	located in	n between a crop field and a ro	oad. <sup>·</sup>	The banks are	densely veg	getated.		



oasd1004\_E



oasd1004\_N



oasd1004\_NW

Waterbody Date	a Silect													
Description														
Project Name:							Date:				Waterboo	dy Su	rvey ID:	
Line 5 Relocation Pro	ject					2	2020-05-19				sasa1005	5р		
State:		County/	Parish:			L	JSGS Water	body Name	<b>e</b> :					
Wisconsin		Ashland	i			E	Brunsweiler	River						
Company:		Crew M	ember Ini	tials:		L	_atitude:				Longitud	e:		
Enbridge		SBR/DO	GL			4	46.405042				-90.8122	43		
Survey Type: (check one)	☑ Center	ine	☐ Re-Ro	ute		□Ac	cess Road	□Facility		□Other				
Waterbody Type: (check one)	☑ River		☐ Stream	n		□ Di	itch	☐ Swale		☐ Canal		□ O	ther	
Water Appearance: (check one)	□ No Wa	ter	☐ Clear			<b>☑</b> Tu	ırbid	☐Sheen o Surface	n	□Surfac	e Scum	□Alǫ	gal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☑ Highly	Function	nal Stream	n 🗆	Modera	itely I	Functional S		☐ Fund	ctionally	Impaired S	Strear	m	
Feature Description: (check one)	✓ Natura		☐ Artifici	al, man	-made	□ M	anipulated							
Flow Regime: (check one)	☐ Ephem	eral	☐ Interm	ittent		<b>P</b>	erennial	☐ Connec	cting					
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Mean	dering										
Measurements														
Depth of Water: 2	ft.	N/A□	Unkno	wn□	Water Ed	dge t	o Water Ed	<b>ge:</b> <u>15</u> ft	t.	N/A□	OHWM W	Vidth:	<u>25</u> ft.	
OHWM Indicator: (check all that apply)	<b>┏</b> C	ear line	on bank	<b>⊠</b> Sh	elving		□Wrested ve	getation	□Sc	ouring			□Water st	aining
	miss	nt, matte ing vege		<b>Ľ</b> Wr	ack line	[	☑Litter and o	ebris	□Abi chan		t commun		<b>☑</b> Soil char change	racteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	<b>☑</b> Co	obble	. <b>⊻</b> G	ravel	<b>⊻</b> Sa	nd	□ Silt/	clay	□ 0	rganic
Observations														
Riparian Zone Preser	nt: 🗹 Ye	es		No										
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Sapling	s/Shrubs	;	☑ Herbs							
Dominant Bank Vege Populus balsamifera,	<b>etation</b> (lisa Poa prater	): isis, Cori	nus alba, <i>i</i>	Abies b	alsamea									
<b>Aquatic Habitats</b> (ex: Riffles, pools, gravel b	submerged or pars, and w	emerged a oody de	quatic vegeta bris are pr	ition, overl resent a	hanging ban as potentia	nks/roo al ha	ts, leaf packs, la bitat.	ge submerged	wood, riffl	es, deep po	ools, etc.):			
Aquatic Organisms ( Minnows were observ	<b>Observed</b> red.	(list):												
<b>Disturbances</b> (ex: live Potential for polluted i	stock acces unoff from	s, manure road and	in waterbo d overpas	dy, wast sing brid	e discharge dge that is	e pipe s out	es): tsude the su	vey area.						
Observation Notes: The river has steep be	anks along	the west	t side and	flatter b	oanks alo	ong th	ne east side.							



sasa1005p\_W (across)



sasa1005p\_N (downstream)



sasa1005p\_S (upstream)

Trate: Beay Bat	4 011000									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Pro	ject					2020-05-19			sasa1007e	
State:		County/	Parish:			USGS Wate	rbody Name	:		
Wisconsin		Ashland	Ł			UNT to Brun	sweiler River	•		
Company:		Crew M	ember Init	tials:		Latitude:			Longitude:	
Enbridge		SBR/D0	ЭL			46.404595			-90.811087	
Survey Type: (check one)	☑ Centerl	ine	☐ Re-Ro			Access Road	□Facility	□Other		
Waterbody Type: (check one)	☐ River		✓ Stream	n		Ditch	☐ Swale	☐ Cana		Other
Water Appearance: (check one)	☑ No Wa	ter	☐ Clear			Turbid	☐Sheen on Surface	□Surfac	e Scum 🗆 A	lgal Mats □Other
Existing Condition a: (check one)	☐ Highly	Function	nal Stream	V	Moderately	y Functional S	tream [	☐ Functionally	Impaired Strea	am
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-	made $\square$	Manipulated				
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	ittent		Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Meand	dering						
Measurements										
Depth of Water: N/A	t_ft.	N/A 🗹	Unknov	wn□ \	Water Edge	e to Water Ed	<b>ge:</b> <u>N/A</u> ft.	N/A 🗹	OHWM Width	i: <u>5</u> ft.
OHWM Indicator: (check all that apply)	□ Cl	ear line	on bank	☑She	elving	□Wrested v	egetation	□Scouring		□Water staining
(oroon all that apply)		nt, matte		□Wra	ack line	<b>☑</b> Litter and	debris	□Abrupt plan	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)		edrock	□ Вог	ulder	□ Cobb	le 🗆 C	Gravel	<b>☑</b> Sand	□ Silt/ clay	☐ Organic
Observations										
Riparian Zone Preser	nt: 🗹 Ye	es	1 🗆	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>v</b> (	Saplings	s/Shrubs	✓ Herbs				
Dominant Bank Vege Thuja occidentalis, Pi	etation (list nus strobus	): s, Matteu	uccia struth	niopteris	, Tsuga car	nadensis, Fra	kinus nigra, M	laianthemum c	anadense, Ca	rex cf umbellata
Aquatic Habitats (ex: None.	submerged or	emerged a	quatic vegetat	tion, overh	anging banks/r	oots, leaf packs, la	irge submerged w	vood, riffles, deep p	ools, etc.):	
Aquatic Organisms ( None.	Observed (	(list):								
<b>Disturbances</b> (ex: live Observed beaver dist	stock acces urbance in	s, manure nearby r	in waterboo	dy, waste line.	e discharge p	ipes):				
										igh here at some point in her deciduous species



sasa1007e\_W (across)



sasa1007e\_N (downstream)



sasa1007e\_E (upstream)

Waterbody Data 3	HCCL									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project						2020-05-19			sasa1006i	
State:		County/	Parish:			USGS Wate	body Name			
Wisconsin		Ashland				UNT to Brun	sweiler River	•		
Company:	ı	Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		SBR/DG	<b>SL</b>			46.404984			-90.811049	
Survey Type:	Centerli	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:   (check one)	River		✓ Stream	ı		Ditch	☐ Swale	☐ Canal		Other
Water Appearance:   (check one)	lo Wat	er	☐ Clear		V	Turbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition <sup>a</sup> :	Highly	Function	al Stream		Moderately	y Functional S		☐ Functionally	Impaired Strea	am
Feature Description: V	Natural		☐ Artificia	al, man-m	nade 🗆 I	Manipulated				
Flow Regime:	phem	eral	✓ Interm	ittent		Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor:	Straigh	t	✓ Meano	dering						
The feature is an intermitte				·	·			·		
Measurements										
Depth of Water: 0.1 ft.		N/A□	Unknov	wn□ W	ater Edge	to Water Ed	<b>ge:</b> 2 ft.	N/A□	OHWM Width	n: <u>9</u> ft.
OHWM Indicator: (check all that apply)	□ Cl	ear line o	on bank	<b>☑</b> Shel	ving	□Wrested v	egetation	□Scouring		☐Water staining
(onesical distribution)		nt, matte ng veget		□Wrad	ck line	<b>☑</b> Litter and o	lebris		t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	drock	□ Во	ulder		le 🗹 🤆	iravel	<b>☑</b> Sand	☐ Silt/ clay	☐ Organic
Observations										
Riparian Zone Present:	<b>☑</b> Ye	s		No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tre	ees	<b>V</b> :	Saplings/	Shrubs	☑ Herbs				
Dominant Bank Vegetation Thuja occidentalis, Ulmus	on (list amerić	): cana, Tsı	uga canad	lensis, Fr	axinus nig	ra, Carex bro	moides			
Aquatic Habitats (ex: subme Some pools present within	erged or or featur	emerged ac e that pr	quatic vegeta ovide sha	tion, overhai Ilow aqua	nging banks/ro atic habitat	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obse Frog, aquatic insects.	erved (	list):								
<b>Disturbances</b> (ex: livestock None observed.	access	s, manure	in waterboo	dy, waste o	discharge pi	ipes):				
Observation Notes: Stream meanders through will likely develop later in t			Imost con	tinuous c	anopy cov	er and a relat	vely sparse ι	understory at tii	me of survey.	A more dense understory



sasa1006i\_E (across)



sasa1006i\_N (downstream)



sasa1006i\_S (upstream)

Water body Data C	nicci									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project						2020-06-04			sasc1004e	
State:		County/	Parish:			USGS Water	body Name			
Wisconsin		Ashland	I			None				
Company:		Crew Mo	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		EJO/JS	W			46.404283			-90.804430	
Survey Type:  (check one)	Centerl	ine	□ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:	River		☐ Stream	า	<b>V</b> 1	Ditch	☐ Swale	☐ Canal		Other
Water Appearance: 🗹	No Wa	ter	☐ Clear		□Т	Turbid	☐Sheen on Surface	□Surfac	e Scum 🗆 A	lgal Mats □Other
Existing Condition <sup>a</sup> :	Highly	Function	nal Stream	<b>⊈</b> Mo	oderately	/ Functional S		☐ Functionally	Impaired Strea	ım
Feature Description:	Natural		☐ Artificia	al, man-ma	de 🗹 I	Manipulated				
Flow Regime: (check one)	Ephem	eral	☐ Interm	ittent		Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Meano	dering						
The feature is a narrow s		a a	(Sp. 1000)	20.m0011 a	gravoro	vo.uay a.i.a i	ooldonnan pro	sporty and lam		
Measurements										
Depth of Water: NA f	i.	N/A□	Unknov	wn□ <b>W</b> at	er Edge	to Water Ed	ge: <u>NA</u> ft.	N/A□	OHWM Width	: <u>1</u> ft.
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line o	on bank	□Shelvir	ng	□Wrested ve	getation	□Scouring		□Water staining
(orion all tract apply)		nt, matte		□Wrack	line	□Litter and o	lebris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Cobb	le □ G	ravel	☐ Sand	<b></b> Silt/ clay	☐ Organic
Observations										
Riparian Zone Present: (check one)	<b>Ľ</b> Y∈	es		No						
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/Sl	nrubs	☑ Herbs				
Dominant Bank Vegetati Scirpus cyperinus, Phalai	i <b>on</b> (list	): dinacea,	Carex cf.	scoparia, S	Salix disc	color				
Aquatic Habitats (ex: subn Overhanging, dense vege	nerged or etation.	emerged a	quatic vegeta	tion, overhangi	ng banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obs None observed.	erved (	(list):								
Disturbances (ex: livestod Part of the stream is mow	k access red whe	s, manure ere it inte	in waterboorsects a la	dy, waste dis iwn.	charge pi	pes):				
Observation Notes: The feature is an epheme	eral stre	eam that	occurs on	a residenti	al prope	rty. A narrow t	ringe wetland	d is present on	either side of	stream.



sasc1004e\_S (across)



sasc1004e\_E (downstream)



sasc1004e\_W (upstream)

Waterbody Data 3	HICCI									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project						2020-06-04			sasc1005e	
State:		County/	Parish:			USGS Wate	rbody Name			
Wisconsin		Ashland				None				
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		EJO/JS\	W			46.404142			-90.804637	
Survey Type:	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:	River		☐ Stream	n	V	Ditch	☐ Swale	☐ Canal		Other
Water Appearance: 🗹 I	No Wat	er	☐ Clear			Turbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition <sup>a</sup> :	Highly	Function	al Stream		Moderately	y Functional S		☐ Functionally	Impaired Strea	am
Feature Description:	Natural		✓ Artifici	al, man-m	nade 🗆	Manipulated				
Flow Regime: 🗹 I	Ephem	eral	☐ Interm	ittent		Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	☐ Mean	dering						
The feature is an epheme	erai ditc	n that rur	ns betwee	en a grave	ei driveway	y and a nay ne	eia.			
Measurements										
Depth of Water: NA ft.		N/A□	Unknov	wn□ W	/ater Edge	e to Water Ed	ge: <u>NA</u> ft.	N/A□	OHWM Width	n: <u>1</u> ft.
OHWM Indicator: (check all that apply)	<b>☑</b> Cl	ear line o	on bank	□Shel	ving	□Wrested v	egetation	□Scouring		□Water staining
(onoon an arat apply)		nt, matte ng veget		□Wrad	ck line	□Litter and o	debris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	☐ Cobb	ole 🗆 G	Gravel	☐ Sand	<b>⊻</b> Silt/ clay	☐ Organic
Observations										
Riparian Zone Present: (check one)	□ Ye	:S	V	No						
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/	Shrubs	☑ Herbs				
Dominant Bank Vegetati Trifolium repens, Lotus co	<b>on</b> (list ornicula	): tus								
Aquatic Habitats (ex: subm None observed.	nerged or	emerged ac	quatic vegeta	tion, overha	nging banks/r	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Observed.	erved (	list):								
Disturbances (ex: livestock The feature is partially pla	k access inted in	, manure hay.	in waterbo	dy, waste d	discharge p	ipes):				
Observation Notes: The feature has sparse ve	egetativ	e cover;	part of the	e feature	occurs in	a hay field.				



sasc1005e\_S (across)



sasc1005e\_E (downstream)



sasc1005e\_W (upstream)

vaterbody bata	Officet									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project	et					2020-06-05			sasc1006p	
State:		County/	Parish:			USGS Wate	rbody Name			
Wisconsin		Ashland	I			UNT to Brun	sweiler River			
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		EJO/JS	W			46.401275			-90.801781	
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	ute	□A	Access Road	□Facility	□Other		
Waterbody Type:	River		✓ Strean	n		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	No Wa	ter	✓ Clear		□Т	urbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition <sup>a</sup> : (check one)	Highly	Function	nal Stream	ı □ N	/loderately	/ Functional S		☐ Functionally	Impaired Strea	am
Feature Description: (check one)	Natural		☐ Artificia	al, man-m	ade 🗆 l	Manipulated				
Flow Regime: (check one)	Ephem	eral	☐ Interm	ittent	<b>V</b>	Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Mean	dering						
The feature is a perenni			,							
Measurements										
Depth of Water: 0.5	ft.	N/A□	Unknov	wn 🗆 🛮 Wa	ater Edge	to Water Ed	<b>ge:</b> 4 ft.	N/A□	OHWM Width	n: <u>8</u> ft.
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line o	on bank	✓Shelv	/ing	□Wrested ve	egetation	<b>☑</b> Scouring		□Water staining
(		nt, matte		□Wrac	k line	<b>☑</b> Litter and o	debris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□В€	edrock	□ Во	ulder	☐ Cobbl	le 🗆 G	Gravel	<b>☑</b> Sand	☐ Silt/ clay	☐ Organic
Observations										
Riparian Zone Present:	<b>☑</b> Ye	es		No						
Vegetation Layers:	<b>☑</b> Tr	ees		Saplings/S	Shrubs	✓ Herbs				
Dominant Bank Vegeta Salix interior, Cornus se	<b>tion</b> (list ricea, Ed	): quisetum	sylvaticur	n, Equise	tum hyem	ale				
Aquatic Habitats (ex: sub Pools, overhanging vege	omerged or etation, o	emerged accorded wo	quatic vegeta oody debr	tion, overhan	nging banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob Water striders, minnows	served (	(list):								
<b>Disturbances</b> (ex: liveston None observed.	ock acces	s, manure	in waterboo	dy, waste d	lischarge pi	pes):				
Observation Notes: The perennial stream ha	as a sand	dy substr	ate with sa	andbar wi	llow being	the dominan	t vegetation a	at the sample p	oint.	



sasc1006p\_SE (across)



sasc1006p\_N (downstream)



sasc1006p\_SW (upstream)

Waterbody Dat	a Sileet										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ject					2020-06-05			sasc1007e		
State:		County/	Parish:			USGS Wate	rbody Name	:			
Wisconsin		Ashland	İ			UNT to Brur	sweiler Rive	r			
Company:		Crew M	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		EJO/JS	W			46.400847			-90.800042	2	
Survey Type: (check one)	✓ Center	line	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Strean	n		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance: (check one)	✓ No Wa	ter	☐ Clear			Turbid	☐Sheen or Surface	n □Surfac	e Scum	∃Algal Mats	□Other
Existing Condition a: (check one)	☑ Highly	Function	nal Stream	I	Moderatel	y Functional S		☐ Functionally	Impaired Str	ream	
Feature Description: (check one)	✓ Natura		☐ Artificia	al, man-m	nade 🗆	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	ittent		Perennial	☐ Connec Swale	ting			
Sinuosity within Survey Corridor: (check one)	□ Straigh	nt	✓ Meano	dering							
The feature is an eph											
Measurements Depth of Water: NA	ft	N/A□	Unknov	<sub>vn</sub> □ W	later Edge	e to Water Ed	ae. NA ft	N/A□	OHWM Wid	dth: 2 ft	
Deptil of Water.	<u>.                                    </u>	IWAL	OTIKITO	,wii	ato. Lugi	, 10 11ato. La	<b>901</b> <u>117 (</u> 16.	1071	O	<u></u>	•
OHWM Indicator: (check all that apply)	<b>▼</b> C	lear line	on bank	<b>☑</b> Shel	ving	□Wrested v	egetation	<b>☑</b> Scouring		□Water s	staining
(спеск ан тасарру)		ent, matte		□Wrad	ck line	<b>☑</b> Litter and	debris	□Abrupt plan	t community	/ □Soil cha change	aracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	<b>☑</b> Cobb	le 🗆 C	Gravel	□ Sand	☑ Silt/ cla	ay 🗆 (	Organic
Observations											
Riparian Zone Prese	nt: 🗆 Ye	es	<u> </u>	No							
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Saplings/	Shrubs	✓ Herbs					
<b>Dominant Bank Vege</b> Tilia americana, Dryo	etation (lisa pteris inter	t) <b>:</b> media, C	arex graci	llima, Am	nelanchier	spp.					
Aquatic Habitats (ex: Overhanging vegetati	submerged or On, WOOdy	emerged ad debris.	quatic vegeta	tion, overha	nging banks/r	oots, leaf packs, la	irge submerged v	wood, riffles, deep po	ools, etc.):		
Aquatic Organisms ( None observed.	Observed	(list):									
<b>Disturbances</b> (ex: live None observed in stre	stock acces eam; strear	s, manure n adjace	in waterboont to agric	dy, waste outtural fie	discharge p ld.	ipes):					
Observation Notes: The stream is located	in a forest	ed ravine	e dominate	ed by bas	sswood.						
ı											



sasc1007e\_NW (across)



sasc1007e\_NE (downstream)



sasc1007e\_S (upstream)

Traterboay Bat	4 011000										
Description											
Project Name:						Date:			Waterbody S	urvey ID:	
Line 5 Relocation Pro	ect					2020-06-0	5		sasc1008e		
State:		County	/Parish:			USGS Wa	terbody Name	<b>e</b> :			
Wisconsin		Ashland	ł			UNT to Br	unsweiler Rive	er			
Company:		Crew M	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		EJO/JS	W			46.400437			-90.799208		
Survey Type: (check one)	☑ Centerle	ine	□ Re-Ro	ute		Access Roa	d □Facility	□Other			
Waterbody Type:	□ River		✓ Stream	n		Ditch	☐ Swale	☐ Cana	I 🗆 (	Other	
Water Appearance: (check one)	<b>☑</b> No Wa	ter	☐ Clear			Turbid	☐Sheen o	n □Surfac	ce Scum	lgal Mats	Other
Existing Condition <sup>a</sup> :	✓ Highly	Function	nal Stream	n 🗆	Moderate	ly Functiona	Surface Stream	☐ Functionally	Impaired Strea	ım	
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-	made $\square$	Manipulated	I				
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	ittent		Perennial	☐ Connec	cting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Mean	dering							
Measurements											
Depth of Water: NA	ft.	N/A□	Unknov	wn□ \	Water Edg	je to Water E	idge: <u>NA</u> ft	i. N/A□	OHWM Width	: <u>1</u> ft.	
OHWM Indicator: (check all that apply)	<b>ℤ</b> CI	ear line	on bank	□She	elving	□Wrested	vegetation	✓ Scouring		□Water stain	ing
(chican an anat appriy)		nt, matte ing vege		□Wra	ack line	□Litter an	d debris	□ Abrupt plar change	t community	□Soil charac	teristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	☐ Cob	ble 🗆	Gravel	☐ Sand	<b>坚</b> Silt/ clay	☐ Orga	anic
Observations											
Riparian Zone Preser (check one)	nt: 🗆 Ye	es	<b>V</b>	No							
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>v</b>	Saplings	s/Shrubs	<b>☑</b> Herl	)S				
Dominant Bank Vege Eurybia macrophylla,	<b>tation</b> (list Fraxinus n	): igra, Fra	xinus ame	ericana,	Rhamnus	cathartica, A	melanchier sp	p.			
Aquatic Habitats (ex: Overhanging vegetati	submerged or on, woody	emerged a debris.	quatic vegeta	ition, overh	anging banks	/roots, leaf packs	, large submerged	wood, riffles, deep p	ools, etc.):		
Aquatic Organisms ( None observed.	Observed (	(list):									
<b>Disturbances</b> (ex: live None observed in stre	stock acces am; strear	s, manure n is surro	in waterbo ounded by	dy, waste an agrid	discharge cultural fie	pipes): ld.					
Observation Notes: The stream occurs wi	thin a narro	ow ravine	e dominate	ed by bla	ack ash, w	hite ash, and	red maple.				



sasc1008e\_W (across)



sasc1008e\_N (downstream)



sasc1008e\_S (upstream)

Waterbody Data C	meet									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project						2020-06-05			sasc1009e	
State:		County/	Parish:			USGS Water	body Name			
Wisconsin		Ashland	I			UNT to Brun	sweiler River	•		
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		EJO/JS	W			46.399830			-90.798920	
Survey Type:	Centerl	ine	☐ Re-Ro	ute	□A	Access Road	□Facility	□Other		
Waterbody Type:	River		✓ Strean	n		Ditch	☐ Swale	☐ Canal		Other
Water Appearance:	No Wat	er	☑ Clear		□Т	urbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition <sup>a</sup> :	Highly	Function	al Stream	□ M	loderately	/ Functional S		☐ Functionally	Impaired Strea	am
Feature Description:   (check one)	Natural		☐ Artificia	al, man-ma	ade 🗆 N	Manipulated				
Flow Regime:	Ephem	eral	☐ Interm	ittent	□ F	Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Meano	dering						
The feature is an epheme	siai sii s	<b></b>		· roroctou	iaviio ii c	at 10 out 10 und	ou by an ag.			
Measurements										
Depth of Water: 0.1 f	t.	N/A□	Unknov	wn□ <b>W</b> a	ater Edge	to Water Ed	<b>ge:</b> <u>1</u> ft.	N/A□	OHWM Width	n: <u>2</u> ft.
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line o	on bank	□Shelvi	ing	□Wrested ve	getation	<b>☑</b> Scouring		☐Water staining
(oneon all tract apply)		nt, matte		□Wrack	k line	<b>☑</b> Litter and o	lebris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	drock	□ Во	ulder	☐ Cobbl	le 🗆 G	ravel	☐ Sand	<b>坚</b> Silt/ clay	☐ Organic
Observations										
Riparian Zone Present:	□ Ye	es	<b>V</b> 1	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>Ø</b> :	Saplings/S	Shrubs	☐ Herbs				
Dominant Bank Vegetat Acer rubrum, Fraxinus ni	<b>ion</b> <i>(list</i> gra, Die	): rvilla lon	icera, Equ	isetum arv	vense, Pro	unus serotina	Carex graci	llima		
Aquatic Habitats (ex: subr Woody debris, overhangi	nerged or ng vege	emerged acetation.	quatic vegeta	tion, overhang	ging banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	pols, etc.):	
Aquatic Organisms Obs None observed.	erved (	(list):								
<b>Disturbances</b> (ex: livestor None observed in stream	ck access ; the str	s, manure eam is s	in waterboo surrounded	dy, waste dis d by an agr	scharge pi ricultural f	pes): field.				
Observation Notes: The stream is located in a	a forest	ed ravine	e dominate	ed by red n	maple, bla	ack ash, and b	lack cherry.			



sasc1009e\_E (across)



sasc1009e\_N (downstream)



sasc1009e\_S (upstream)

Traterious Bate	. 0000									
Description										
Project Name:						Date:			Waterbody Su	urvey ID:
Line 5 Relocation Proje	ect					2020-06-09			sasa1028i	
State:		County/	Parish:			USGS Wate	rbody Name	•		
Wisconsin		Ashland				None				
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		SBR/DG	<b>S</b> L			46.400745			-90.797648	
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
'	□ River		✓ Strean	n		Ditch	□ Swale	☐ Canal		Other
Water Appearance: (check one)	☐ No Wat	ter	☑ Clear		□T	Turbid	☐Sheen on	□Surfac	e Scum □Al	gal Mats □Other
Existing Condition <sup>a</sup> : (check one)	☐ Highly	Function	al Stream	<b>V</b> 1	Moderately	/ Functional S	Surface Stream	☐ Functionally	Impaired Strea	m
Feature Description: (check one)	☐ Natural		☐ Artificia		nade 🗹 I	Manipulated				
(check one)	☐ Ephem		✓ Interm			Perennial	☐ Connection Connection	ting		
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Meano	dering						
Measurements										
Depth of Water: 0.1	_ft.	N/A□	Unknov	wn 🗆 🛮 W	ater Edge	to Water Ed	<b>ge:</b> 1 ft.	N/A□	OHWM Width	: <u>6</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	□Shel	ving	□Wrested v	egetation	<b>☑</b> Scouring		□Water staining
(check all that apply)		nt, matte		□Wrad	ck line	<b>☑</b> Litter and	debris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Cobb	le 🗆 C	Gravel	☐ Sand	<b>☑</b> Silt/ clay	☐ Organic
Observations										
Riparian Zone Presen (check one)	t: 🗹 Ye	es		No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Saplings/	Shrubs	✓ Herbs				
Dominant Bank Vege Parthenocissus inserta	<b>tation</b> <i>(list</i> a, Fraxinus	): america	ına, Acer ı	rubrum, E	Betula alleg	ghaniensis, U	mus america	na		
Aquatic Habitats (ex: s Pools.	submerged or	emerged ac	quatic vegeta	tion, overha	nging banks/ro	oots, leaf packs, la	arge submerged v	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms O Aquatic invertebrates.	bserved (	(list):								
<b>Disturbances</b> (ex: lives Polluted runoff from up	stock accessoslope agr	s, manure icultural f	in waterboo ield.	dy, waste o	discharge pi	pes):				
Observation Notes: Some areas have den	ser herbad	ceous ve(	getation a	long the b	oank. Feat	ure associate	d with wetlan	d wasa1072f.		



sasa1028i\_SE (across)



sasa1028i\_SE (downstream)



sasa1028i\_NW (upstream)

Waterbody Date	a Silect										
Description											
Project Name:						Date:			Waterbody	/ Survey ID:	
Line 5 Relocation Pro	ject					2020-06-09			sasa1027e	)	
State:		County/l	Parish:			USGS Wate	rbody Name	:			
Wisconsin		Ashland				None					
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:		
Enbridge		SBR/DG	3L			46.400826			-90.796458	3	
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	□ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance: (check one)	✓ No War	ter	☐ Clear		□Т	Turbid	☐Sheen on Surface	Surfac	e Scum	□Algal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☐ Highly	Function	al Stream	<b>☑</b> Mo	derately	y Functional S		☐ Functionally	Impaired St	ream	
Feature Description: (check one)	☐ Natural		☐ Artificia	al, man-mad	de 🗹	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Intermi	ittent		Perennial	☐ Connect	ting			
Sinuosity within Survey Corridor: (check one)	✓ Straigh	it	☐ Meand	lering							
<b>M</b> easurements											
Depth of Water: N/A	<u>\</u> ft.	N/A <b>I</b>	Unknov	vn□ Wat	er Edge	to Water Ed	<b>ge:</b> <u>N/A</u> ft.	N/A 🗹	OHWM Wie	dth: <u>3</u> 1	t.
OHWM Indicator:	□ CI	ear line o	on bank	☑Shelvin	g	□Wrested v	egetation	✓ Scouring		□Water	staining
(check all that apply)		nt, matte		□Wrack	line	<b>☑</b> Litter and o	debris	✓Abrupt plan change	t community		aracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Воι	ulder [	☐ Cobb	le 🗆 G	Gravel	☐ Sand	<b>I</b> Silt/ cl	lay 🗆	Organic
Observations											
Riparian Zone Prese	nt: 🗆 Ye	es	<b>M</b> 1	No							
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>v</b> (	Saplings/Sh	rubs	☑ Herbs					
<b>Dominant Bank Vege</b> Betula alleghaniensis	<b>etation</b> (list Prunus sp	): ., Corylu	s cornuta,	Ribes cf ar	nerican	um					
Aquatic Habitats (ex: None.	submerged or	emerged ac	quatic vegetat	ion, overhangir	ng banks/ro	oots, leaf packs, la	rge submerged w	vood, riffles, deep po	ools, etc.):		
Aquatic Organisms ( None.	Observed (	(list):									
<b>Disturbances</b> (ex: live Polluted runoff from the	stock acces ne agricultu	s, manure Iral field.	in waterboo	dy, waste disc	charge pi	ipes):					
Observation Notes: No water at the time of	of survey.										



sasa1027e\_NE (across)



sasa1027e\_NW (downstream)



sasa1027e\_SE (upstream)

Tratorboay Bata	011000											
Description												
Project Name:						C	Date:			Waterbody S	urvey ID:	
Line 5 Relocation Proje	ect					2	2020-06-09			sasa1025e		
State:		County	/Parish:			U	JSGS Water	body Nam	e:			
Wisconsin		Ashland	b			١	None					
Company:		Crew M	ember Ini	itials:		L	_atitude:			Longitude:		
Enbridge		SBR/D0	GL			4	46.401906			-90.795275		
Survey Type: [	☐ Centerl	ine	□ Re-Ro	oute	[	<b>☑</b> Ac	cess Road	□Facility	□Other	<u>I</u>		
· · · · · · · · · · · · · · · · · · ·	River		☐ Stream	n	[	<b>Ø</b> Di	itch	☐ Swale	☐ Cana	I 🗆 (	Other	
· · · · · · · · · · · · · · · · · · ·	☑ No Wa	ter	☐ Clear		[	□Tu		☐Sheen o	n □Surfac	ce Scum $\Box$ A	Igal Mats	□Other
	☐ Highly	Function	nal Stream	n 🗹	Moderat	tely F	Functional St		☐ Functionally	Impaired Stream	am	
Feature Description: [	□ Natural		☐ Artifici	al, man-	made	<b>Y</b> Ma	anipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	nittent	[	□ P6		☐ Conne Swale	cting			
Sinuosity within Survey Corridor: (check one)	<b>☑</b> Straigh	t	☐ Mean	dering								
Measurements												
Depth of Water: N/A	_ft.	N/A <b></b> ✓	Unkno	wn 🗆 📙	Water Ed	lge t	o Water Edg	e: <u>N/A</u> f	t. N/A🗹	OHWM Widtl	<b>1:</b> <u>3</u> f	t.
OHWM Indicator: (check all that apply)	□ CI	ear line	on bank	□She	elving	[	Wrested ve	getation	□Scouring		□Water	staining
(		nt, matte		□Wra	ack line		□Litter and d	ebris	☑Abrupt plar change	nt community	□Soil cha	aracteristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□Во	oulder	□ Со	bble	: □ Gı	ravel	□ Sand	<b></b> Silt/ clay		Organic
Observations												
Riparian Zone Present (check one)	i: <b>☑</b> Y∈	es		No								
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings	s/Shrubs		✓ Herbs					
Dominant Bank Veget Typha sp., Poa pratens	<b>ation (list</b> sis, Juncu	): s filiform	is, Leucar	nthemum	n vulgare	, Lot	us corniculat	us				
Aquatic Habitats (ex: st None.	ubmerged or	emerged a	iquatic vegeta	ation, overh	anging banl	ks/root	its, leaf packs, lar	ge submerged	wood, riffles, deep p	ools, etc.):		
Aquatic Organisms Ol None.	bserved (	(list):										
<b>Disturbances</b> (ex: lives Receives runoff from ro	tock access badside ai	s, manure nd adjac	e in waterbo ent agricu	dy, waste Iltural fie	e discharge ld.	e pipe	es):					
Observation Notes: Feature is located alon	g a busy l	nighway	. A narrow	wetland	d fringe is	pres	sent.					



sasa1025e\_E (across)



sasa1025e\_NW (downstream)



sasa1025e\_SE (upstream)

Waterbody Dat	a Officet										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ject					2020-06-0	09		sasa1026e		
State:		County	/Parish:			USGS Wa	aterbody Nam	ne:			
Wisconsin		Ashland	t			None					
Company:		Crew M	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		SBR/D0	GL			46.40176	1		-90.795139		
Survey Type: (check one)	☐ Centerl	ine	□ Re-Ro	ute	[	Access Roa	ad □Facility	□Other	•		
Waterbody Type: (check one)	☐ River		☐ Strear	n		☑ Ditch	☐ Swale	☐ Cana	al 🗆	Other	
Water Appearance:	✓ No Wat	ter	☐ Clear			□Turbid	☐ Sheen of Surface	on □Surfa	ce Scum 🗆	Algal Mats	□Other
Existing Condition a: (check one)	□ Highly	Function	nal Stream	V	Moderat	ely Functiona		☐ Functionally	Impaired Stre	eam	
Feature Description: (check one)	☐ Natural		☐ Artifici	al, man-	made 🗓	✓ Manipulate	d				
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	ittent		☐ Perennial	☐ Conne Swale	ecting			
Sinuosity within Survey Corridor: (check one)	<b>☑</b> Straigh	t	☐ Mean	dering			- Cwalo				
· I											
Measurements											
Depth of Water: N/A	<u>\</u> ft.	N/A <b></b> ✓	Unkno	wn□ \	Nater Ed	ge to Water	Edge: N/A 1	ft. N/A <b>☑</b>	OHWM Wid	<b>th:</b> <u>3</u> f	t.
OHWM Indicator:	□ CI	ear line	on bank	□She	elving	✓Wrested	d vegetation	Scouring		□Water	staining
(check all that apply)		nt, matte			ack line	□Litter ar		· ·	nt community		aracteristic
Dominant Substrate: (check all that apply)		edrock	□ Во	ulder	□ Col	bble [	Gravel	□ Sand	<b>☑</b> Silt/ cla		Organic
Observations Riparian Zone Prese	nt: ☑ Ye	es		No							
(check one) Vegetation Layers:	□ Tr	ees		Saplings	s/Shrubs	<b>☑</b> Her	bs				
(check all that apply)	etation /liet	1.									
Dominant Bank Vege Typha sp., Juncus filit	formis, Equ	isetum p	oratense, L	eucanth.	nemum vu	ulgare, Lotus	corniculatus				
Aquatic Habitats (ex: None.	submerged or	emerged a	quatic vegeta	tion, overh	anging bank	s/roots, leaf pack	s, large submerged	d wood, riffles, deep p	oools, etc.):		
Aquatic Organisms ( None.	Observed (	(list):									
<b>Disturbances</b> (ex: live Polluted runoff from n	estock acces earby road	s, manure and cor	in waterbo n field.	dy, waste	discharge	e pipes):					
Observation Notes: No water was observed	ed at the tir	ne of su	rvey. A na	rrow we	tland fring	ge is present.					



sasa1026e\_NE (across)



sasa1026e\_NW (downstream)



sasa1026e\_SE (upstream)

Waterbody Data	a Sileet										
Description											
Project Name:						Date:			Waterbod	y Survey ID:	
Line 5 Relocation Pro	ject					2020-06-05			sasc1010i		
State:		County/	Parish:			USGS Wate	rbody Name	:			
Wisconsin		Ashland	i			UNT to Brur	sweiler Rive	r			
Company:		Crew M	ember Ini	tials:		Latitude:			Longitude	):	
Enbridge		EJO/JS	W			46.400263			-90.79096	5	
Survey Type: (check one)	☑ Center	line	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Strean	n		Ditch	☐ Swale	☐ Cana	<b>I</b> [	☐ Other	
Water Appearance: (check one)	□ No Wa	ter	☐ Clear		V	Turbid	□Sheen or Surface	n □Surfac	ce Scum [	□Algal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☑ Highly	Function	nal Stream	n 🗆	Moderatel	y Functional S		☐ Functionally	Impaired S	tream	
Feature Description: (check one)	✓ Natura		☐ Artificia	al, man-r	made $\square$	Manipulated					
Flow Regime: (check one)	☐ Ephem	eral	✓ Interm	ittent		Perennial	☐ Connec Swale	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	nt	✓ Mean	dering							
Measurements											
Depth of Water: 0.5	ft.	N/A□	Unknov	wn 🗆 🛛 V	Vater Edge	e to Water Ed	<b>ge:</b> <u>1</u> ft.	N/A□	OHWM Wi	idth: <u>3</u>	ft.
OHWM Indicator:	<b>Ľ</b> C	lear line	on bank	<b></b> ✓She	lving	□Wrested v	egetation	✓ Scouring		□Water	staining
(check all that apply)		ent, matte ing vege		□Wra	ck line	<b>☑</b> Litter and	debris	□Abrupt plan	nt communit	ty □Soil ch change	naracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	☐ Cobb	ole 🗆 (	Gravel	<b>☑</b> Sand	<b>⊻</b> Silt/ c	clay □	Organic
Observations											
Riparian Zone Preser	nt: 🗹 Ye	es		No							
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>Ø</b> :	Saplings	/Shrubs	✓ Herbs					
Dominant Bank Vege Cornus sericea, Salix	etation (list eriocephal	t): a, Vitis r	iparia, Pop	oulus trer	muloides						
Aquatic Habitats (ex: Pools, overhanging ve	submerged or egetation, o	emerged a coarse w	quatic vegeta oody debr	tion, overha	anging banks/r	roots, leaf packs, l	arge submerged v	vood, riffles, deep p	ools, etc.):		
Aquatic Organisms ( None observed.	Observed	(list):									
<b>Disturbances</b> (ex: live None observed in the	stock acces stream.	s, manure	in waterbo	dy, waste	discharge p	ipes):					
Observation Notes: The stream is associa	ited with a	shrub-ca	arr wetland	I.							



sasc1010i\_SE (across)



sasc1010i\_E (downstream)



sasc1010i\_SW (upstream)

Waterbody Date	a Silect										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ect					2020-06-02			sasc1003p		
State:		County/	Parish:			USGS Wate	erbody Name	9:			
Wisconsin		Ashland	i			UNT to Trou	ut Brook				
Company:		Crew M	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		EJO/JS	W			46.397164			-90.781390		
Survey Type: (check one)	☑ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type:	□ River		✓ Strean	n		Ditch	☐ Swale	☐ Cana		Other	
Water Appearance: (check one)	□ No Wa	ter	☐ Clear		V	Turbid	☐Sheen or Surface	n □Surfac	e Scum 🗆	Algal Mats	□Other
Existing Condition <sup>a</sup> :	☑ Highly	Function	nal Stream		Moderatel	y Functional S		☐ Functionally	Impaired Str	eam	
Feature Description:	✓ Natural		☐ Artificia	al, man-n	nade 🗆	Manipulated					
Flow Regime: (check one)	☐ Ephem	eral	☐ Interm	ittent	V	Perennial	☐ Connec	cting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	nt	<b>☑</b> Meand	dering							
The feature is a perer											
Moasuromonts											
Measurements Depth of Water: 1	ft.	N/A□	Unknov	wn□ IV	Vater Edge	e to Water Ed	lge: 6 ft	. N/A 🗆	OHWM Wid	Ith: 8 ft.	
					J						
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line	on bank	☑Shel	lving	□Wrested v	egetation	✓ Scouring		□Water st	aining
, , , , , , , , , , , , , , , , , , , ,		ent, matte ing vege		□Wra	ck line	□Litter and	debris	□Abrupt plan change	t community	□Soil char	acteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Cobb	ole 🗆 (	Gravel	<b>☑</b> Sand	☐ Silt/ cla	ay 🗆 O	rganic
Observations											
Riparian Zone Preser	nt: 🗹 Ye	es		No							
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Saplings	/Shrubs	✓ Herbs	<b>3</b>				
<b>Dominant Bank Vege</b> Cornus racemosa, Vik	etation (list ournum len	tago, Ca	ırex brunnı	escens, F	Ribes ame	ricanum, Sali	x cf. nigra, Fr	raxinus nigra			
Aquatic Habitats (ex: Overhanging vegetation	submerged or On, pools, I	emerged acruns and	quatic vegeta riffles.	tion, overha	anging banks/r	roots, leaf packs, l	arge submerged	wood, riffles, deep p	ools, etc.):		
Aquatic Organisms ( Water striders, unider	<b>Dbserved</b> ( tified fish.	(list):									
<b>Disturbances</b> (ex: live None observed.	stock acces	s, manure	in waterbo	dy, waste	discharge p	ipes):					
Observation Notes: The feature is a perer	nial strean	n surrour	nded by a	floodplai	n forest.						



sasc1003p\_SE (across)



sasc1003p\_NE (downstream)



sasc1003p\_S (upstream)

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Proje	ct					2020-06-02			sasc1002i	
State:		County/F	Parish:			USGS Wate	body Name			
Wisconsin		Ashland				UNT to Trou	t Brook			
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:	
Enbridge		EJO/JSV	N			46.397008			-90.779854	
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type: [	□ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: [	□ No Wa	ter	Clear		□1	Γurbid	☐Sheen on Surface	□Surfac	e Scum □A	Algal Mats □Other
Existing Condition <sup>a</sup> : [	Highly	Function	al Stream	□ Мо	derately	y Functional S		☐ Functionally	Impaired Stre	am
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-mad	de 🗆 I	Manipulated				
Flow Regime: (check one)	☐ Ephem	eral	✓ Interm	ittent		Perennial	☐ Connec	ting		
Sinuosity within Survey Corridor: (check one)	□ Straigh	t	✓ Meand	lering						
The stream is contiguor				J						
Measurements										
Depth of Water: 0.25	ft.	N/A□	Unknov	vn□ Wat	er Edge	to Water Ed	<b>ge:</b> <u>1</u> ft.	N/A□	OHWM Widt	<b>h:</b> <u>5</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line c	n bank	□Shelvin	g	□Wrested ve	egetation	□Scouring		<b>☑</b> Water staining
(orison all that apply)		nt, matte		□Wrack	line	□Litter and o	lebris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder [	☐ Cobb	le 🗹 G	iravel	<b>坚</b> Sand	☐ Silt/ clay	∕ □ Organic
Observations										
Riparian Zone Present (check one)	: 🗹 Ye	es	1	No						
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/Sh	rubs	✓ Herbs				
Dominant Bank Vegeta Phalaris arundinacea, E	<b>ation</b> (list quisetun	): n arvense	e, Onoclea	a sensibilis						
Aquatic Habitats (ex. su Overhanging vegetation			uatic vegetat	tion, overhangir	ng banks/ro	oots, leaf packs, la	rge submerged w	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob Frog.	oserved (	(list):								
<b>Disturbances</b> (ex: livest None observed; the sur	ock access rounding	s, manure wet mea	in waterboo dow is do	dy, waste disc minated by	charge pi invasive	ipes): e reed canary	grass.			
Observation Notes: The feature is an interm	nittent stre	eam asso	ociated wit	h a wet me	adow do	ominated by re	eed canary g	rass.		



sasc1002i\_NE (across)



sasc1002i\_NW (downstream)



sasc1002i\_SE (upstream)

Waterbody Data 3	iicct									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project						2020-06-02			sasc1001i	
State:	(	County/I	Parish:			USGS Wate	body Name			
Wisconsin		Ashland				UNT to Trou	Brook			
Company:	(	Crew Me	ember Init	tials:		Latitude:			Longitude:	
Enbridge		EJO/JS\	N			46.396325			-90.779823	
Survey Type:	Centerli	ne	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:   (check one)	River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance:   (check one)	lo Wate	er	☐ Clear		V	Γurbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition <sup>a</sup> :	Highly F	unction	al Stream	<b>☑</b> Mod	erately	y Functional S		☐ Functionally	Impaired Strea	am
Feature Description: V N (check one)	Natural		☐ Artificia	al, man-made	· 🗆	Manipulated				
Flow Regime:   (check one)	pheme	eral	✓ Interm	ittent		Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor:	Straight		✓ Meand	lering						
			Ü	, ,						
Measurements										
Depth of Water: 0.5 ft.	١	√/A□	Unknov	vn□ Water	Edge	to Water Ed	<b>ge:</b> 2 ft.	N/A□	OHWM Width	n: <u>5</u> ft.
OHWM Indicator: (check all that apply)	<b>☑</b> Cle	ear line o	on bank	✓ Shelving		□Wrested ve	egetation	<b>☑</b> Scouring		□Water staining
(		nt, matte ng veget		□Wrack lin	ne	<b>☑</b> Litter and o	lebris	☐Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Be	drock	□ Во	ulder 🗹	Cobb	le 🗹 G	ravel	☐ Sand	☐ Silt/ clay	☐ Organic
Observations										
Riparian Zone Present:	☐ Ye	S	<u> </u>	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tre	ees	<b>v</b> (	Saplings/Shru	ıbs	✓ Herbs				
Dominant Bank Vegetation Populus tremuloides, Ono	on (list) clea se	: nsibilis,	Rubus ida	ieus, Vitis ripa	aria, N	Matteuccia stru	thiopteris, Co	ornus sericea,	Diervilla lonice	era
Aquatic Habitats (ex: subme Overhanging vegetation, o	erged or e coarse v	emerged ag WOOdy do	quatic vegetat ebris.	tion, overhanging	banks/r	oots, leaf packs, la	rge submerged w	rood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obse None observed.	rved (/	ist):								
<b>Disturbances</b> (ex: livestock Lumber and other refuse of	access bserve	, manure ed in stre	in waterboo am.	dy, waste disch	arge p	ipes):				
Observation Notes: The stream is intermittent	and is f	fed by a	culvert.							



sasc1001i\_NW (across)



sasc1001i\_NE (downstream)



sasc1001i\_SW (upstream)

Waterbouy Date	a Officet									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Proj	ect					2020-06-06			sasc1011e	
State:		County/l	Parish:			USGS Wate	body Name	:		
Wisconsin		Ashland				None				
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:	
Enbridge		EJO/JS\	W			46.390528			-90.775157	
Survey Type: (check one)	☑ Center	line	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type: (check one)	☐ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance:	✓ No Wa	ter	☐ Clear			Turbid	☐Sheen or Surface	n □Surfac	e Scum □A	lgal Mats □Other
Existing Condition a: (check one)	✓ Highly	Function	al Stream	☐ Mode	erately	y Functional S		☐ Functionally	Impaired Stre	am
Feature Description: (check one)	✓ Natura		☐ Artificia	al, man-made		Manipulated				
Flow Regime: (check one)	<b>☑</b> Ephem	neral	☐ Intermi	ittent		Perennial	☐ Connec	ting		
Sinuosity within Survey Corridor: (check one)	☐ Straigh	nt	✓ Meand	ering						
Description Notes: The feature is a narro wasc1041f.	w epheme	ral strean	n located v	within a hardw	ood f	forest. The str	eam appears	s to drain out of	wetland waso	c1040f and into wetland
Measurements										
Depth of Water: NA	ft.	N/A□	Unknov	vn□ Water	Edge	e to Water Ed	<b>ge:</b> <u>NA</u> ft.	N/A□	OHWM Widtl	n: <u>1</u> ft.
OHWM Indicator:	<b>Ľ</b> C	lear line o	on bank	□Shelving		□Wrested ve	getation	<b>☑</b> Scouring		□Water staining
(check all that apply)		ent, matte ing veget		□Wrack line	е	□Litter and o	lebris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□В€	edrock	□ Воι	ulder 🗆	Cobb	ole □ G	ravel	□ Sand	<b>☑</b> Silt/ clay	□ Organic
Observations										
Riparian Zone Preser	nt: 🗆 Ye	es	<u> </u>	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>Ø</b> (	Saplings/Shru	bs	✓ Herbs				
Dominant Bank Vege Tsuga canadensis, Ad	etation (list cer rubrum	t): , Ulmus a	americana,	Dryopteris in	iterme	edia, Thuja oc	cidentalis			
Aquatic Habitats (ex: Overhanging vegetation	submerged or ON, WOOdy	emerged ac debris.	quatic vegetat	ion, overhanging b	banks/r	oots, leaf packs, la	rge submerged v	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms One observed.	Observed	(list):								
<b>Disturbances</b> (ex: live None observed.	stock acces	s, manure	in waterboo	ly, waste discha	arge pi	ipes):				
Observation Notes: The stream runs throu	igh a fores	t dominat	ted by eas	tern hemlock,	, red ı	maple, Americ	an elm, and	northern white	cedar.	



sasc1011e\_N (across)



sasc1011e\_E (downstream)



sasc1011e\_W (upstream)

Waterbody Date	a Silect										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ject					2020-06-06			sasc1012p		
State:		County/	Parish:			USGS Wate	rbody Name	:			
Wisconsin		Ashland	i			Trout Brook					
Company:		Crew Mo	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		EJO/JS	W			46.390396			-90.774462		
Survey Type: (check one)	✓ Centerl	ine	□ Re-Ro	oute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☑ River		☐ Stream	n		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance: (check one)	□ No Wa	ter	✓ Clear			Turbid	☐Sheen or Surface	n □Surfac	e Scum 🗆	Algal Mats	□Other
Existing Condition a: (check one)	☑ Highly	Function	nal Stream	ı 🗆	Moderatel	ly Functional S		☐ Functionally	Impaired Stre	eam	
Feature Description:	✓ Natural		☐ Artifici	al, man-	made $\square$	Manipulated					
Flow Regime: (check one)	☐ Ephem	eral	☐ Interm	nittent	ď	Perennial	☐ Connec	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	it	✓ Mean	dering							
Measurements											
Depth of Water: 2	ft.	N/A□	Unkno	wn 🗆 📙	Water Edg	e to Water Ec	l <b>ge:</b> 20 ft.	N/A□	OHWM Wid	<b>th:</b> <u>30</u> ft.	
OHWM Indicator:	<b>☑</b> CI	ear line	on bank	<b></b> ✓She	elving	□Wrested v	egetation	<b></b> Scouring		□Water st	aining
(check all that apply)		ent, matte ing veget		□Wra	ack line	<b>☑</b> Litter and	debris	□Abrupt plan	t community	□Soil chai change	racteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	oulder	☑ Cobb	ole 🗹 (	Gravel	<b>☑</b> Sand	□ Silt/ cla	ју 🗆 О	rganic
Observations											
Riparian Zone Prese	nt: 🗹 Ye	es		No							
Vegetation Layers:	<b>☑</b> Tr	ees	V	Saplings	s/Shrubs	☑ Herbs	,				
Dominant Bank Vege Populus balsamifera,	tation (list Matteuccia	t): struthio	pteris, Tili	a amerio	cana, Solida	ago gigantea,	Acer rubrum,	, Fraxinus nigra	l		
Aquatic Habitats (ex: Overhanging vegetati	submerged or on, pools, I	emerged ac runs and	quatic vegeta riffles, co	ation, overh arse woo	anging banks/i	roots, leaf packs, I	arge submerged v	wood, riffles, deep po	ools, etc.):		
Aquatic Organisms ( None observed.	Observed (	(list):									
<b>Disturbances</b> (ex: live None observed.	stock acces	s, manure	in waterbo	dy, waste	e discharge p	pipes):					
Observation Notes: The stream is associa	ted with a	floodplai	n forest.								



sasc1012p\_SE (across)



sasc1012p\_E (downstream)



sasc1012p\_SW (upstream)

vvaterbody bata	Officet									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project	ct					2020-06-08			sasa1014e	
State:		County/	Parish:			USGS Wate	body Name	:		
Wisconsin		Ashland	l			UNT to Whit	e River			
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:	
Enbridge		SBR/DG	SL			46.496051			-90.905262	
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	ute	<b>V</b>	Access Road	□Facility	□Other		
Waterbody Type: [check one]	River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	No Wat	er	☐ Clear			Turbid	☐Sheen on Surface	n □Surfac	e Scum 🗆 🛭	lgal Mats □Other
Existing Condition <sup>a</sup> : [	Highly	Function	al Stream	<b>☑</b> Mod	erately	y Functional S		☐ Functionally	Impaired Strea	am
Feature Description: (check one)	Natural		☐ Artificia	al, man-made		Manipulated				
Flow Regime: (check one)	<b>E</b> phem	eral	☐ Interm	ttent		Perennial	☐ Connection Connectica Connection Connecti	ting		
Sinuosity within Survey Corridor: (check one)	₫ Straigh	t	☐ Meand	lering						
The feature is an ephen	neral stre	am that o	carries wa	ter away fror	n an a	gricultural field	1.			
Measurements										
Depth of Water: N/A	ft.	N/A <b></b>	Unknov	vn□ Wate	r Edge	e to Water Ed	<b>ge: <u>N/A</u> ft</b> .	N/A 🗹	OHWM Widtl	n: <u>2</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	✓ Shelving		□Wrested ve	getation	□Scouring		□Water staining
(onoon an anacappy)		nt, matte ng veget		□Wrack lir	ne	<b>☑</b> Litter and o	lebris	✓ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□В€	edrock	□ Во	ulder 🗆	Cobb	ole □ G	ravel	☐ Sand	<b></b> Silt/ clay	□ Organic
Observations										
Riparian Zone Present:	□ Үе	es .	<b>I</b>	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	V S	Saplings/Shr	ubs	✓ Herbs				
Dominant Bank Vegeta Abies balsamea, Populi	i <b>tion</b> (list us tremul	): oides, To	oxicodendi	on rydbergii,	Equis	setum pratens	<del></del>			
Aquatic Habitats (ex: sul None.	omerged or	emerged ac	quatic vegetat	ion, overhanging	banks/r	oots, leaf packs, la	rge submerged v	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob None.	served (	(list):								
<b>Disturbances</b> (ex: livestor Potential runoff from the	ock access nearby	s, manure agricultui	in waterboo ral field.	ly, waste disch	arge p	ipes):				
Observation Notes: The stream channel has	s been us	sed as a	place to di	ump househo	old gar	rbage.				



sasa1014e\_S (across)



sasa1014e\_E (downstream)



sasa1014e\_W (upstream)

Waterbody Data	Once									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project	ct					2020-06-06			sasa1013e	
State:		County/	Parish:			USGS Water	body Name	•		
Wisconsin		Ashland				UNT to White	River			
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:	
Enbridge		SBR/DG	SL.			46.495777			-90.898417	
Survey Type: [	Centerl	ine	☐ Re-Ro	ute	<b>V</b> /	Access Road	□Facility	□Other		
Waterbody Type: [	River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	No Wat	ter	☐ Clear			Γurbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition <sup>a</sup> : [	☐ Highly	Function	al Stream	<b>☑</b> Mode	erately	y Functional S		☐ Functionally	Impaired Strea	ım
Feature Description: [	Natural		☐ Artificia	al, man-made	V	Manipulated				
Flow Regime: (check one)	<b>Z</b> Ephem	eral	☐ Interm	ittent		Perennial	☐ Connec Swale	ting		
Sinuosity within Survey Corridor: (check one)	<b>₫</b> Straigh	t	☐ Meand	lering						
The feature is a manipu	lated eph	nemeral s	stream tha	t drains watei	r awa	y from a meac	ow that bord	ers an agriculti	ural field.	
Measurements										
Depth of Water: N/A	ft.	N/A🗹	Unknov	vn□ Water	Edge	to Water Ed	<b>je:</b> <u>N/A</u> ft.	N/A 🗹	OHWM Width	: <u>2</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	□Shelving		□Wrested ve	getation	□Scouring		□Water staining
(onook an arat apply)		nt, matte		□Wrack lin	е	□Litter and o	ebris	✓ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder 🗆	Cobb	le □ G	ravel	☐ Sand	<b>坚</b> Silt/ clay	☐ Organic
Observations										
Riparian Zone Present:	∵ <b>Ľ</b> Y∈	es	1 🗆	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Saplings/Shru	bs	✓ Herbs				
Dominant Bank Vegeta Populus tremuloides, Fr	<b>ation</b> (list axinus a	): mericana	a, Phalaris	arundinacea,	Care	ex gracillima				
Aquatic Habitats (ex: su None.			quatic vegetat	ion, overhanging l	banks/r	oots, leaf packs, la	ge submerged w	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob None.	served (	(list):								
<b>Disturbances</b> (ex: livested Potential disturbance from	ock access om the ne	s, manure earby agi	in waterboo ricultural fi	dy, waste discha eld.	arge pi	ipes):				
Observation Notes: The stream becomes m	ore obvic	ous on its	s eastern s	ide and exter	nds be	eyond the surv	ey corridor.			



sasa1013e\_N (across)



sasa1013e\_E (downstream)



sasa1013e\_W (upstream)

Tratorious But	4 011000														
Description															
Project Name:						Ī	Date:			١	Waterbody	/ Surv	vey ID:		
Line 5 Relocation Pro	ject						2020-05-27			:	sasc026e_	X			
State:		County	/Parish:			-	JSGS Water	body Name	:						
Wisconsin		Ashland	t				UNT to Billy	Creek							
Company:		Crew M	ember Ini	itials:		Ī	Latitude:			l	_ongitude:	;			
Enbridge		KDF/SA	AM				46.389529				-90.766952	2			
Survey Type: (check one)	☑ Centerl	ine	□ Re-Ro	oute		□Ac	ccess Road	□Facility		Other					
Waterbody Type:	☐ River		✓ Strear	n		□ D	itch	☐ Swale		Canal		Oth	ner		
Water Appearance: (check one)	□ No Wat	ter	☐ Clear		[	ďΤι	urbid	☐Sheen on	n 🗆 S	Surface	Scum [	□Alga	al Mats	□Othe	er
Existing Condition <sup>a</sup> : (check one)	☑ Highly	Function	nal Stream	ı 🗆	Moderat	tely	Functional S	Surface tream	☐ Function	nally li	mpaired St	ream			
Feature Description: (check one)	✓ Natural		☐ Artifici	al, man	-made [	□ N	lanipulated								
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	nittent		□ P	erennial	☐ Connection Connection	ting						
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Mean	dering											
Measurements															
Depth of Water: 0.29	<u>5</u> ft.	N/A□	Unkno	wn□	Water Ed	lge 1	to Water Ed	<b>je:</b> <u>3</u> ft.	N/	'A□ (	OHWM Wie	dth:	<u>3</u> ft		
OHWM Indicator:	□ CI	ear line	on bank	□Sh	elving	[	□Wrested ve	getation	Scouri	ing			□Water s	taining	
(check all that apply)		nt, matte		□Wr	ack line	[	<b>☑</b> Litter and o	ebris	□ Abrupt	t plant	community		∃Soil cha hange	aracterist	ic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	oulder	☐ Col	bble	e 🗆 G	ravel	☐ Sand		<b>☑</b> Silt/ cl	ay		Organic	
Observations															
Riparian Zone Preser	nt: 🗹 Ye	es		No											
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	V	Sapling	s/Shrubs		✓ Herbs								
Dominant Bank Vege Alnus incana, Phalaris	etation (list s arundinad	ea, Imp	atiens cap	ensis, (	Onoclea s	ens	ibilis								
Aquatic Habitats (ex: Inundated vegetation	submerged or within and	emerged a SURFOUNG	quatic vegeta ding areas	ation, overl s of the s	hanging bank stream.	ks/roc	ots, leaf packs, la	ge submerged v	vood, riffles, o	deep po	ols, etc.):				
Aquatic Organisms ( None.															
<b>Disturbances</b> (ex: live None.	stock acces	s, manure	in waterbo	ody, wast	e discharge	e pip	es):								
Observation Notes: None.															



sasc026e\_x (across)



sasc026e\_x (downstream)



sasc026e\_x (upstream)

Tratorboay Bat	4 011000										
Description											
Project Name:						Date:			Waterbody S	urvey ID:	
Line 5 Relocation Pro	ject					2020-05-27	•		sasb1001e		
State:		County	/Parish:			USGS Wate	erbody Name	:			
Wisconsin		Ashland	d			UNT to Billy	/ Creek				
Company:		Crew M	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		KDF/SA	AM			46.388421			-90.763688		
Survey Type: (check one)	☑ Centerl	ine	□ Re-Ro	oute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	□ River		✓ Strear	n		Ditch	☐ Swale	☐ Cana		Other	
Water Appearance: (check one)	☐ No Wat	er	☑ Clear			Turbid	☐Sheen or	n □Surfac	e Scum	lgal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☑ Highly	Function	nal Stream	n 🗆	Moderate	ly Functional	Surface Stream	☐ Functionally	Impaired Strea	am	
Feature Description: (check one)	✓ Natural		☐ Artifici	al, man-	made $\square$	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	nittent		Perennial	☐ Connec	ting			
Sinuosity within Survey Corridor: (check one)	□ Straigh	t	✓ Mean	dering							
<b>M</b> easurements											
Depth of Water: 0.2	<u>5</u> ft.	N/A□	Unkno	wn□	Water Edg	e to Water E	dge: 2 ft.	N/A□	OHWM Width	: <u>2</u> ft.	
OHWM Indicator:	r c	ear line	on bank	□She	alvina	□Wrested	/egetation	<b></b> ✓Scouring		□Water sta	ining
(check all that apply)	<b>⊻</b> Be	nt, matte	ed, or		ack line	☑Litter and	-	□ Abrupt plan	t community	✓Soil chara change	
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	oulder	□ Cob	ble 🗆	Gravel	□ Sand	✓ Silt/ clay	□ Or	ganic
Observations											
Riparian Zone Prese	nt: 🗆 Ye	es	V	No							
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	V	Saplings	s/Shrubs	☑ Herbs	3				
Dominant Bank Vege Athyrium filix-femina,	<b>etation</b> (list Fraxinus p	): ennsylva	anica, Soli	dago fle	xicaulis						
Aquatic Habitats (ex. Downed woody debris	submerged or s is abunda	emerged a nt within	quatic vegeta the featu	ation, overh	anging banks	/roots, leaf packs,	large submerged v	wood, riffles, deep p	ools, etc.):		
Aquatic Organisms ( None.	Observed (	(list):									
Disturbances (ex: live Erosion is evident alo	stock acces ng the ban	s, manure KS.	in waterbo	dy, waste	e discharge <sub>l</sub>	pipes):					
Observation Notes: None.											



sasb1001e\_S (across)



sasb1001e\_E (downstream)



sasb1001e\_W (upstream)

waterbody bate	Jileet										
Description											
Project Name:						Date:			Waterbody	/ Survey ID:	
Line 5 Relocation Proj	ect					2020-05-29			sasb1007e	)	
State:		County/F	Parish:			USGS Water	body Name	:			
Wisconsin		Ashland				UNT to Billy	Creek				
Company:		Crew Me	mber Init	ials:		Latitude:			Longitude:	:	
Enbridge		KDF/SAI	М			46.387715			-90.760997	7	
Survey Type: (check one)	☑ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance: (check one)	□ No Wa	ter	☑ Clear			Γurbid	☐Sheen or Surface	n □Surfac	e Scum	□Algal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☐ Highly	Function	al Stream		Moderately	y Functional S		☐ Functionally	Impaired St	ream	
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-m	nade 🗆	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Intermi	ittent		Perennial	☐ Connec Swale	ting			
Sinuosity within Survey Corridor: (check one)	<b>☑</b> Straigh	t	☐ Meand	lering							
Description Notes: The ephemeral stream along the margins of t							d and flows	north through t	he corridor.	Small boulde	ers are present
Measurements											
Depth of Water: <0.2	<u>5</u> ft.	N/A□	Unknov	vn□ W	ater Edge	to Water Ed	<b>ge:</b> <u>0.5</u> ft.	N/A 🗆	OHWM Wid	<b>dth:</b> 2 f	t.
								70			
OHWM Indicator: (check all that apply)	⊔ Cl	ear line o	n bank	□Shel	ving	□Wrested ve	egetation	<b>☑</b> Scouring		□Water	staining
		nt, matted ing vegeta		□Wrac	ck line	Litter and	lebris	□Abrupt plan change	t community	y □Soil cha change	aracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Воι	ulder	□ Cobb	le 🗆 G	ravel	□ Sand	<b>☑</b> Silt/ cl	ay 🗆	Organic
Observations											
Riparian Zone Preser	nt: 🗆 Ye	es	<b>V</b> 1	No							
Vegetation Layers:	<b>☑</b> Tr	ees	<b>v</b> (	Saplings/	Shrubs	✓ Herbs					
<b>Dominant Bank Vege</b> Ostrya virginiana, Osr	tation (list	toniana, <i>i</i>	Arisaema	triphyllur	n						
Aquatic Habitats (ex: None.	submerged or	emerged aq	uatic vegetat	ion, overhar	nging banks/re	oots, leaf packs, la	rge submerged v	vood, riffles, deep po	ools, etc.):		
Aquatic Organisms O None.	bserved (	(list):									
<b>Disturbances</b> (ex: live There is significant ba	stock acces nk erosion	s, manure i present t	in waterboo throughou	dy, waste of it most of	discharge pi the featur	ipes): re.					
Observation Notes: None.											



sasb1007e W (across)



sasb1007e\_NO (downstream)



sasb1007e\_S (upstream)

Waterbody Date	Jileet													
Description														
Project Name:						Da	ate:			١	Waterbo	dy Su	rvey ID:	
Line 5 Relocation Proj	ect					20	020-05-27			:	sasb100	2i		
State:		County/	Parish:			U	SGS Water	body Name	<b>9</b> :					
Wisconsin		Ashland	l			U	JNT to Billy (	Creek						
Company:		Crew Me	ember Ini	tials:		La	atitude:			l	Longitud	le:		
Enbridge		KDF/SA	M			40	6.387116				-90.7631	53		
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Ro	ute		□Acc	cess Road	□Facility		Other				
Waterbody Type:	☐ River		✓ Stream	n		□ Dit	ch	☐ Swale		Canal		□ Ot	ther	
Water Appearance:	☐ No Wa	ter	☐ Clear		[	Tur	bid	☐Sheen or Surface	n 🗆	Surface	e Scum	□Alg	gal Mats	□Other
Existing Condition <sup>a</sup> :	□ Highly	Function	al Stream	<b>y</b>	Moderate	ely F	unctional St		☐ Functi	onally l	mpaired	Strear	n	
Feature Description:	✓ Natural		☐ Artificia	al, man-	made [	□ Ma	anipulated							
Flow Regime:	☐ Ephem	eral	✓ Interm	ittent		□ Pe	rennial	☐ Connec	cting					
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Mean	dering				Swale						
Description Notes: The intermittent strear the survey corridor.	n is locate	d within a	a ravine su	urrounde	ed by mes	sic ha	ardwood fore	est. The stre	eam flows	s north	into anot	her int	termittent	stream within
Measurements														
Depth of Water: 0.25	ft.	N/A□	Unknov	wn 🗆 🛝	Water Ed	ge to	Water Edg	<b>je:</b> 2 ft.	. N	√A□ (	OHWM V	Vidth:	f	t.
-														
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	□She	elving		Wrested ve	getation	☑Scou	ıring			□Water	staining
		nt, matte		□Wra	ack line		Litter and d	ebris	□ Abru change		commur		✓Soil chacked shange	aracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Cot	bble	□G	ravel	☐ Sand	d	✓ Silt/	clay		Organic
Observations														
Riparian Zone Preser	it: 🗹 Ye	es		No										
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Saplings	s/Shrubs		✓ Herbs							
Dominant Bank Vege Athyrium filix-femina, (	<b>tation</b> (list Ostrya virg	): iniana, S	Solidago fle	exicaulis	s, Equiset	tum p	oratense, Ac	er saccharu	ım					
Aquatic Habitats (ex: Small pools will likely i woody debris is also a	bundant th	nroughou		tion, overh as it be	anging bank gins to dry	s/roots y up.	s, leaf packs, lar Recent hea	ge submerged vy precipita	wood, riffles ation is re	, deep po sulting i	ols, etc.): in consis	tent flo	ow through	hout. Downed
Aquatic Organisms C None.	bserved (	(list):												
<b>Disturbances</b> (ex: live: There is concrete fill p	stock access resent with	s, manure nin the sc	in waterboouthern en	dy, wastend of the	e discharge feature, a	e pipes as we	s): ell as scatte	red garbage	e debris.	Erosion	is evide	nt alor	ng portions	s of the bank
Observation Notes: Common buckthorn is	abundant	along a <sub>l</sub>	portion of	the stre	am.									



sasb1002i\_E (across)



sasb1002i\_N (downstream)



sasb1002i\_S (upstream)

Waterbody Data 3	HCCL									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Project						2020-05-29			sasb1004e	
State:		County/l	Parish:			USGS Water	body Name	•		
Wisconsin		Ashland				UNT to Billy	Creek			
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		KDF/SA	M			46.387296			-90.761861	
Survey Type:	Centerli	ine	☐ Re-Ro	ute	□A	ccess Road	□Facility	□Other		
Waterbody Type:   (check one)	River		✓ Strean	n		Ditch	☐ Swale	☐ Canal		Other
7	No Wat	er	☐ Clear		□Т	urbid	☐Sheen on Surface	<b>☑</b> Surfac	e Scum □A	Algal Mats □Other
Existing Condition <sup>a</sup> :	Highly	Function	al Stream	<b>Y</b> N	Moderately	Functional S		☐ Functionally	Impaired Stre	am
Feature Description:	Natural		☐ Artificia	al, man-m	nade 🗆 l	Manipulated				
Flow Regime: 🗹 E	Ephem	eral	☐ Interm	ittent		Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor:	Straigh	t	✓ Meano	dering						
Measurements										
Depth of Water: <0.25 ft.		N/A□	Unknov	wn 🗆   W	ater Edge	to Water Ed	<b>ge:</b> <u>0.5</u> ft.	N/A□	OHWM Widt	<b>h:</b> <u>2</u> ft.
OHWM Indicator:	□ Cl	ear line o	on bank	□Shelv	ving	□Wrested ve	getation	<b></b> Scouring		□Water staining
(check all that apply)		nt, matte ng veget		□Wrac	ck line	<b>☑</b> Litter and o	ebris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	drock	□ Во	ulder	☐ Cobbl	e □ G	ravel	□ Sand	<b>☑</b> Silt/ clay	/ □ Organic
Observations										
Riparian Zone Present:	<b>☑</b> Ye	s		No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tre	ees		Saplings/	Shrubs	✓ Herbs				
Dominant Bank Vegetation Populus grandidentata, Ad	on (list er sac	): charum,	Fraxinus	pennsylva	anica, Athy	/rium filix-femi	na			
Aquatic Habitats (ex: submed bowned woody debris is a	erged or object of the second	emerged ac nt throug	quatic vegeta jhout.	tion, overhan	nging banks/ro	oots, leaf packs, la	rge submerged w	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obse None.	erved (	list):								
<b>Disturbances</b> (ex: livestock The feature is located adja	access acent to	s, manure o a hay fi	in waterbo	dy, waste d kely receiv	discharge pi ves pollute	pes): ed runoff, resu	lting in a sur	face sheen on	the water.	
Observation Notes: Small boulders are preser	nt along	the mar	rgins of th	e stream.						



sasb1004e\_W (across)



sasb1004e\_NE (downstream)



sasb1004e\_S (upstream)

Trater Body Bata	011000										
Description											
Project Name:						Date:			Waterbody Sเ	ırvey ID:	
Line 5 Relocation Proje	ect					2020-05-27			sasc025i_x		
State:		County/P	arish:			USGS Wate	rbody Name	9:			
Wisconsin		Ashland				UNT to Billy	Creek				
Company:		Crew Mer	mber Init	ials:		Latitude:			Longitude:		
Enbridge		KDF/SAM	Λ			46.388392			-90.763193		
Survey Type: (check one)	✓ Centerl	ine [	☐ Re-Rou	ute	□A	ccess Road	□Facility	□Other			
, ,	River	[9	<b>√</b> Stream	1		Ditch	☐ Swale	☐ Cana	I 🗆 C	Other	
Water Appearance: (check one)	□ No Wa	ler [	Clear		√T	urbid	□Sheen o Surface	n □Surfac	e Scum	lgal Mats	□Other
	<b>☑</b> Highly	Functiona	l Stream	□ M	oderately	Functional S		☐ Functionally	Impaired Strea	ım	
Feature Description: (check one)	<b>√</b> Natural		☐ Artificia	ıl, man-ma	ade 🗆 l	Manipulated					
Flow Regime: (check one)	□ Ephem	eral	✓ Intermi	ttent		Perennial	☐ Connec	cting			
Sinuosity within Survey Corridor: (check one)	□ Straigh	t s	<b>√</b> Meand	ering							
The intermittent stream emergent wetland is lo									g into the strea	m on the w	est side. An
Measurements											
Depth of Water: 0.25	_ft.	N/A□	Unknow	<sub>vn□</sub> Wa	iter Edge	to Water Ed	<b>ge:</b> <u>3</u> ft	i. N/A□	OHWM Width	: <u>3</u> ff	i.
OHWM Indicator: (check all that apply)	□ CI	ear line or	n bank	□Shelvi	ing	□Wrested v	egetation	<b></b> Scouring		□Waters	staining
(	<b>√</b> Be miss	ent, matted ing vegeta	l, or ation	□Wrack	( line	<b>☑</b> Litter and	debris	□Abrupt plan change	t community	□Soil cha	aracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Воι	ulder	<b>▼</b> Cobbl	le 🗆 C	Gravel	□ Sand	Silt/ clay		Organic
Observations											
Riparian Zone Present (check one)	t: √Ye	es		No							
Vegetation Layers: (check all that apply)	<b>√</b> Tr	ees	<b>√</b> S	Saplings/S	hrubs	✓ Herbs					
Dominant Bank Veget Glyceria striata, Phalar	<b>ation</b> (list	): acea, Fra	xinus per	nsylvanic	а						
Aquatic Habitats (ex. si Downed woody debris	ubmerged or is present	emerged aqu : within the	atic vegetati e feature.	ion, overhang	ging banks/ro	oots, leaf packs, la	arge submerged	wood, riffles, deep p	ools, etc.):		
Aquatic Organisms O None.	bserved (	Tist):									
<b>Disturbances</b> (ex: lives None.	tock acces	s, manure ir	n waterbod	ly, waste dis	scharge pi	pes):					
Observation Notes: Feature was previously	/ characte	rized as e	phemeral	l but shoul	ld be inte	rmittent after	inspection o	of the extension	area.		



sasc025i\_x (across)



sasc025i\_x (downstream)



sasc025i\_x (upstream)

Water Dody Data S	nicci									
Description										
Project Name:						Date:			Waterbody \$	Survey ID:
Line 5 Relocation Project						2020-05-28			sasb1003e	
State:		County/l	Parish:			USGS Water	body Name	•		
Wisconsin		Ashland				UNT				
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:	
Enbridge		KDF/SA	M			46.386259			-90.762358	
Survey Type:	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type:	River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance:	No Wat	ter	☐ Clear		1	Turbid	☐Sheen on Surface	<b>☑</b> Surfac	e Scum 🗆	Algal Mats □Other
Existing Condition <sup>a</sup> :	Highly	Function	al Stream	<b>☑</b> Mod	derately	y Functional S		☐ Functionally	Impaired Stre	eam
Feature Description: (check one)	Natural		☐ Artificia	al, man-mad	е 🗆	Manipulated				
Flow Regime: (check one)	Ephem	eral	□ Interm	ittent		Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Meand	lering						
The ephemeral stream is wetland present on either				arge at the s	ouii e	nu anu overno	w of surface	water travelling	, downslope.	There is a narrow imige
Measurements										
Depth of Water: <0.25 ft		N/A□	Unknov	vn□ Wate	r Edge	to Water Ed	<b>ge:</b> <u>6</u> ft.	N/A□	OHWM Widt	t <b>h:</b> <u>2</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	□Shelving	3	□Wrested ve	getation	<b>☑</b> Scouring		☐Water staining
(опоск ин тик арруу)		nt, matte ng veget		□Wrack li	ne	<b>☑</b> Litter and o	lebris	□Abrupt plan	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder 🗆	Cobb	le 🗆 G	ravel	<b>坚</b> Sand	✓ Silt/ cla	y 🗆 Organic
Observations										
Riparian Zone Present:	<b>☑</b> Ye	es	1	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	V S	Saplings/Shr	ubs	✓ Herbs				
Dominant Bank Vegetati Onoclea sensibilis, Osmu	<b>on</b> (list	) <del>:</del> iytoniana	, Equisetu	ım hyemale,	Betula	papyrifera				
Aquatic Habitats (ex: subn	nerged or	emerged ac	quatic vegetat	ion, overhangin	g banks/ro	oots, leaf packs, la	rge submerged w	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obs None.	erved (	(list):								
<b>Disturbances</b> (ex: livestoc Feature appears to receiv	k access e pollu	s, manure ted runof	in waterboo ff resulting	dy, waste disc in a sheen o	harge pi on the	ipes): surface of the	water.			
Observation Notes: None.										



sasb1003e\_NW (across)



sasb1003e\_NE (downstream)



sasb1003e\_SW (upstream)

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Proje	ect					2020-06-29			sasd1018e	
State:		County/P	Parish:			USGS Wate	rbody Name			
Wisconsin		Ashland				UNT to Billy	Creek			
Company:		Crew Me	mber Init	ials:		Latitude:			Longitude:	
Enbridge		DMP/AG	iG			46.387975			-90.760878	
Survey Type: (check one)	☐ Centerl	ine [	☐ Re-Rou	ute		Access Road	□Facility	□Other		
Waterbody Type:	River		✓ Stream	l		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	✓ No Wat	ter [	□ Clear		1	Turbid	☐Sheen on Surface	□Surfac	e Scum □A	Algal Mats □Other
Existing Condition <sup>a</sup> : (check one)	✓ Highly	Functiona	al Stream	<b>☑</b> Mode	rately	y Functional S		☐ Functionally	Impaired Stre	am
Feature Description: (check one)	✓ Natural		☐ Artificia	ıl, man-made		Manipulated				
Flow Regime: (check one)	<b>☑</b> Ephem	eral	□ Intermi	ttent		Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	<b>⊻</b> Straigh	t I	□ Meand	ering						
Description Notes: No flowing water was o	observed v	within the	feature du	uring the field	surve	ey.				
Measurements										
Depth of Water: 0	_ft.	N/A□	Unknow	vn□ Water	Edge	to Water Ed	<b>ge:</b> 0 ft.	N/A 🗆	OHWM Widt	<b>h:</b> 1 ft.
OHWM Indicator: (check all that apply)	Ľ CI	ear line o	n bank	□Shelving		□Wrested v	egetation	□Scouring		□Water staining
		nt, matteding vegeta		□Wrack line	е	Litter and	debris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Воι	ulder 🗆	Cobb	le 🗆 G	Gravel	<b>☑</b> Sand	<b>☑</b> Silt/ clay	/ □ Organic
Observations										
Riparian Zone Present	t: 🗆 Ye	es	<b>I</b>	No.						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>v</b> 9	Saplings/Shru	bs	☑ Herbs				
Dominant Bank Veget Tsuga canadensis, Ath	<b>ation</b> (list	) <u>:</u> -femina, F	Phegopter	is connectilis,	, Taxı	us canadensis	i			
Aquatic Habitats (ex: si None.	ubmerged or	emerged aqı	uatic vegetati	ion, overhanging b	oanks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):	
Aquatic Organisms O None.	bserved (	(list):								
<b>Disturbances</b> (ex: lives None.	tock access	s, manure i	in waterbod	ly, waste discha	arge pi	ipes):				
Observation Notes: The ephemeral stream sasb1007e.	flows thro	ough a ste	eep and e	roded channe	el thro	ugh a forest.	Γhe feature is	s contiguous wi	th sasb1006e	and flows into



sasd1018e\_E (across)



sasd1018e\_N (downstream)



sasd1018e\_S (upstream)

Waterbody Date	Officet										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Proj	ect					2020-05-29			sasb1006e		
State:		County/	Parish:			USGS Wate	body Name	:			
Wisconsin		Ashland				UNT to Billy	Creek				
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:		
Enbridge		KDF/SA	М			46.387697			-90.760698		
Survey Type: (check one)	☑ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance:	☐ No Wa	ter	☐ Clear		ØT	Turbid	☐Sheen or Surface	n □Surfac	e Scum 🗆	Algal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☐ Highly	Function	al Stream	ØN	/loderately	/ Functional S		☐ Functionally	Impaired Stre	eam	
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-m	ade 🗆 I	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Intermi	ittent		Perennial	☐ Connec Swale	ting			
Sinuosity within Survey Corridor: (check one)	<b>☑</b> Straigh	t	☐ Meand	lering							
The stream is located	within a sr	iallow fav	vine that b	ecomes s	ignincanu	y more dissec	tea outsiae (	or the comdon	iorin or the m	аррео театит	<del>.</del>
Measurements											
Depth of Water: <0.2	<u>5</u> ft.	N/A□	Unknov	vn□ Wa	ater Edge	to Water Ed	<b>ge:</b> <u>0.5</u> ft.	N/A□	OHWM Widt	th: <u>1</u> ft.	
OLDA/BA In dia atau		!:	an hande	Chall	d			TE Consumira a		□\\/ ata = at	alaia a
OHWM Indicator: (check all that apply)		ear line o	on bank	□Shelv	/ing	□Wrested v	egetation	<b></b> Scouring		□Water st	aining
		nt, matte ng veget		□Wrac	k line	<b>☑</b> Litter and o	lebris	☐Abrupt plan change	t community	□Soil char change	racteristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Воι	ulder	□ Cobb	le 🗆 G	iravel	☐ Sand	<b>☑</b> Silt/ cla	у 🗆 О	rganic
Observations											
Riparian Zone Preser	it: 🗆 Ye	es	<u> </u>	No							
Vegetation Layers:	<b>☑</b> Tr	ees	<b>v</b> 9	Saplings/S	Shrubs	☑ Herbs					
Dominant Bank Vege Fraxinus pennsylvanio	<b>tation</b> (list	): virginiana	a, Athyriun	n filix-femi	ina, Care	x pedunculata					
Aquatic Habitats (ex: None.	submerged or	emerged ac	quatic vegetat	ion, overhan	ging banks/ro	oots, leaf packs, la	rge submerged v	vood, riffles, deep po	ools, etc.):		
Aquatic Organisms C None.	bserved (	(list):									
<b>Disturbances</b> (ex: live The stream continues	stock access north outs	s, manure ide of the	in waterboo e corridor,	dy, waste d where the	ischarge pi e banks ex	pes): xhibit significa	nt erosion.				
Observation Notes: None.											



sasb1006e\_E (across)



sasb1006e\_N (downstream)



sasb1006e\_S (upstream)

Waterbody Data	a Silect										
Description											
Project Name:						Date:			Waterbody	/ Survey ID:	
Line 5 Relocation Pro	ect					2020-05-29			sasb1005i		
State:		County/	Parish:			USGS Wate	rbody Name	:			
Wisconsin		Ashland				None					
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		KDF/SA	.M			46.387418			-90.759966	6	
Survey Type: (check one)	☑ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type:	□ River		✓ Strean	n		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance:	□ No Wa	ter	☑ Clear			Turbid	☐Sheen or Surface	n □Surfac	e Scum	□Algal Mats	□Other
Existing Condition a: (check one)	✓ Highly	Function	al Stream	ı 🗆	Moderatel	y Functional S		☐ Functionally	Impaired St	ream	
Feature Description:	✓ Natural		☐ Artificia	al, man-r	made $\square$	Manipulated					
Flow Regime: (check one)	☐ Ephem	eral	✓ Interm	ittent		Perennial	☐ Connec	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	it	✓ Mean	dering			Owale				
Measurements											
Depth of Water: 0.25	5_ft.	N/A□	Unknov	wn 🗆 🛛 V	Vater Edge	e to Water Ed	<b>ge:</b> 2 ft.	N/A□	OHWM Wie	<b>dth:</b> <u>3</u> f	t.
OHWM Indicator:	□ CI	ear line o	on bank	□She	elving	□Wrested v	egetation	✓ Scouring		□Water	staining
(check all that apply)		nt, matte		□Wra	ack line	<b>☑</b> Litter and	debris	□Abrupt plan	t community		aracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Cobb	ole 🗆 C	Gravel	□ Sand	<b>☑</b> Silt/ cl	ay 🗆	Organic
Observations											
Riparian Zone Preser	nt: 🗹 Ye	es		No							
Vegetation Layers:	<b>☑</b> Tr	ees		Saplings	/Shrubs	✓ Herbs					
<b>Dominant Bank Vege</b> Tsuga canadensis, Fr	tation (list axinus per	): insylvanio	ca, Betula	allegha	niensis, Ath	nyrium filix-fer	nina				
Aquatic Habitats (ex: Some woody debris is	submerged or present w	emerged ac ithin the	quatic vegeta feature.	tion, overha	anging banks/r	roots, leaf packs, la	arge submerged v	wood, riffles, deep po	ools, etc.):		
<b>Aquatic Organisms (</b> None.	Observed (	(list):									
<b>Disturbances</b> (ex: live Bank erosion is preva	stock acces lent within	s, manure the strea	in waterboom m feature	dy, waste	discharge p	ipes):					
Observation Notes: None.											



sasb1005i\_E (across)



sasb1005i\_N (downstream)



sasb1005i\_S (upstream)

Tratorboay Bat	4 011000										
Description											
Project Name:						Date:			Waterbody S	urvey ID:	
Line 5 Relocation Pro	ect					2020-05-30			sasb1008e		
State:		County/	Parish:			USGS Wate	erbody Name	:			
Wisconsin		Ashland	i			UNT to Billy	Creek				
Company:		Crew M	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		KDF/SA	M			46.386847			-90.758976		
Survey Type: (check one)	☑ Centerle	ine	□ Re-Ro	oute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Strear	n		Ditch	□ Swale	☐ Canal		Other	
Water Appearance:	□ No Wa	ter	✓ Clear			Turbid	☐Sheen on	n □Surfac	e Scum	lgal Mats	Other
(check one)  Existing Condition <sup>a</sup> : (check one)	✓ Highly	Function	nal Stream	ı 🗆	Moderate	ly Functional	Surface Stream	☐ Functionally	Impaired Strea	ım	
Feature Description: (check one)	✓ Natural		☐ Artifici	al, man-	made $\square$	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	nittent		Perennial	☐ Connec Swale	ting			
Sinuosity within Survey Corridor: (check one)	✓ Straigh	t	☐ Mean	dering							
Measurements				1							
Depth of Water: <0.2	<u>5</u> ft.	N/A□	Unkno	wn 🗆 🖹	Water Edg	e to Water Ed	<b>lge:</b> 1 ft.	N/A□	OHWM Width	: <u>2</u> ft.	
OHWM Indicator: (check all that apply)	□ Cl	ear line	on bank	□She	elving	□Wrested \	egetation	<b>☑</b> Scouring		□Water stai	ning
(		nt, matte		□Wr	ack line	<b>☑</b> Litter and	debris	□Abrupt plan	t community	<b>☑</b> Soil charachange	cteristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	<b>☑</b> Bo	oulder	☐ Cobl	ble 🗆	Gravel	<b>☑</b> Sand	□ Silt/ clay	□ Org	anic
Observations											
Riparian Zone Preser (check one)	nt: 🗹 Ye	es		No							
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Sapling	s/Shrubs	☐ Herbs	3				
<b>Dominant Bank Vege</b> Tsuga canadensis	etation (list	):									
Aquatic Habitats (ex. Downed woody debris	submerged or s is abunda	emerged a int throug	quatic vegeta ghout.	ation, overh	nanging banks	/roots, leaf packs,	arge submerged v	wood, riffles, deep po	ools, etc.):		
Aquatic Organisms ( None.	Observed (	(list):									
<b>Disturbances</b> (ex: live Bank erosion is highly	stock acces evident th	s, manure roughou	in waterbo t the featu	dy, waste ire. Thei	e discharge <sub>l</sub> re is garba	pipes): ge debris neai	the the begir	nning of the stre	eam but not wit	thin the stream	n bed.
Observation Notes: Feature flows into sas	b1009p.										



sasb1008e\_E (across)



sasb1008e\_N (downstream)



sasb1008e\_S (upstream)

Waterbody Date	a Silect										
Description											
Project Name:						Date:			Waterbod	y Survey ID:	
Line 5 Relocation Pro	ject					2020-05-30			sasb1009p	0	
State:		County/	Parish:			USGS Wate	rbody Name	:			
Wisconsin		Ashland				Billy Creek					
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude	:	
Enbridge		KDF/SA	M			46.387049			-90.75911	0	
Survey Type: (check one)	☑ Centerle	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Stream	n		Ditch	☐ Swale	☐ Cana	I [	Other	
Water Appearance: (check one)	□ No Wa	ter	☑ Clear			Turbid	☐Sheen or Surface	n □Surfac	e Scum [	□Algal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☑ Highly	Function	al Stream		Moderatel	y Functional S		☐ Functionally	Impaired St	tream	
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-m	nade $\square$	Manipulated					
Flow Regime: (check one)	☐ Ephem	eral	☐ Interm	ittent	V	Perennial	☐ Connec Swale	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Meand	dering							
Description Notes: The perennial stream the feature from the s		within a r	avine don	ninated b	y hemlock	and yellow b	irch. The stre	am exhibits mo	oderately fa	st flow. Sasb1	008e flows into
Measurements											
Depth of Water: 1	ft.	N/A□	Unknov	wn□ W	/ater Edge	e to Water Ed	l <b>ge:</b> <u>6</u> ft.	N/A□	OHWM Wi	i <b>dth:</b> <u>8</u> f	<u>t</u> .
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line o	on bank	□Shel	ving	□Wrested v	egetation	<b>☑</b> Scouring		□Waters	staining
		nt, matte		□Wrad	ck line	<b>☑</b> Litter and	debris	□Abrupt plan	nt communit	ty <b>⊻</b> Soil cha change	aracteristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Cobb	ole 🗆 C	Gravel	<b>☑</b> Sand	□ Silt/ c	lay 🗆 (	Organic
Observations											
Riparian Zone Preser	nt: 🗆 Ye	es	<u> </u>	No							
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Saplings/	Shrubs	☐ Herbs					
Dominant Bank Vege Tsuga canadensis, Be	<b>etation</b> (list etula allegh	): aniensis									
Aquatic Habitats (ex. Downed woody debris	submerged or s, riffles, ex	emerged ac posed ro	quatic vegeta oot tangles	tion, overha	nging banks/r ed sand ba	roots, leaf packs, la ars, rock bars	arge submerged v	vood, riffles, deep p	ools, etc.):		
Aquatic Organisms ( Aquatic invertebrates.	Observed (	(list):									
<b>Disturbances</b> (ex: live The banks are highly	stock acces eroded thro	s, manure oughout t	in waterboothe feature	dy, waste o	discharge p	ipes):					
Observation Notes: Side hill seeps preser	nt on south	bank.									



sasb1009p\_S (across)



sasb1009p\_NW (downstream)



sasb1009p\_NE (upstream)

Waterbody Date	JIICEL													
Description														
Project Name:						-	Date:			١	Naterbo	dy Su	rvey ID:	
Line 5 Relocation Pro	ect					:	2020-05-30				sasb1010	0i		
State:		County/	Parish:			ļ	JSGS Water	body Name	<b>)</b> :					
Wisconsin		Ashland				ı	UNT to Billy	Creek						
Company:		Crew Me	ember Ini	tials:		L	_atitude:			Į.	ongitud	le:		
Enbridge		KDF/SA	M				46.386762				-90.7585	32		
Survey Type: (check one)	☑ Centerl	ine	☐ Re-Ro	ute	[	□Ac	cess Road	□Facility		Other				
Waterbody Type: (check one)	☐ River		✓ Strean	n	[	□ D	itch	☐ Swale		Canal		□ O	ther	
Water Appearance: (check one)	☐ No Wa	ter	☑ Clear		[	□Tu	ırbid	☐Sheen or Surface	n 🗆 S	Surface	Scum	□Alo	gal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☑ Highly	Function	al Stream		Moderat	tely	Functional S		☐ Function	nally l	mpaired (	Strear	n	
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-	-made [	□ M	lanipulated							
Flow Regime: (check one)	☐ Ephem	eral	✓ Interm	ittent	[	□Р	erennial	☐ Connec	cting					
Sinuosity within Survey Corridor: (check one)	□ Straigh	t	✓ Mean	dering										
Description Notes: The intermittent stream sasb1009p.	n is locate	d within a	a ravine do	ominate	ed by hem	nlock	x. The feature	flows north	west thro	ugh the	e survey	corrid	or and fee	ds into
Measurements														
Depth of Water: 0.25	5_ft.	N/A□	Unknov	wn□	Water Ed	lge t	to Water Edo	<b>je:</b> <u>1</u> ft.	. N	/A 🗆	N MWHC	Vidth:	<u>3</u> ft	
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line o	on bank	□She	elving	[	□Wrested ve	getation	<b>☑</b> Scour	ring			□Waters	staining
(спеск ан шасарруу)		nt, matte		□Wr	ack line	[	☑Litter and d	ebris	□Abrup change	t plant	commun		□Soil cha	aracteristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Co	bble	: □ G	ravel	<b>☑</b> Sand		☐ Silt/	clay		Organic
Observations														
Riparian Zone Preser	nt: 🗹 Ye	es		No										
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Sapling	s/Shrubs		☐ Herbs							
<b>Dominant Bank Vege</b> Tsuga canadensis, Th	etation (list nuja occide	): ntalis												
Aquatic Habitats (ex. Downed woody debris	submerged or	emerged ac	quatic vegeta	tion, overh	hanging bank	ks/roc	ots, leaf packs, la	ge submerged v	wood, riffles,	deep po	ols, etc.):			
<b>Aquatic Organisms (</b> None.	Observed (	(list):												
<b>Disturbances</b> (ex: live Moderate bank erosio	stock access n is eviden	s, manure it through	in waterboo nout the fe	dy, waste ature.	e discharge	e pip	es):							
Observation Notes: Fern species are abur	ndant along	g a portio	on of the st	tream w	vithin the a	asso	ociated forest	ed seep (wa	asb1011f)	-				



sasb1010i\_W (across)



sasb1010i\_N (downstream)



sasb1010i\_SE (upstream)

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project	t					2020-06-01			sasb1011p	
State:		County/	Parish:			USGS Wate	rbody Name			
Wisconsin		Ashland				Billy Creek				
Company:		Crew Me	ember Init	ials:		Latitude:			Longitude:	
Enbridge		KDF/SA	М			46.386650			-90.757378	
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type: (check one)	River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	No Wa	ter	☑ Clear			Turbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
	1 Highly	Function	al Stream	☐ Mod	lerately	y Functional S		☐ Functionally	Impaired Strea	am
Feature Description:	Natural		☐ Artificia	al, man-made	e 🗆	Manipulated				
Flow Regime: (check one)	Ephem	eral	☐ Interm	ittent	V	Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Meand	lering						
The perennial stream flo	ws throu	ign a cui	vert to the	east and coi	ntinues	s northwest. It	is located at	the edge of the	e survey corrid	or.
Measurements										
Depth of Water:1	ft.	N/A□	Unknov	<sub>vn</sub>	r Edge	to Water Ed	<b>ge:</b> <u>6</u> ft.	N/A□	OHWM Width	n: <u>11</u> ft.
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	□Shelving	l	□Wrested v	egetation	<b>☑</b> Scouring		□Water staining
(check all that apply)		nt, matte		□Wrack lii	ne	<b>☑</b> Litter and o	debris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder 🗆	Cobb	le □ G	Gravel	<b>☑</b> Sand	☐ Silt/ clay	☐ Organic
Observations										
Riparian Zone Present:	□Y€	es	<b>I</b>	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	V S	Saplings/Shr	ubs	☐ Herbs				
Dominant Bank Vegeta Ostrya virginiana, Tsuga	tion (list canade	): nsis, Fra	xinus nigra	a						
Aquatic Habitats (ex. sub Downed woody debris is	merged or abunda	emerged ac int throug	quatic vegetat jhout. San	ion, overhanging d and gravel	banks/rebars a	oots, leaf packs, la are present al	rge submerged wong the marg	ood, riffles, deep poins.	ools, etc.):	
Aquatic Organisms Ob- Aquatic invertebrates.	served (	(list):								
Disturbances (ex: livesto Moderate erosion is evid				dy, waste disch	narge pi	ipes):				
Observation Notes: Feature is mapped as se	everal co	omponen	ts as it me	anders in an	d out o	of the survey o	corridor.			



sasb1011p\_S (across)



sasb1011p\_NW (downstream)



sasb1011p\_E (upstream)

Waterbody Date	JIICEL										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ect					2020-06-09			sasa1024i		
State:		County/l	Parish:			USGS Water	body Name	:			
Wisconsin		Ashland				UNT to Billy	Creek				
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:		
Enbridge		SBR/DG	SL.			46.385709			-90.756309		
Survey Type: (check one)	☑ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	□ River		✓ Stream	า		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance:	□ No Wa	ter	☐ Clear		□Т	urbid	☑Sheen on Surface	□Surfac	e Scum	Algal Mats	□Other
Existing Condition a: (check one)	□ Highly	Function	al Stream	<b>V</b>	Moderately	Functional S		☐ Functionally	Impaired Stre	eam	
Feature Description:	☐ Natural		☐ Artificia	al, man-m	nade 🗹 I	Manipulated					
Flow Regime: (check one)	☐ Ephem	eral	✓ Interm	ittent		Perennial	☐ Connect	ting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Meand	dering			Swale				
Measurements Depth of Water: 0.1	ft.	N/A□	Unknov	wn□ <b> W</b>	ater Edge	to Water Ed	<b>ge:</b> <u>1</u> ft.	N/A 🗆	OHWM Wid	lth: <u>3</u> ft.	
OHWM Indicator:		ear line o	on hank	□Shelv	vina	□Wrested ve	egetation	Scouring		<b>⊻</b> Water st	aining
(check all that apply)	<b>⊻</b> Be	nt, matte	ed, or	□Wrac	Ū	□Litter and o	·	✓Abrupt plan change	t community		
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	☐ Cobb	le □ G	iravel	□ Sand	✓ Silt/ cla	ay 🗆 O	rganic
Observations											
Riparian Zone Prese	nt: 🗹 Ye	es	1	No							
Vegetation Layers:	<b>☑</b> Tr	ees	<b>v</b> (	Saplings/	Shrubs	✓ Herbs					
<b>Dominant Bank Vege</b> Equisetum hyemale, <i>i</i>	<b>tation</b> <i>(list</i> Athyrium fil	): ix-femina	ı, Fraxinus	america	na, Betula	alleghaniens	is, Abies bals	samea			
Aquatic Habitats (ex: Small pools.	submerged or	emerged ac	quatic vegetat	tion, overhar	nging banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):		
<b>Aquatic Organisms (</b> Amphibians.	Observed (	(list):									
<b>Disturbances</b> (ex: live Potential mowing in the	stock access le adjacent	s, manure utility co	in waterboo rridor and	dy, waste c runoff fro	discharge pi om the per	pes): sonal residen	ce.				
Observation Notes: There is household ga	arbage litte	ring the s	stream cha	annel.							



sasa1024i\_S (across)



sasa1024i\_E (downstream)



sasa1024i\_W (upstream)

Waterbody Date	a Silect										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ject					2020-06-30			sasd1019e		
State:		County/	Parish:			USGS Wate	rbody Name:				
Wisconsin		Ashland	l			UNT to Mare	engo River				
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:		
Enbridge		DMP/AG	<b>G</b>			46.389600			-90.755056		
Survey Type: (check one)	☐ Center	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type:	☐ River		✓ Stream	n		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance: (check one)	□ No Wa	ter	✓ Clear		□⊺	urbid	☐Sheen on Surface	□Surfac	e Scum	Algal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☑ Highly	Function	al Stream	V	Moderately	/ Functional S		Functionally	Impaired Stre	eam	
Feature Description: (check one)	☐ Natural		☐ Artificia	al, man-r	made 🗹	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	ittent		Perennial	☐ Connect Swale	ing			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	it	✓ Meano	dering							
There was clear flowing	ig water w		stroum du	ing the t	icia survey						
Measurements											
Depth of Water: 0.25	<u>5</u> ft.	N/A□	Unknov	wn□ <b>V</b>	Vater Edge	to Water Ed	<b>ge:</b> <u>1</u> ft.	N/A□	OHWM Wid	th: <u>1</u> ft.	
OHWM Indicator:	IN CI	ear line o	nn hank	□She	lvina	<b>☑</b> Wrested v	egetation	□Scouring		□Water stai	inina
(check all that apply)	<b></b> ✓Be	ent, matte	ed, or		ck line	☑Litter and	-	□ Abrupt plan change	t community		-
Dominant Substrate: (check all that apply)		edrock	□ Во	ulder	□ Cobb	le 🗆 C	Gravel	<b>☑</b> Sand	✓ Silt/ cla		ganic
Observations											
Riparian Zone Preser	nt: 🗹 Ye	es		No							
Vegetation Layers:	<b>☑</b> Tr	ees		Saplings	/Shrubs	✓ Herbs					
Dominant Bank Vege Tilia americana, Betul	etation (list a alleghan	t): iensis, Ad	cer rubrum	n, Phalar	is arundina	acea, Impatier	s capensis				
Aquatic Habitats (ex: Overhanging vegetati	submerged or on, large w	emerged ac oody dek	quatic vegetal Oris.	tion, overha	anging banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):		
Aquatic Organisms ( None.	Observed (	(list):									
<b>Disturbances</b> (ex: live The feature flows into	stock acces a road cul	s, manure vert just o	in waterboo outside of	dy, waste the surv	discharge pi ey area to	pes): the north.					
Observation Notes: The ephemeral strear	n begins at	t wasw03	33f and flo	ws north	into a culv	ert that is loca	ated outside c	of the survey ar	ea.		



sasd1019e\_NW (across)



sasd1019e\_NE (downstream)



sasd1019e\_SW (upstream)

Tratorboay Bat	4 011000													
Description														
Project Name:						Date:				1	Waterbody	Surv	ey ID:	
Line 5 Relocation Pro	ect					2020-06-	05				sasd1013p			
State:		County/	/Parish:			USGS W	aterboo	ly Name:						
Wisconsin		Ashland	d			UNT to S	Silver Cr	eek						
Company:		Crew M	ember Ini	tials:		Latitude:				I	Longitude:			
Enbridge		KDF/OT	ГG			46.37674	11				-90.731301			
Survey Type: (check one)	☑ Centerl	ine	☐ Re-Ro	oute		Access Ro	ad □F	acility		Other				
Waterbody Type: (check one)	☐ River		✓ Stream	n		Ditch		Swale		Canal		Oth	er	
Water Appearance:	☐ No Wat	er	☑ Clear			Turbid		Sheen on		Surface	e Scum 🗆	Alga	l Mats	□Other
(check one)  Existing Condition <sup>a</sup> : (check one)	✓ Highly	Function	nal Stream	n 🗆	Moderate	ely Function		rface m [	☐ Functio	nally I	mpaired Str	eam		
Feature Description: (check one)	✓ Natural		☐ Artifici	al, man-		Manipulate	ed							
Flow Regime: (check one)	☐ Ephem	eral	☐ Interm	nittent	V	Perennial	□ Sw	Connect ale	ting					
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Mean	dering										
Description Notes: The perennial stream river to the east.	is a tributa	ry to Silv	ver Creek.	There is	an interm	nittent strea	m to the	south th	at termina	ates a	t the feature	e befo	re flowing	g into the
Measurements	- £1	NI/A 🖂	Llaka		Nator Ede	ge to Water	Edgo:	2 ft	N	/A□ [0	OHWM Wic	lth:	3 ft.	
Depth of Water: 0.25	<u>Σ</u> π.	N/A□	Unkno	wn 🗆 📙	water Eut	je to vvater	Euge.	<u> </u>	IN	/AL	OTIVINI VVIC	iui.	<u> </u>	
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line	on bank	□She	elving	□Wreste	d vegeta	ation	<b>☑</b> Scour	ing			Water st	aining
		nt, matte		□Wra	ack line	<b>Ľ</b> Litter a	nd debri	s	□ Abrup change	t plant	community		Soil char	racteristic
Dominant Substrate: (check all that apply)	□ Ве	drock	□ Во	oulder	□ Cob	ble	☐ Grave	el	<b>☑</b> Sand		☐ Silt/ cla	ay	□О	rganic
Observations														
Riparian Zone Preser	nt: 🗆 Ye	es		No										
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees		Saplings	s/Shrubs	<b>☑</b> He	rbs							
Dominant Bank Vege Abies balsamea, Matt	etation (list euccia stru	) <u>:</u> thiopteri	s, Acer sa	ıccharun	า									
<b>Aquatic Habitats</b> (ex. Downed woody debris	submerged or s is present	emerged a within th	quatic vegeta he feature	ation, overh	anging banks	s/roots, leaf pac	ks, large si	ubmerged w	ood, riffles,	deep po	ols, etc.):			
Aquatic Organisms ( None.	Observed (	list):												
<b>Disturbances</b> (ex: live None.	stock access	s, manure	in waterbo	dy, waste	discharge	pipes):								
Observation Notes: None.														



sasd1013p S (across)



sasd1013p\_E (downstream)



sasd1013p\_W (upstream)

Waterbody Data	Officet									
Description										
Project Name:						Date:			Waterbody S	Survey ID:
Line 5 Relocation Proje	ect					2020-06-05			sasd1012i	
State:		County/	Parish:			USGS Wate	rbody Name	:		
Wisconsin		Ashland				UNT to Silve	er Creek			
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:	
Enbridge		AGG/OT	ГG			46.376656			-90.731303	
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type: (check one)	River		☑ Stream	n		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	□ No Wa	ter	☑ Clear		□Т	Turbid	☐Sheen on Surface	□Surfac	e Scum □A	Algal Mats □Other
Existing Condition <sup>a</sup> : (check one)	Highly	Function	al Stream	□ M	oderately	/ Functional S		☐ Functionally	Impaired Stre	am
Feature Description: [check one]	✓ Natural		☐ Artificia	al, man-ma	ade 🗆 I	Manipulated				
Flow Regime: [check one]	☐ Ephem	eral	✓ Interm	ittent		Perennial	☐ Connection Connection	ting		
Sinuosity within Survey Corridor: (check one)	□ Straigh	t	✓ Meano	dering						
Intermittent tributary ult	imately d	aming to	Sliver Ch	еек.						
Measurements										
Depth of Water: 0.5	ft.	N/A□	Unknov	wn□ Wa	iter Edge	to Water Ed	<b>ge:</b> 2 ft.	N/A□	OHWM Widtl	h: <u>3</u> ft.
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line o	on bank	□Shelvi	ing	□Wrested v	egetation	□Scouring		□Water staining
(		nt, matte		□Wrack	line	□Litter and	debris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	□ Cobb	le 🗆 G	Gravel	<b>☑</b> Sand	<b>⊻</b> Silt/ clay	√ □ Organic
Observations										
Riparian Zone Present	:: □ Y€	es	<b>1</b>	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	V (	Saplings/S	hrubs	✓ Herbs				
Dominant Bank Veget Acer saccharum, Abies	<b>ation</b> (list balsame	): a, Picea	glauca, At	thyrium filix	x-femina,	Matteuccia s	truthiopteris			
Aquatic Habitats (ex: si None.	ubmerged or	emerged ac	quatic vegetat	tion, overhang	ging banks/ro	oots, leaf packs, la	arge submerged w	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ol Insects.	bserved (	(list):								
<b>Disturbances</b> (ex: lives None.	tock acces	s, manure	in waterboo	dy, waste dis	scharge pi	pes):				
Observation Notes: The feature is an intern	nittent stre	eam that	appears to	o be fed by	y seepag	e outside of tl	ne survey cor	ridor. The featu	ure terminates	in stream sasd1013p.



sasd1012i\_E (across)



sasd1012i\_N (downstream)



sasd1012i\_S (upstream)

valerbody bata	Officet									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Projection	ct					2020-06-05			sasd1011p	
State:		County/	Parish:			USGS Wate	rbody Name	:		
Wisconsin		Ashland	I			Silver Creek				
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:	
Enbridge		AGG/O	ГG			46.376706			-90.730952	
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	oute		Access Road	□Facility	□Other		
'	River		☐ Stream	n		Ditch	□ Swale	☐ Canal		Other
,	No Wa	ter	☑ Clear		□⊺	urbid	☐Sheen on Surface	Surfac	e Scum 🗆 🗸	lgal Mats □Other
	<b>1</b> Highly	Function	al Stream	n 🗆 l	Moderately	/ Functional S		☐ Functionally	Impaired Stre	am
Feature Description: (check one)	Natural		☐ Artifici	al, man-n	nade 🗆 I	Manipulated				
Flow Regime: (check one)	Ephem	eral	☐ Interm	nittent	V	Perennial	☐ Connect	ting		
Sinuosity within Survey Corridor: (check one)	∃ Straigh	t	✓ Mean	dering						
Feature is Silver Creek,	a pereni	nial river.								
Measurements										
Depth of Water: 1	ft.	N/A□	Unkno	wn 🗆   W	/ater Edge	to Water Ed	<b>ge:</b> <u>12</u> ft.	N/A□	OHWM Widt	<b>1:</b> <u>15</u> ft.
OHWM Indicator: (check all that apply)	<b>I</b> CI	ear line o	on bank	□Shel	ving	□Wrested v	egetation	□Scouring		☐Water staining
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		nt, matte		□Wrad	ck line	□Litter and	debris	□ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	<b>☑</b> Cobb	le 🗹 🤇	Gravel	<b>坚</b> Sand	□ Silt/ clay	□ Organic
Observations										
Riparian Zone Present: (check one)	<b>☑</b> Ye	es		No						
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/	/Shrubs	✓ Herbs				
Dominant Bank Vegeta Salix spp., Barbarea vu	<b>ition</b> (list garis	·):								
Aquatic Habitats (ex: su Pools, riffles, runs, rock	omerged or outcrops	emerged ac s, sand b	quatic vegeta ars, grave	ition, overha l bars, wo	nging banks/ro oody debris	oots, leaf packs, la S.	rge submerged w	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob None.	served	(list):								
<b>Disturbances</b> (ex: livest None.	ock acces	s, manure	in waterbo	dy, waste	discharge pi	pes):				
Observation Notes: The feature is a braided	channel	perennia	al waterbo	ody. Withi	in the surve	ey corridor, th	e feature has	multiple chanr	nels separated	d by large gravel bars.



sasd1011p\_W (across)



sasd1011p\_N (downstream)



sasd1011p\_S (upstream)

		<u>t                                    </u>						
Description								
Project Name:				Date:			Waterbody Su	ırvey ID:
Line 5 Relocation Project				2020-06-06			oasd1002	
State:	County	/Parish:		USGS Water	body Name:		·	
Wisconsin	Ashlan	d		None				
Company:	Crew N	lember Initials:		Latitude:			Longitude:	
Enbridge	KDF/A	GG		46.373536			-90.719455	
Survey Type:   √ Central Cent	terline	☐ Re-Route		Access Road	□Facility	□Other		
Waterbody Type: ☐ Stoc	k Pond	☐ Natural Pond		Fishing Pond	☐ Lake	✓ Other		
Water Appearance: ☐ No V	Vater	☐ Clear	<b>₫</b> T	urbid	□Sheen on Surface	□Surfac	e Scum	gal Mats □Other
Feature Quality:	١	✓ Moderate		Low	Curiaco			
Feature Description: ☐ Natu	ural	☑ Artificial, man-	made 🗆	Manipulated				
Description Notes:								
Measurements								
Depth of Water: 3 ft.	N/A□	Unknown□						
OHWM Indicator:	Clear line	on bank □She	elving	□Wrested ve	egetation	Scouring		□Water staining
	Bent, matt		ack line	□Litter and o	lebris		t community	☐Soil characteristic change
Dominant Substrate:  (check all that apply)	Bedrock	☐ Boulder	☐ Cobb	le 🗆 G	iravel	□ Sand	☑ Silt/ clay	□ Organic
Observations								
Riparian Zone Present: (check one)	Yes	□ No						
Vegetation Layers:  √ (check all that apply)	Trees	<b></b> Saplings	s/Shrubs	✓ Herbs				
Dominant Bank Vegetation (	(list):							
Salix bebbiana, Scirpus cyper	inus, Popu	llus tremuloides, G	lyceria stria	ta				
Aquatic Habitats (ex: submerged			nanging banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep pe	ools, etc.):	
Pools, inundated vegetation a		anks.						
Aquatic Organisms Observe								
Tadpoles, aquatic invertebrate								
Disturbances (ex: livestock acc								
Runoff from the gravel road as	nd nearby	quarry. Gravel imp	ounding wa	ter on the eas	t side.			
Observation Notes:								
Woodcock observed near the	feature.							



oasd1002\_E



oasd1002\_S



oasd1002\_SW

vvaterbody bata	Jileet										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ect					2020-06-06			sasd1014e		
State:		County/F	Parish:			USGS Wate	body Name	:			
Wisconsin		Ashland				None					
Company:		Crew Me	mber Init	ials:		Latitude:			Longitude:		
Enbridge		KDF/AG	G			46.373356			-90.719430		
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Rou	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	□ River		☐ Stream	1	<b>V</b>	Ditch	☐ Swale	☐ Canal		Other	
Water Appearance: (check one)	☑ No Wa	ter	☐ Clear		□Т	urbid	☐Sheen on Surface	□Surfac	e Scum	Algal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☐ Highly	Function	al Stream	<b>☑</b> Mo	oderately	/ Functional S		☐ Functionally	Impaired Str	eam	
Feature Description: (check one)	☐ Natural		☐ Artificia	al, man-ma	de 🗹 I	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Intermi	ttent		Perennial	☐ Connect Swale	ting			
Sinuosity within Survey Corridor: (check one)	✓ Straigh	it	☐ Meand	ering							
Description Notes: The feature is a small oasd1002 when water			at connect	s a wetland	d from ou	utside of the s	urvey corrido	or to an open w	aterbody. Th	ne feature flov	ws into
Measurements											
Depth of Water: 0	ft.	N/A□	Unknow	vn□ Wat	er Edge	to Water Ed	<b>ge:</b> <u>0</u> ft.	N/A□	OHWM Wid	lth: <u>2</u> ft	i.
OHWM Indicator:		ear line o	n hank	□Shelvir	na	□Wrested v	agetation	✓ Scouring		□Water s	staining
(check all that apply)	<b>⊻</b> Be	ent, matted	d, or	□Wrack		□Litter and o	·	□ Abrupt plan change	t community		aracteristic
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Воι	ulder	□ Cobb	le 🗆 G	iravel	□ Sand	☑ Silt/ cla	ay 🗆 (	Organic
Observations											
Riparian Zone Preser	nt: 🗆 Ye	es	<u> </u>	No							
Vegetation Layers:	<b>☑</b> Tr	ees	<b>Ø</b> 9	Saplings/Sh	nrubs	☑ Herbs					
Dominant Bank Vege Populus tremuloides,	tation (list Salix bebb	·): iana, Glyd	ceria striat	ta							
Aquatic Habitats (ex: None.	submerged or	emerged aq	uatic vegetati	ion, overhangi	ng banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):		
Aquatic Organisms ( None.	Observed (	(list):									
<b>Disturbances</b> (ex: live Disturbance from land				ly, waste dis	charge pi	pes):					
Observation Notes: None.											



sasd1014e\_E (across)



sasd1014e\_S (downstream)



sasd1014e\_N (upstream)

Waterbody Data	Jiicci										
Description											
Project Name:						Date:			Waterbody S	urvey ID:	
Line 5 Relocation Projec	t					2020-06-08			sasd1017p		
State:		County/	Parish:			USGS Wate	rbody Name				
Wisconsin		Ashland				UNT to Silve	r Creek				
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:		
Enbridge		KDF/AG	G			46.374060			-90.714307		
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	ute	□A	Access Road	□Facility	□Other			
Waterbody Type:	River		✓ Stream	า		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance:  (check one)	No Wat	ter	☑ Clear		□Т	urbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other	
Existing Condition <sup>a</sup> :  (check one)	Highly	Function	al Stream	□ N	/loderately	/ Functional S		☐ Functionally	Impaired Strea	am	
Feature Description:	Natural		☐ Artificia	al, man-m	ade 🗆 N	Manipulated					
Flow Regime:	Ephem	eral	☐ Interm	ittent		Perennial	☐ Connect Swale	ting			
Sinuosity within Survey Corridor: (check one)	Straigh	t	✓ Meano	dering							
The perennial stream flo	ws nortr	east to s	southwest	through th	ne survey	corridor.					
Measurements											
Depth of Water: 1	ft.	N/A□	Unknov	wn□ Wa	ater Edge	to Water Ed	<b>ge:</b> <u>10</u> ft.	N/A□	OHWM Width	n: <u>12</u> ft.	
OHWM Indicator: (check all that apply)	□ CI	ear line o	on bank	□Shelv	ring	□Wrested v	egetation	<b>☑</b> Scouring		□Water staining	
(orosii an anat appry)		nt, matte		□Wrac	k line	<b>☑</b> Litter and o	debris	□Abrupt plan change	t community	☐Soil characteristic change	
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	☐ Cobbl	le 🗆 G	Gravel	<b>☑</b> Sand	□ Silt/ clay	☐ Organic	
Observations											
Riparian Zone Present:	<b>☑</b> Ye	es		No							
Vegetation Layers: (check all that apply)	□ Tr	ees	V (	Saplings/S	Shrubs	✓ Herbs					
Dominant Bank Vegetar Alnus incana, Matteuccia	t <b>ion</b> (list a struthio	): opteris, G	Slyceria cf.	. striata							
Aquatic Habitats (ex. sub Downed woody debris, s	merged or and and	emerged ac I gravel b	quatic vegetat	tion, overhan	ging banks/ro	oots, leaf packs, la	rge submerged w	ood, riffles, deep po	ools, etc.):		
Aquatic Organisms Obs Aquatic invertebrates, m	served ( innows.	(list):									
<b>Disturbances</b> (ex: livesto Moderate bank erosion.	ck access	s, manure	in waterboo	dy, waste d	ischarge pi	pes):					
Observation Notes: None.											



sasd1017p\_W (across)



sasd1017p\_S (downstream)



sasd1017p\_NE (upstream)

Waterbody Date	Jileet											
Description												
Project Name:						Date:				Waterboo	dy Sur	vey ID:
Line 5 Relocation Proj	ect					2020-06-09	)			sasa071p	<b>_</b> x	
State:		County/	/Parish:			USGS Wat	erbody Nar	me:				
Wisconsin		Ashland	t			UNT to Silv	er Creek					
Company:		Crew M	ember Ini	tials:		Latitude:				Longitude:		
Enbridge		KDF/AG	3G			46.373704				-90.7128 <sup>2</sup>	19	
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	y	□Other			
Waterbody Type: (check one)	☐ River		✓ Strean	n		Ditch	☐ Swale	е	☐ Cana	I	☐ Oth	ner
Water Appearance:	□ No Wa	ter	☑ Clear			Turbid	☐Sheen Surface	on	□Surfac	ce Scum	□Alga	al Mats □Other
Existing Condition a: (check one)	☑ Highly	Function	nal Stream		Moderate	ely Functional		□ Fu	nctionally	Impaired S	Stream	1
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-	-made [	Manipulated						
Flow Regime: (check one)	□ Ephem	eral	☐ Interm	ittent	•	Perennial	☐ Conn Swale	necting				
Sinuosity within Survey Corridor: (check one)	☐ Straigh	nt	✓ Meano	dering								
Magguramanta												
Measurements Depth of Water: 1	ft.	N/A□	Unknov	wn□	Water Ede	ge to Water E	dge: 12	ft.	N/A□	OHWM W	/idth:	12 ft.
					·			=				
OHWM Indicator: (check all that apply)	□ Cl	ear line	on bank	□Sh	elving	□Wrested	vegetation	<b></b> ✓S	couring			□Water staining
, , , , , , , , , , , , , , , , , , , ,		ent, matte ing vege		□Wr	ack line	<b>☑</b> Litter and	debris	□A cha		nt commun		Soil characteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Cob	ble $\square$	Gravel		Sand	✓ Silt/	clay	☐ Organic
Observations												
Riparian Zone Preser	it: 🗹 Ye	es		No								
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>Ø</b> :	Sapling	s/Shrubs	✓ Herb	3					
<b>Dominant Bank Vege</b> Fraxinus nigra, Alnus	tation (list incana, Ca	t): irex crinit	ta, Matteu	ccia stru	uthiopteris							
Aquatic Habitats (ex. 9 Downed woody debris	submerged or , exposed	emerged a	quatic vegeta	tion, overh	hanging banks	s/roots, leaf packs,	large submerge	ed wood, r	iffles, deep p	ools, etc.):		
Aquatic Organisms O Aquatic invertebrates.	bserved (	(list):										
<b>Disturbances</b> (ex: live: Minimal bank erosion.	stock acces	s, manure	e in waterboo	dy, waste	e discharge	pipes):						
Observation Notes: Snapping turtle nestin	g along the	e gravel ı	road above	e the cu	ulverts.							



sasa071p\_x (across)



sasa071p\_x (downstream)



sasa071p\_x (upstream)

Waterbody Date	Jileet										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Proj	ect					2020-06-08			sasd1015p		
State:		County/	Parish:			USGS Wate	erbody Name	9:			
Wisconsin		Ashland	l			UNT					
Company:		Crew Me	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		KDF/AG	iG			46.371905			-90.718866		
Survey Type: (check one)	✓ Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other	l		
Waterbody Type: (check one)	☐ River		✓ Strean	n		Ditch	☐ Swale	☐ Cana	I 🗆	Other	
Water Appearance: (check one)	□ No Wa	ter	☑ Clear			]Turbid	☐Sheen or Surface	n □Surfac	ce Scum 🗆	Algal Mats □Other	
Existing Condition <sup>a</sup> :	☑ Highly	Function	al Stream	ı 🗆	Moderate	ely Functional		☐ Functionally	Impaired Stre	eam	
Feature Description:	✓ Natural		☐ Artificia	al, man-	made $\square$	Manipulated					
Flow Regime: (check one)	□ Ephem	eral	☐ Interm	ittent	V	Perennial	☐ Connec	cting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	nt	✓ Mean	dering			Swale				
· 			J	·							
Measurements											
Depth of Water: 0.75	<u>5_</u> ft.	N/A□	Unknov	wn□	Water Edg	ge to Water Ed	<b>lge</b> : <u>6</u> ft	N/A 🗆	OHWM Widt	t <b>h:</b> <u>8</u> ft.	
OHWM Indicator:		ear line o	an hank	□Sh	alvina	□\Mrootod \	vocatation	✓ Scouring		□Water etaining	
(check all that apply)		ear iirie (	on bank	□She	eiving	□Wrested \	regetation	<b>■</b> Scouring		□Water staining	
		ent, matte ing veget	-, -	□Wr	ack line	<b>☑</b> Litter and	debris	□Abrupt plar change	nt community	✓ Soil characteristic change	
Dominant Substrate: (check all that apply)	□В€	edrock	□ Во	ulder	<b>☑</b> Cob	ble 🗆	Gravel	<b>☑</b> Sand	☐ Silt/ cla	y 🗆 Organic	
Observations											
Riparian Zone Preser	nt: 🗹 Ye	es		No							
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>v</b> :	Sapling	s/Shrubs	✓ Herbs	3				
Dominant Bank Vege Equisetum scirpoides,	<b>tation</b> (list Fraxinus	·) <u>:</u> nigra, Ma	atteuccia s	truthiop	teris						
Aquatic Habitats (ex. 9 Downed woody debris	submerged or , sand and	emerged ac I gravel b	quatic vegeta pars, riffles	tion, overh	nanging banks	/roots, leaf packs,	arge submerged	wood, riffles, deep p	ools, etc.):		
Aquatic Organisms C Aquatic invertebrates.	bserved (	(list):									
<b>Disturbances</b> (ex: live: Moderate bank erosio	stock acces n with exp	s, manure osed roo	in waterboots.	dy, waste	e discharge	pipes):					
Observation Notes: Feature associated wi	th wetland	wasd103	33.								
l											



sasd1015p\_S (across)



sasd1015p\_W (downstream)



sasd1015p\_E (upstream)

Waterbody Data	Officet										
Description											
Project Name:						Date:			Waterbody S	urvey ID:	
Line 5 Relocation Proje	ect					2020-06-08			sasd1016i		
State:		County/F	Parish:			USGS Wate	body Name	:			
Wisconsin		Ashland				UNT					
Company:		Crew Me	mber Init	ials:		Latitude:			Longitude:		
Enbridge		KDF/AG	G			46.371817			-90.718855		
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	☐ River		✓ Stream	1		Ditch	☐ Swale	☐ Canal		Other	
Water Appearance:	□ No Wa	ter	☑ Clear			Turbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other	
	☑ Highly	Function	al Stream	□ Mod	lerately	y Functional S		☐ Functionally	Impaired Strea	am	
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-made	e 🗆	Manipulated					
Flow Regime: (check one)	□ Ephem	eral	✓ Intermi	ittent		Perennial	☐ Connec	ting			
Sinuosity within Survey Corridor: (check one)	<b>☑</b> Straigh	t	□ Meand	ering							
The intermittent stream	i is ied by	а ѕеер а	na nows r	iorth through	i the Si	urvey corridor	into sasqu is	φ.			
Measurements											
Depth of Water: 0.25	_ft.	N/A□	Unknov	vn□ Wate	r Edge	e to Water Ed	<b>ge:</b> <u>0.5</u> ft.	N/A□	OHWM Width	n: <u>2</u> ft.	
OHWM Indicator: (check all that apply)	□ CI	ear line o	n bank	□Shelving	I	□Wrested ve	getation	✓Scouring		□Water staining	
(спеск ан шагарру)		nt, matted		□Wrack li	ne	<b>☑</b> Litter and o	lebris	□Abrupt plan	t community	□Soil characteristic change	
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Воι	ulder 🗆	Cobb	ole 🗆 G	ravel	<b>☑</b> Sand	☐ Silt/ clay	☐ Organic	
Observations											
Riparian Zone Presen	t: 🗆 Ye	es	<b>V</b> 1	No							
Vegetation Layers: (check all that apply)	□ Tr	ees	<b>v</b> (	Saplings/Shr	ubs	✓ Herbs					
Dominant Bank Veget Fraxinus nigra, Ranund	ation (list	): s, Athyriur	m filix-fem	iina							
Aquatic Habitats (ex: s None.	ubmerged or	emerged aq	uatic vegetat	ion, overhanging	j banks/r	oots, leaf packs, la	rge submerged v	wood, riffles, deep po	ools, etc.):		
Aquatic Organisms O None.	bserved (	(list):									
<b>Disturbances</b> (ex: lives Moderate bank erosion		s, manure i	in waterboo	ly, waste disch	narge p	ipes):					
Observation Notes: None.											



sasd1016i\_E (across)



sasd1016i\_N (downstream)



sasd1016i\_S (upstream)

Trate: Beay Batt	4 011000										
Description											
Project Name:						Date:			Waterbody Su	urvey ID:	
Line 5 Relocation Pro	ect					2020-05-28			sase1005e		
State:		County	/Parish:			USGS Wate	erbody Name	<b>)</b> :			
Wisconsin		Ashland	d			None					
Company:		Crew M	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		ARK/DI	MP			46.366805			-90.723369		
Survey Type: (check one)	✓ Center	ine	□ Re-Ro	oute		Access Road	□Facility	□Other			
Waterbody Type: (check one)	□ River		□ Strear	n		Ditch	✓ Swale	☐ Cana	I 🗆 C	Other	
Water Appearance: (check one)	□ No Wa	ter	✓ Clear			Turbid	☐Sheen or	n 🗆 Surfac	e Scum	lgal Mats □Other	
Existing Condition <sup>a</sup> : (check one)	✓ Highly	Function	nal Stream	ı 🗆	Moderate	ly Functional	Surface Stream	☐ Functionally	Impaired Strea	ım	
Feature Description: (check one)	✓ Natura		☐ Artifici	al, man-	-made $\square$	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	eral	☐ Interm	nittent		Perennial	☐ Connection Connection	eting			
Sinuosity within Survey Corridor: (check one)	☐ Straigh	nt	✓ Mean	dering							
Ephemeral feature wit to a wetland outside the			ed bed an	d bank,	located in	a forested swa	ale. Conveys	stormwater cor	centrated from	higher in the landscape	
Measurements											
Depth of Water: 0.25	<u>5</u> ft.	N/A□	Unkno	wn□	Water Edg	e to Water Ed	dge: <u>2</u> ft.	. N/A□	OHWM Width	: <u>2</u> ft.	
OHWM Indicator:	□С	ear line	on bank	□She	elving	□Wrested \	/egetation	□Scouring		□Water staining	
(check all that apply)		ent, matte ing vege		□Wra	ack line	<b>☑</b> Litter and	debris	☑Abrupt plan change	t community	☑Soil characteristic change	
Dominant Substrate: (check all that apply)	□Ве	edrock	□Вс	oulder	☐ Cobl	ble 🗆	Gravel	□ Sand	<b>I</b> Silt/ clay	☐ Organic	
Observations											
Riparian Zone Preser	nt: 🗆 Ye	es	<b>V</b>	No							
Vegetation Layers:	<b>☑</b> Tr	ees		Saplings	s/Shrubs	✓ Herbs	3				
Dominant Bank Vege Acer saccharum, Ono	etation (list clea sensi	oilis, Tox	kicodendro	n radica	ans						
Aquatic Habitats (ex: None.	submerged or	emerged a	quatic vegeta	ation, overh	nanging banks/	roots, leaf packs,	large submerged	wood, riffles, deep p	ools, etc.):		
Aquatic Organisms ( None.	Observed	(list):									
<b>Disturbances</b> (ex: live None.	stock acces	s, manure	e in waterbo	dy, waste	e discharge p	oipes):					
Observation Notes: There is less vegetation	on in the b	ed of the	e channel t	han the	re is on the	adjacent slop	oes.				



sase1005e\_SE (across)



sase1005e\_NE (downstream)



sase1005e\_SW (upstream)

Waterbody Data 3	iicci									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Project						2020-05-29			sase1006e	
State:	C	County/F	Parish:			USGS Wate	body Name	:		
Wisconsin	,	Ashland				None				
Company:	C	Crew Me	mber Init	ials:		Latitude:			Longitude:	
Enbridge	I	DMP/AR	K			46.366865			-90.723447	
Survey Type:	Centerlin	ne	☐ Re-Rou	ute	<b>V</b>	Access Road	□Facility	□Other		
Waterbody Type:   (check one)	River		☐ Stream	l		Ditch	✓ Swale	☐ Canal		Other
	No Wate	er	☑ Clear		1	Turbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition a:	Highly F	unction	al Stream	<b>☑</b> Mod	lerately	y Functional S		☐ Functionally	Impaired Strea	ım
Feature Description:   (check one)	Natural		☐ Artificia	ıl, man-made	e <b></b>	Manipulated				
Flow Regime: 🗹 E	Epheme	eral	☐ Intermi	ttent		Perennial	☐ Connec Swale	ting		
Sinuosity within Survey Corridor:	Straight		✓ Meand	ering						
Measurements										
Depth of Water: 0.25 ft.	١	N/A□	Unknow	<sub>vn□</sub> Wate	r Edge	e to Water Ed	<b>ge:</b> <u>1</u> ft.	N/A□	OHWM Width	: <u>2</u> ft.
OHWM Indicator: (check all that apply)	<b>☑</b> Cle	ar line o	n bank	□Shelving	J	□Wrested ve	egetation	□Scouring		☐Water staining
(онных ан инасарруу)		nt, matted		□Wrack lii	ne	□Litter and o	lebris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□ Bed	drock	□ Воι	ulder 🗆	Cobb	ole 🗆 G	ravel	□ Sand	<b></b> Silt/ clay	□ Organic
Observations										
Riparian Zone Present:	☐ Yes	3	<b>I</b>	No						
Vegetation Layers: (check all that apply)	✓ Tre	es	<b>Ø</b> 9	Saplings/Shr	ubs	☑ Herbs				
Dominant Bank Vegetation Betula papyrifera, Prunus	on (list): serotina	a, Osmu	nda clayto	oniana, Cory	lus cor	nuta, Carex g	racillima			
Aquatic Habitats (ex: submething feature could be used	erged or e by rept	merged aq tiles and	uatic vegetati amphibia	ion, overhanging ns when flow	panks/r	oots, leaf packs, la	rge submerged v	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obse No aquatic organisms wer	e <b>rved</b> (la e obser	ist): ved.								
<b>Disturbances</b> (ex: livestock The headwater of the feature)	access, ure is lo	, manure i ocated or	in waterbod n an existi	ly, waste disch ng private ro	narge pi oad.	ipes):				
Observation Notes: The ephemeral stream be	gins at	a private	road and	flows throug	gh a w	oodland. The	stream is rath	ner short, and e	empties into sa	se1005e.



sase1006e\_N (across)



sase1006e\_W (downstream)



sase1006e\_W (upstream)

Waterbody Data	a Silect									
Description										
Project Name:						Date:			Waterbody	Survey ID:
Line 5 Relocation Pro	ject					2020-05-29			sase1007p	
State:		County/	Parish:			USGS Wate	rbody Name	:		
Wisconsin		Ashland	l			Silver Creek	(			
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:	
Enbridge		DMP/AF	RK			46.367410			-90.715404	
Survey Type: (check one)	☐ Centerl	ine	☐ Re-Ro	ute	<b>V</b>	Access Road	□Facility	□Other		
Waterbody Type:	□ River		✓ Stream	n		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: (check one)	□ No Wa	ter	☑ Clear		□1	Γurbid	☐Sheen or Surface	□Surfac	e Scum	Algal Mats □Other
Existing Condition <sup>a</sup> : (check one)	☑ Highly	Function	al Stream		Moderately	y Functional S		☐ Functionally	Impaired Str	eam
Feature Description: (check one)	✓ Natural		☐ Artificia	al, man-m	nade 🗆	Manipulated				
Flow Regime: (check one)	□ Ephem	eral	□ Interm	ittent	V	Perennial	☐ Connec Swale	ting		
Sinuosity within Survey Corridor: (check one)	☐ Straigh	t	✓ Meano	dering						
Measurements				- Isaa						
Depth of Water: 2	ft.	N/A□	Unknov	wn□   <b>W</b>	ater Edge	to Water Ed	l <b>ge: <u>25</u> ft</b> .	N/A□	OHWM Wid	<b>Ith:</b> <u>25</u> ft.
OHWM Indicator:	<b>☑</b> CI	ear line o	on bank	□Shel	ving	□Wrested v	egetation	□Scouring		□Water staining
(check all that apply)		nt, matte		<b>⊈</b> Wrac	ck line	<b>☑</b> Litter and	debris	✓ Abrupt plan change	t community	✓ Soil characteristic change
Dominant Substrate: (check all that apply)	□ Ве	edrock	□ Во	ulder	<b>☑</b> Cobb	le 🗹 (	Gravel	<b>☑</b> Sand	☐ Silt/ cla	ay 🗆 Organic
Observations										
Riparian Zone Preser	nt: 🗹 Ye	es	<u> </u>	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	<b>Ø</b> (	Saplings/	Shrubs	✓ Herbs				
<b>Dominant Bank Vege</b> Betula papyrifera, Tilia	etation (list a american	): a, Alnus	incana, So	cirpus mid	crocarpus					
<b>Aquatic Habitats</b> (ex: Pools, riffles, runs, an	submerged or d large wo	emerged ac ody debri	quatic vegetat	tion, overhar	nging banks/re	oots, leaf packs, l	arge submerged v	wood, riffles, deep po	ools, etc.):	
Aquatic Organisms ( No aquatic organisms	Observed were obse	(list): erved dur	ring the su	rvey, how	vever fish,	amphibians,	and aquatic	insects are ass	sumed to be	present.
<b>Disturbances</b> (ex: live There is bridge that g	stock acces oes over th	s, manure e stream	in waterboo	dy, waste o	discharge pi	ipes):				
Observation Notes: The perennial stream	meanders	south to	north thro	ugh the a	a forest. Th	nere was a br	idge over the	feature, but the	e disturbance	e is low.



sase1007p\_W (across)



sase1007p\_N (downstream)



sase1007p\_S (upstream)

Waterbody Date	a Silect										
Description											
Project Name:						Date:			Waterbody	Survey ID:	
Line 5 Relocation Pro	ject					2020-05-27			sasd1003e		
State:		County/	Parish:			USGS Wate	erbody Name	<b>9</b> :			
Wisconsin		Ashland	i			None	-				
Company:		Crew M	ember Ini	tials:		Latitude:			Longitude:		
Enbridge		AGG/O	TG			46.351847			-90.666622		
Survey Type:	✓ Center	line	☐ Re-Ro	ute		Access Road	□Facility	□Other			
(check one)	□ River		☐ Stream			Ditch		Cons		Other	
Waterbody Type: (check one)				<b> </b>			☐ Swale	☐ Canal			
Water Appearance: (check one)	□ No Wa	ter	☐ Clear			Turbid	☐ Sheen or Surface	n □Surfac	e Scum	∃Algal Mats	□Other
Existing Condition <sup>a</sup> : (check one)	☐ Highly	Function	nal Stream	□ M	loderately	/ Functional :		Functionally	Impaired Str	ream	
Feature Description:	□ Natura	l	Artificia	al, man-ma	ade 🗆 I	Manipulated					
Flow Regime: (check one)	<b>☑</b> Ephem	neral	☐ Interm	ittent		Perennial	☐ Connec	cting			
Sinuosity within Survey Corridor: (check one)	<b>☑</b> Straigh	nt	☐ Meano	dering							
Artificial ephemeral di											
Measurements Depth of Water: 0.5	ft	N/A□	Unknov	wn □ Wa	ater Edge	to Water Ed	ige: 1 ft	. N/A 🗆	OHWM Wid	dth: 1 ft	•
Depth of Water	_ ''.	10/10	Ontrior				.g				•
OHWM Indicator: (check all that apply)	□С	lear line	on bank	□Shelv	ing	□Wrested \	egetation	□Scouring		□Waters	staining
(oncor all that apply)		ent, matte		□Wracł	k line	□Litter and	debris	□Abrupt plan	t community	/ □Soil cha change	aracteristic
Dominant Substrate: (check all that apply)	□Ве	edrock	□ Во	ulder	□ Cobb	le 🗆 (	Gravel	□ Sand	<b>I</b> Silt/ cla		Organic
Observations											
Riparian Zone Preser	nt: 🗆 Ye	es	<u> </u>	No							
Vegetation Layers: (check all that apply)	□ Tr	ees		Saplings/S	Shrubs	☑ Herbs	3				
Dominant Bank Vege Lotus corniculatus, Ju	etation (list incus effus	t): us									
Aquatic Habitats (ex: None.	submerged or	emerged a	quatic vegeta	tion, overhanç	ging banks/ro	oots, leaf packs, l	arge submerged	wood, riffles, deep p	ools, etc.):		
Aquatic Organisms ( None.	Observed	(list):									
<b>Disturbances</b> (ex: live Excavated feature.	stock acces	s, manure	in waterboo	dy, waste di	ischarge pi	pes):					
Observation Notes: The feature is a man-	made ditch	ı created	to move v	vater away	/ from nea	arby infrastru	cture.				



sasd1003e\_N (across)



sasd1003e\_E (downstream)



sasd1003e\_W (upstream)

Water body Data Si	icci							
Description								
Project Name:				Date:			Waterbody S	urvey ID:
Line 5 Relocation Project				2020-05-27			sasd1001e	
State:	Count	y/Parish:		USGS Wate	erbody Name	:		
Wisconsin	Ashlar	nd		None				
Company:	Crew I	Member Initi	als:	Latitude:			Longitude:	
Enbridge	AGG/0	OTG		46.351835			-90.665073	
Survey Type:	enterline	☐ Re-Rou	te	□Access Road	□Facility	□Other		
Waterbody Type: ☐ R	liver	✓ Stream		☐ Ditch	☐ Swale	☐ Canal		Other
Water Appearance: ☐ N	lo Water	☐ Clear		<b>☑</b> Turbid	☐Sheen or Surface	n □Surfac	e Scum □A	lgal Mats □Other
Existing Condition <sup>a</sup> :	lighly Function	onal Stream	☐ Modera	tely Functional		Functionally	Impaired Strea	am
Feature Description: N (check one)	latural	Artificial	, man-made	☐ Manipulated				
Flow Regime:	phemeral	☐ Intermit	tent	☐ Perennial	☐ Connec Swale	ting		
Sinuosity within Survey Corridor: (check one)	traight	☐ Meande	ering					
Artificial ephemeral feature	draining an	excavated w	etiano.					
Measurements								
Depth of Water: 0.25 ft.	N/A□	Unknow	n□ Water Ed	dge to Water Ed	<b>lge:</b> <u>1</u> ft.	N/A□	OHWM Width	n: <u>1</u> ft.
OHWM Indicator: (check all that apply)	☐ Clear line	on bank	□Shelving	□Wrested \	regetation	□Scouring		□Water staining
(check all that apply)	☑Bent, mat missing veg		□Wrack line	<b>Ľ</b> Litter and	debris	✓ Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	☐ Bedrock	☐ Bou	lder □ Co	obble 🗆 (	Gravel	☐ Sand	<b>坚</b> Silt/ clay	☐ Organic
Observations								
Riparian Zone Present:	□ Yes	<b>☑</b> N	0					
Vegetation Layers: (check all that apply)	☐ Trees	□S	aplings/Shrubs	✓ Herbs	3			
Dominant Bank Vegetatio Scirpus sp.	on (list):							
Aquatic Habitats (ex: subme None.		aquatic vegetation	on, overhanging ban	ks/roots, leaf packs, l	arge submerged v	vood, riffles, deep po	ools, etc.):	
Aquatic Organisms Obse None.	rved (list):							
Disturbances (ex: livestock Culverts, roads, large rocks	access, manu s placed in th	re in waterbody ne channel.	/, waste discharge	e pipes):				
Observation Notes: The feature is an ephemer	al stream tha	nt flows throug	gh two culverts	and an associa	ted wetland. I	t is highly altere	ed and very lov	w quality.



sasd1001e\_S (across)



sasd1001e\_E (downstream)



sasd1001e\_W (upstream)

Trator Sour Bata	011000								
Description									
Project Name:				Date:			Waterbody S	urvey ID:	
Line 5 Relocation Proje	ect			2020-05-2	7		sasd1002e		
State:	Co	ounty/Parish:		USGS Wa	terbody Nam	e:			
Wisconsin	As	shland		None					
Company:	Cr	ew Member Ini	tials:	Latitude:			Longitude:		
Enbridge	A	GG/OTG		46.351578	}		-90.665676		
Survey Type: (check one)	✓ Centerline	e □ Re-Ro	ute	□Access Roa	d □Facility	□Other			
· · · · · · · · · · · · · · · · · · ·	□ River	✓ Stream	n	☐ Ditch	☐ Swale	☐ Cana	I 🗆 (	Other	
·	☐ No Water	☐ Clear		☑Turbid	☐Sheen o	on □Surfac	ce Scum	lgal Mats	□Other
Existing Condition <sup>a</sup> :	☐ Highly Fu	ınctional Stream	☐ Modera	ately Functional	Surface Stream	Functionally	Impaired Strea	ım	
Feature Description: (check one)	□ Natural	✓ Artificia	al, man-made	☐ Manipulated	ı				
	<b>☑</b> Ephemer	al 🗆 Interm	ittent	☐ Perennial	☐ Conne Swale	ecting			
·	□ Straight	<b>☑</b> Meand	dering		Owaic				
Measurements									
Depth of Water: 0.5	_ ft. N/.	A□ Unknov	wn□ Water E	dge to Water E	idge:11	ft. N/A□	OHWM Width	n: <u>1</u> f	t.
OHWM Indicator:	☐ Clea	r line on bank	□Shelving	□Wrested	vegetation	□Scouring		□Waters	staining
(check all that apply)		matted, or vegetation	□Wrack line	□Litter and	d debris	□Abrupt plar change	t community	□Soil cha	aracteristic
Dominant Substrate: (check all that apply)	☐ Bedr	ock 🗆 Bo	ulder 🗆 Co	obble $\square$	Gravel	<b>☑</b> Sand	<b>I</b> Silt/ clay		Organic
Observations									
Riparian Zone Presen (check one)	t: 🗆 Yes	<b>V</b> 1	No						
Vegetation Layers: (check all that apply)	☐ Tree	s 🗆 :	Saplings/Shrubs	s <b>☑</b> Hert	OS				
Dominant Bank Veget Festuca cf. rubra	tation (list):								
<b>Aquatic Habitats</b> (ex: s None.	ubmerged or em	erged aquatic vegeta	tion, overhanging bar	nks/roots, leaf packs	, large submerged	I wood, riffles, deep p	ools, etc.):		
Aquatic Organisms O None.	<b>bserved</b> (lis	t):							
<b>Disturbances</b> (ex: lives Culvert, road, large roo	tock access, r cks placed in	nanure in waterboo channel.	dy, waste discharg	ge pipes):					
Observation Notes: The feature is a highly	altered ephe	meral stream th	at flows through	n a culvert and	terminates in	a nearby wetlan	d.		



sasd1002e\_S (across)



sasd1002e\_W (downstream)



sasd1002e\_E (upstream)

Waterbody Data	Once									
Description										
Project Name:						Date:			Waterbody S	urvey ID:
Line 5 Relocation Projection	ct					2020-05-28			sasb006p_x1	
State:		County/l	Parish:			USGS Wate	rbody Name			
Wisconsin		Ashland				Bad River				
Company:		Crew Me	ember Init	tials:		Latitude:			Longitude:	
Enbridge		AGG/OT	ΓG			46.336244			-90.652612	
Survey Type: (check one)	Centerl	ine	☐ Re-Ro	ute		Access Road	□Facility	□Other		
Waterbody Type: (check one)	<b>1</b> River		☐ Stream	า		Ditch	☐ Swale	☐ Canal		Other
Water Appearance: [	☐ No Wa	ter	☑ Clear		□Т	urbid	☐Sheen on Surface	□Surfac	e Scum □A	lgal Mats □Other
Existing Condition <sup>a</sup> : (check one)	<b>1</b> Highly	Function	al Stream	□ M	oderately	/ Functional S		Functionally	Impaired Strea	am
Feature Description: (check one)	Natural		☐ Artificia	al, man-ma	ade 🗆 I	Manipulated				
Flow Regime: [check one)	Ephem	eral	☐ Interm	ittent	V I	Perennial	☐ Connect Swale	ting		
Sinuosity within Survey Corridor: (check one)	∃ Straigh	t	✓ Meano	dering						
Southern bank of the Ba	ad River	at the ed	ge of the s	survey corr	ridor.					
Measurements										
Depth of Water: 5	ft.	N/A□	Unknov	wn□ Wa	ter Edge	to Water Ed	<b>ge:</b> <u>50</u> ft.	N/A□	OHWM Width	i: <u>50</u> ft.
OHWM Indicator: (check all that apply)	<b>☑</b> CI	ear line o	on bank	□Shelvi	ng	□Wrested v	egetation	□Scouring		□Water staining
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		nt, matte ing veget		□Wrack	line	□Litter and o	debris	□Abrupt plan change	t community	☐Soil characteristic change
Dominant Substrate: (check all that apply)	□В€	edrock	□ Во	ulder	□ Cobb	le 🗆 G	Gravel	<b>☑</b> Sand	<b>坚</b> Silt/ clay	☐ Organic
Observations										
Riparian Zone Present	<b>☑</b> Ye	es	1 🗆	No						
Vegetation Layers: (check all that apply)	<b>☑</b> Tr	ees	V (	Saplings/S	hrubs	✓ Herbs				
Dominant Bank Vegeta Acer saccharinum, Frax	<b>ition</b> (list inus pen	): nsylvanio	ca, Matteu	ccia struth	iopteris,	Prunus virgini	ana			
Aquatic Habitats (ex: su Runs, pools, woody deb	oris, over	emerged achanging v	quatic vegetal vegetation	tion, overhang	jing banks/ro	oots, leaf packs, la	rge submerged w	rood, riffles, deep po	ools, etc.):	
Aquatic Organisms Ob None.	served (	(list):								
<b>Disturbances</b> (ex: livest Road, bridges.	ock acces	s, manure	in waterboo	dy, waste dis	scharge pi	pes):				
Observation Notes: The Bad River is a pere	nnial wat	terbody tl	hat flows t	hrough su	rrounding	g floodplain fo	rest.			



sasb006p\_x1 (across)



sasb006p\_x1 (downstream)



sasb006p\_x1 (upstream)