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Waterbody Index			
County	Feature ID	Survey Map Page	Datasheet Part Number
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Ashland	sasb1003e	20	10
Ashland	sasb1004e	20, 21	10
Ashland	sasb1005i	20, 21	11
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Ashland	sasc1006p	18, 19	8
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Ashland	sasc1010i	19	9
Ashland	sasc1011e	20	9
Ashland	sasc1012p	20	9
Ashland	sasc1013e	20	9
Ashland	sasc1014p	20	9
Ashland	sasd013i_x	10	4
Ashland	sasd1001e	25	13
Ashland	sasd1002e	25	13
Ashland	sasd1003e	25	13
Ashland	sasd1004e	28	14
Ashland	sasd1005e	28	14
Ashland	sasd1006e	27	14
Ashland	sasd1007i	33	14
Ashland	sasd1008i	33	14
Ashland	sasd1009e	33	15
Ashland	sasd1010e	33	16

Waterbody Index			
County	Feature ID	Survey Map Page	Datasheet Part Number
Ashland	sasd1011p	22	12
Ashland	sasd1012i	22	12
Ashland	sasd1013p	22	12
Ashland	sasd1014e	22, 23	12
Ashland	sasd1015p	22, 23	12
Ashland	sasd1016i	22, 23	13
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Ashland	sasd1021e	11	4
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Ashland	sase006p_x	4, 5	2
Ashland	sase1001e	15	4
Ashland	sase1002e	15	4
Ashland	sase1003e	16	5
Ashland	sase1004e	16	5
Ashland	sase1005e	24	13
Ashland	sase1006e	24	13
Ashland	sase1007p	24	13
Ashland	sase1008e	16, 17	5
Ashland	sase1009e	17	5
Ashland	sase1010i	17	6
Ashland	sase1011i	17	6
Ashland	sase1012e	17	6
Ashland	sase1013e	17	6
Ashland	sase1014e	17	6
Ashland	sase1015i	17	6
Ashland	sase1016e	17	6
Ashland	sase1017e	17	6
Ashland	sase1018i	16	5
Ashland	sase1019i	16	5
Ashland	sase1020p	16	5
Ashland	sase1021e	16	5
Ashland	sase1022e	18	7
Ashland	sase1023e	18	7
Ashland	sase1024e	18	7
Ashland	sasw023p	9	2
Bayfield	sbad1001e	1	1

Waterbody Index			
County	Feature ID	Survey Map Page	Datasheet Part Number
Bayfield	sbad1002e	1	1
Bayfield	sbad1003e	1	1
Bayfield	sbad1004p	1	1
Bayfield	sbad1005e	1	1
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Iron	sirb1001e	31	15
Iron	sirb1002e	31, 32	15
Iron	sirc1001e	46, 47	16
Iron	sirc1002e	41	16
Iron	sirc1003i	42	16
Iron	sirc1004e	42	16
Iron	sirc1005p	43	16
Iron	sird016p_x	45, 46	16
Iron	sird1001e	32	16
Iron	sird1002e	32	15
Iron	sird1003e	32	15
Iron	sird1004i	32	15
Iron	sird1005i	32	15
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Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-12	Waterbody Survey ID: sbad1001e
State: Wisconsin	County/Parish: Bayfield	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: KDF/AGG	Latitude: 46.575124	Longitude: -91.032516
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The ephemeral stream begins at a non-functional culvert to the northwest and terminates into a roadside ditch wetland (wbad1001e) to the south. The feature is fed by seepage, and there is no evidence that water flows through the culvert.			
Measurements			
Depth of Water: <u>0.25</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>3</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> OHWM Width: <u>4</u> ft.	
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Athyrium filix-femina, Betula papyrifera, Acer rubrum			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Moderate bank erosion, garbage debris.			
Observation Notes: None.			



sbad1001e_N (across)



sbad1001e_SE (downstream)



sbad1001e_NW (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-22	Waterbody Survey ID: sbad1002e
State: Wisconsin	County/Parish: Bayfield	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: DMP/AGG	Latitude: 46.575593	Longitude: -91.029928
Survey Type: <small>(check one)</small> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input checked="" type="checkbox"/> Facility <input type="checkbox"/> Other			
Waterbody Type: <small>(check one)</small> <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other			
Water Appearance: <small>(check one)</small> <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other			
Existing Condition^a: <small>(check one)</small> <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream			
Feature Description: <small>(check one)</small> <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated			
Flow Regime: <small>(check one)</small> <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale			
Sinuosity within Survey Corridor: <small>(check one)</small> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering			
Description Notes: There was clear flowing water during the field survey.			
Measurements			
Depth of Water: <u>0.25</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>2</u> ft. <input type="checkbox"/> N/A	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <small>(check all that apply)</small> <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <small>(check all that apply)</small> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic			
Observations			
Riparian Zone Present: <small>(check one)</small> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
Vegetation Layers: <small>(check all that apply)</small> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs			
Dominant Bank Vegetation (list): Abies balsamea, Acer saccharum, Carex crinita, Osmunda claytoniana			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): There is a powerline corridor to the north.			
Observation Notes: The feature begins at wetland wbad1002 and flows south. The stream abruptly stops within the forest. Another ephemeral stream is present to the south of this feature.			



sbad1002e_E (across)



sbad1002e_S (downstream)



sbad1002e_N (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-07-09	Waterbody Survey ID: sbad1005e
State: Wisconsin	County/Parish: Bayfield	USGS Waterbody Name: UNT to North Fish Creek	
Company: Enbridge	Crew Member Initials: DMP/AGG	Latitude: 46.570827	Longitude: -91.018936
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input checked="" type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: The feature had flowing turbid water during the site visit.			
Measurements			
Depth of Water: <u>0.5</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>2</u> ft. <input type="checkbox"/> N/A	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Acer saccharum, Thalictrum dasycarpum			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Pools, riffles, runs, and woody debris.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): There is a substantial amount of trash in the stream. The trash consists of barrels, tires, paint buckets, and toys.			
Observation Notes: The feature is an ephemeral stream that flows southeast into a small perennial stream. The feature occurs within a swale that has steep banks. The stream has been significantly disturbed by humans.			



sbad1005e_SW (across)



sbad1005e_SE (downstream)



sbad1005e_NW (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-07-09	Waterbody Survey ID: sbad1004p
State: Wisconsin	County/Parish: Bayfield	USGS Waterbody Name: UNT to North Fish Creek	
Company: Enbridge	Crew Member Initials: DMP/AGG	Latitude: 46.570540	Longitude: -91.018452
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input checked="" type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: There was flowing turbid water within the feature during the site visit.			
Measurements			
Depth of Water: <u>2</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>5</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/>	
OHWM Width: <u>6</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Abies balsamea, Acer negundo, Alnus incana, Glyceria striata, Phalaris arundinacea			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Riffles, pools, runs, overhanging vegetation, and large woody debris.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): A pipeline corridor cuts through the survey area. The trees within the area have been cleared.			
Observation Notes: The feature is a small perennial stream that flows through a woodland. The stream is located within a swale that has very steep banks. Part of the feature has been manipulated by past pipeline construction.			



sbad1004p_S (across)



sbad1004p_E (downstream)



sbad1004p_SW (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-22	Waterbody Survey ID: sbad1003e
State: Wisconsin	County/Parish: Bayfield	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: DMP/AGG	Latitude: 46.575038	Longitude: -91.029576
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input checked="" type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: There was clear flowing water during the field survey.			
Measurements			
Depth of Water: <u>0.25</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>1</u> ft. <input type="checkbox"/> N/A	
OHWM Width: <u>1</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Abies balsamea, Pteridium aquilinum, Athyrium filix-femina			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature flows into a roadside ditch to the south.			
Observation Notes: The ephemeral stream begins within a woodland and flows south into wetland wbaa1001. The banks of surrounding the stream are relatively steep and eroded.			



sbad1003e_E (across)



sbad1003e_S (downstream)



sbad1003e_N (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-18	Waterbody Survey ID: sasa1001e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.554932	Longitude: -90.906428
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: Roadside ditch connecting two culverts.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
OHWM Width: <u>3</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Carex lacustris, Phalaris arundinacea, Tanacetum vulgare, Poa pratensis			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Road runoff.			
Observation Notes: Ditch appears to be mowed.			



sasa1001e_E (across)



sasa1001e_S (downstream)



sasa1001e_N (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-18	Waterbody Survey ID: sasa1003e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.554898	Longitude: -90.901345
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: The feature is a ditch that collects runoff water from two gravel parking lots and a paved road.			
Measurements			
Depth of Water: <u>0.1</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>1</u> ft. N/A <input type="checkbox"/>	
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input checked="" type="checkbox"/> Water staining <i>(check all that apply)</i>		<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Phalaris arundinacea, Juncus effusus, Poa pratensis, Equisetum arvense, Bromus inermis			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): A small pool is present.			
Aquatic Organisms Observed (list): No aquatic organisms were observed at time of survey.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): There is potential for polluted from nearby gravel parking lots and a paved road.			
Observation Notes: The feature is in a small area between two parking lots and a paved road. Only an herbaceous layer is present near the feature with a small pool providing potential for aquatic habitat, but no aquatic organisms were observed at the time of survey.			



sasa1003e_E (across)



sasa1003e_S (downstream)



sasa1003e_N (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-18	Waterbody Survey ID: sasa1004e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.554853	Longitude: -90.900932
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: Feature is a roadside ditch fed by two culverts and potential runoff from up slope paved road and gravel parking lot.			
Measurements			
Depth of Water: <u>0.1</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>1</u> ft. N/A <input type="checkbox"/>	
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input checked="" type="checkbox"/> Water staining <small>(check all that apply)</small>		<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Tanacetum vulgare, Poa pratensis, Phalaris arundinacea			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): One small pool present at time of survey.			
Aquatic Organisms Observed (list): None observed.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Potential polluted runoff from nearby parking lot and road.			
Observation Notes: Only one small pool present within ditch but otherwise no water observed at time of survey.			



sasa1004e_N (across)



sasa1004e_E (downstream)



sasa1004e_W (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-18	Waterbody Survey ID: sasa1002e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.554876	Longitude: -90.904728
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is a roadside ditch that also gets runoff from a nearby gravel parking lot.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input checked="" type="checkbox"/> Water staining <small>(check all that apply)</small>		<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change	
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Taraxacum officinale, Bromus inermis, Poa pratensis, Tanacetum vulgare			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Potential for polluted runoff from gravel road and gravel parking lot.			
Observation Notes: No water present within the ditch at the time of survey, and not likely to hold enough water to provide aquatic habitat.			



sasa1002e_N (across)



sasa1002e_E (downstream)



sasa1002e_W (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-20	Waterbody Survey ID: sasa1008e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Bay City Creek	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.551240	Longitude: -90.895927
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an ephemeral stream with water present at the time of survey.			
Measurements			
Depth of Water: <u>0.1</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>1</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> OHWM Width: <u>4</u> ft.	
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small> <input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Juncus effusus, Poa pratensis, Rhamnus cathartica			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Small pools are present in the stream.			
Aquatic Organisms Observed (list): No aquatic organisms were observed at the time of survey.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): There is potential for erosion from the steep banks and from the mowed utility corridor. There is an old garbage dump site near the head of the stream.			
Observation Notes: There is a possibility of a wetland near the head of the stream, outside the survey area.			



sasa1008e_S (across)



sasa1008e_E (downstream)



sasa1008e_W (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-20	Waterbody Survey ID: sase006p_x
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: Bay City Creek	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.550472	Longitude: -90.896330
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is a perennial stream that weakly meanders with clear, moving water.			
Measurements			
Depth of Water: <u>0.3</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>8</u> ft. <input type="checkbox"/> N/A	OHWM Width: <u>12</u> ft.
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Abies balsamea, Populus tremuloides, Equisetum arvense, Matteuccia struthiopteris			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Shallow pools and downed woody debris are likely habitats for aquatic organisms.			
Aquatic Organisms Observed (list): Minnows were observed in the stream.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Erosion from the steep banks is possible.			
Observation Notes: The stream flows from a forested area into an open area.			



sase006p_x (across)



sase006p_x (downstream)



sase006p_x (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-20	Waterbody Survey ID: sasa1009i
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Bay City Creek	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.550360	Longitude: -90.896193
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an intermittent stream that appears to be channelized by runoff from an upslope mowed utility corridor.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A	
OHWM Width: <u>4</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Populus tremuloides, Taraxacum officinale, Matteuccia struthiopteris, Prunus pensylvanica			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): No water present.			
Aquatic Organisms Observed (list): None observed.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature is potentially disturbed by runoff from an upslope mowed utility corridor.			
Observation Notes: The presence of debris and litter indicates heavy water flowed through the area at some point in time.			



sasa1009i_S (across)



sasa1009i_E (downstream)



sasa1009i_W (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-30	Waterbody Survey ID: sasa1021e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.530378	Longitude: -90.895987
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an ephemeral ditch on the edge of an old field and flowing to a likely man-made pond.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Phalaris arundinacea, Fraxinus pennsylvanica, Crataegus chrysocarpa, Rhamnus cathartica, Phleum pratense			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): No standing water present.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Nearby field is potentially used for cattle grazing or growing hay.			
Observation Notes: The feature is an ephemeral ditch alongside an old field and flows into a stock pond.			



sasa1021e_N (across)



sasa1021e_SE (downstream)



sasa1021e_NW (upstream)

Open Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-30	Waterbody Survey ID: oasa1001
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.530261	Longitude: -90.895832
Survey Type: <small>(check one)</small>	<input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other		
Waterbody Type: <small>(check one)</small>	<input checked="" type="checkbox"/> Stock Pond <input type="checkbox"/> Natural Pond <input type="checkbox"/> Fishing Pond <input type="checkbox"/> Lake <input type="checkbox"/> Other		
Water Appearance: <small>(check one)</small>	<input type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input checked="" type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other		
Feature Quality: <small>(check one)</small>	<input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low		
Feature Description: <small>(check one)</small>	<input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
Description Notes: The feature is a elongated open waterbody with surface scum and is likely used as a stock pond.			
Measurements			
Depth of Water: _____ ft. N/A <input type="checkbox"/> Unknown <input checked="" type="checkbox"/>			
OHWM Indicator: <small>(check all that apply)</small>	<input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change		
Dominant Substrate: <small>(check all that apply)</small>	<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic		
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Salix discolor, Typha sp.			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Open water at a depth that could potentially support fish.			
Aquatic Organisms Observed (list): Frogs.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Disturbances from a nearby gravel road and cattle use.			
Observation Notes: A car dump site is uphill from the pond and could allow trash to be swept into the pond by wind or heavy water events.			



oasa1001_N



oasa1001_SE



oasa1001_SW

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-19	Waterbody Survey ID: sasw023p
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: White River	
Company: Enbridge	Crew Member Initials: KDF/AGG	Latitude: 46.502378	Longitude: -90.895043
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input checked="" type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: The perennial river flows southwest to east through the survey corridor.			
Measurements			
Depth of Water: <u>5</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>60</u> ft. <input type="checkbox"/> N/A	
OHWM Width: <u>60</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Abies balsamea, Tilia americana, Acer negundo			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Sand/gravel bars, downed woody debris.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Moderate bank erosion.			
Observation Notes: Feature is associated with several wetlands.			



sasw023p_S (across)



sasw023p_E (downstream)



sasw023p_SW (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-04	Waterbody Survey ID: sasa1023i
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.500511	Longitude: -90.894053
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an intermittent stream with slowly flowing water present. Potential seep source.			
Measurements			
Depth of Water: <u>0.2</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>1.5</u> ft. <input type="checkbox"/> N/A	OHWM Width: <u>5</u> ft.
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Caltha palustris, Carex bromoides, Fraxinus pennsylvanica, Fraxinus nigra, Ribes cf americanum			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Small pools.			
Aquatic Organisms Observed (list): Aquatic invertebrates. Wood frog.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Downed woody debris.			
Observation Notes: The stream seems to flow from a seep down and empties into the White River. The feature also associated with wetland wasa1054f.			



sasa1023i_E (across)



sasa1023i_N (downstream)



sasa1023i_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-04	Waterbody Survey ID: sasa1022i
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.498789	Longitude: -90.896781
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an intermittent stream that is relatively straight with some water present at the time of survey. There is a lot of downed woody debris in the stream channel.			
Measurements			
Depth of Water: <u>0.1</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>0.5</u> ft. N/A <input type="checkbox"/>	
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Corylus cornuta, Alnus incana, Eurybia macrophylla			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Some small pools.			
Aquatic Organisms Observed (list): None observed.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Downed woody debris throughout most of stream channel.			
Observation Notes: Steep banks with exposed soil.			



sasa1022i_W (across)



sasa1022i_N (downstream)



sasa1022i_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-05	Waterbody Survey ID: sasa1010e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.497714	Longitude: -90.895690
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an ephemeral stream with small pools present in a few areas of the stream at the time of survey.			
Measurements			
Depth of Water: <u>0.1</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>0.5</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/>	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input checked="" type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Acer rubrum, Populus tremuloides, Rubus pubescens, Abies balsamea, Toxicodendron rydbergii			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Small pools.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): ATV trail cuts through the upper portion of the stream.			
Observation Notes: The stream carries water into wetland wasa1057f.			



sasa1010e_W (across)



sasa1010e_SE (downstream)



sasa1010e_SE (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-06	Waterbody Survey ID: sasa1011e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.495001	Longitude: -90.897990
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an ephemeral stream that drains water from a field.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Pinus resinosa, Populus tremuloides, Rhamnus cathartica, Eurybia macrophylla			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Potential disturbance by mowing at the stream headwater.			
Observation Notes: Steep banks are present.			



sasa1011e_N (across)



sasa1011e_E (downstream)



sasa1011e_w (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-06	Waterbody Survey ID: sasa1013e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.495777	Longitude: -90.898417
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is a manipulated ephemeral stream that drains water away from a meadow that borders an agricultural field.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Populus tremuloides, Fraxinus americana, Phalaris arundinacea, Carex gracillima			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Potential disturbance from the nearby agricultural field.			
Observation Notes: The stream becomes more obvious on its eastern side and extends beyond the survey corridor.			



sasa1013e_N (across)



sasa1013e_E (downstream)



sasa1013e_W (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-06	Waterbody Survey ID: sasa1012e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.495437	Longitude: -90.898414
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: Area above stream headwater was likely cleared at some point in time for an agricultural field though it is left as a meadow at the time of survey. Runoff from the field seems to have formed a channel and an ephemeral stream.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Phalaris arundinacea, Eurybia macrophylla, Equisetum pratense, Fraxinus americana, Populus tremuloides			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The stream receives runoff from the surrounding field.			
Observation Notes: The feature is a manipulated ephemeral stream with steep banks.			



sasa1012e_N (across)



sasa1012e_E (downstream)



sasa1012e_W (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-08	Waterbody Survey ID: sasa1019e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.496472	Longitude: -90.900244
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an ephemeral stream within no water present and signs of erosion.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input checked="" type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Viburnum lentago, Populus tremuloides, Corylus cornuta, Toxicodendron rydbergii			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Potential for polluted runoff from the surrounding agricultural field.			
Observation Notes: The stream head starts in an agricultural field planted with corn and drains downhill into a hardwood forest.			



sasa1019e_E (across)



sasa1019e_N (downstream)



sasa1019e_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-08	Waterbody Survey ID: sasa1018e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.496231	Longitude: -90.901199
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: The feature is an ephemeral stream with no water present at the time of survey.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Pteridium aquilinum, Toxicodendron rydbergii, Eurybia macrophylla, Populus tremuloides, Acer saccharum, Viburnum lentago, Abies balsamea			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Runoff from the agricultural field.			
Observation Notes: The feature starts in an agricultural field and leads water away and downhill through a hardwood forest.			



sasa1018e_N (across)



sasa1018e_NE (downstream)



sasa1018e_SW (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-08	Waterbody Survey ID: sasa1017e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.495713	Longitude: -90.902327
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an ephemeral stream with no water present at the time of survey.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Acer saccharum, Populus tremuloides, Eurybia macrophylla			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Runoff and manipulation associated with the agricultural field.			
Observation Notes: Stream head starts on the edge of an agriculture field planted with corn.			



sasa1017e_E (across)



sasa1017e_N (downstream)



sasa1017e_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-08	Waterbody Survey ID: sasa1016e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.495680	Longitude: -90.903464
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an ephemeral stream that starts in an agricultural field and continues into a forested area.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Bromus inermis, Rubus idaeus, Populus tremuloides, Abies balsamea			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Runoff from the agricultural field.			
Observation Notes: The agricultural field near the stream head has been planted with corn.			



sasa1016e_W (across)



sasa1016e_N (downstream)



sasa1016e_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-08	Waterbody Survey ID: sasa1014e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.496051	Longitude: -90.905262
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an ephemeral stream that carries water away from an agricultural field.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Abies balsamea, Populus tremuloides, Toxicodendron rydbergii, Equisetum pratense			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Potential runoff from the nearby agricultural field.			
Observation Notes: The stream channel has been used as a place to dump household garbage.			



sasa1014e_S (across)



sasa1014e_E (downstream)



sasa1014e_W (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-08	Waterbody Survey ID: sasa1015e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.495627	Longitude: -90.904632
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an ephemeral stream that leads water from an agricultural field out of the survey corridor.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>N/A</u> ft. <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Bromus inermis, Rhus typhina, Populus grandidentata, Rubus idaeus			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Potential runoff from the agricultural field by the steam head.			
Observation Notes: There is garbage dumped in the stream channel.			



sasa1015e_E (across)



sasa1015e_NE (downstream)



sasa1015e_SW (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-13	Waterbody Survey ID: sasd013i_x
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to White River	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.493207	Longitude: -90.899669
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The feature is an intermittent ditch that drains water from a surrounding agricultural field.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A	
OHWM Width: <u>3</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Poa pratensis, Phalaris arundinacea, Scirpus microcarpus, Persicaria hydropiper, Phleum pratense			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Feature receives runoff from the road and nearby agricultural field.			
Observation Notes: No water was observed at the time of survey. The ditch is fed by a culvert outside of the survey area.			



sasd013i_x (across)



sasd013i_x (downstream)



sasd013i_x (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-08	Waterbody Survey ID: sasa1020e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: SBR/DGL	Latitude: 46.492422	Longitude: -90.900619
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: The feature is an ephemeral ditch that carries water out of a meadow.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Bromus inermis, Poa pratensis, Phleum pratense, Phalaris arundinacea			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Potential disturbance from nearby agricultural practices.			
Observation Notes: There is no water present at the time of the survey.			



sasa1020e_N (across)



sasa1020e_W (downstream)



sasa1020e_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-09	Waterbody Survey ID: sasc041p_x
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: Rock Creek	
Company: Enbridge	Crew Member Initials: KDF/AGG	Latitude: 46.489878	Longitude: -90.902330
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input checked="" type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The perennial stream is located within a small ravine adjacent to a fallow field. The feature flows northeast through the survey corridor.			
Measurements			
Depth of Water: <u>1</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>6</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/>	
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input checked="" type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Prunus virginiana, Fraxinus nigra, Acer saccharum			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Pools, downed woody debris, exposed sand bars.			
Aquatic Organisms Observed (list): Frogs, aquatic invertebrates.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Moderate bank erosion, garbage debris.			
Observation Notes: None.			



sasc041p_x (across)



sasc041p_x (downstream)



sasc041p_x (upstream)

Open Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-09	Waterbody Survey ID: oasd1003
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: KDF/AGG	Latitude: 46.490247	Longitude: -90.907124
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input checked="" type="checkbox"/> Stock Pond <input type="checkbox"/> Natural Pond <input type="checkbox"/> Fishing Pond <input type="checkbox"/> Lake <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Feature Quality: <input type="checkbox"/> High <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Low <i>(check one)</i>			
Feature Description: <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Description Notes: The artificial stock pond is located within a front yard. The feature appears to be used as a watering hole for livestock.			
Measurements			
Depth of Water: <u> 3 </u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Phalaris arundinacea, Eleocharis sp.			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Open water, submerged vegetation near the shoreline.			
Aquatic Organisms Observed (list): Frogs, aquatic invertebrates.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Runoff from the adjacent roadway. Livestock access.			
Observation Notes: None.			



oasd1003_S



oasd1003_SE



oasd1003_SW

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-07-02	Waterbody Survey ID: sasd1021e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: DMP/AGG	Latitude: 46.473834	Longitude: -90.898191
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: There was no water within the stream during the field survey.			
Measurements			
Depth of Water: <u>0</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>0</u> ft. <input type="checkbox"/> N/A	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Athyrium filix-femina, Osmunda claytoniana, Ostrya virginiana, Abies balsamea			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): None.			
Observation Notes: The ephemeral stream begins in a mesic forest and flows east outside of the survey corridor.			



sasd1021e_N (across)



sasd1021e_E (downstream)



sasd1021e_W (upstream)

Open Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-18	Waterbody Survey ID: oase1001
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.453093	Longitude: -90.899201
Survey Type: <i>(check one)</i>	<input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other		
Waterbody Type: <i>(check one)</i>	<input checked="" type="checkbox"/> Stock Pond <input type="checkbox"/> Natural Pond <input type="checkbox"/> Fishing Pond <input type="checkbox"/> Lake <input type="checkbox"/> Other		
Water Appearance: <i>(check one)</i>	<input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other		
Feature Quality: <i>(check one)</i>	<input type="checkbox"/> High <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Low		
Feature Description: <i>(check one)</i>	<input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
Description Notes: Turbid water was observed in the stock pond.			
Measurements			
Depth of Water: <u> 3 </u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>			
OHWM Indicator: <i>(check all that apply)</i>	<input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change		
Dominant Substrate: <i>(check all that apply)</i>	<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic		
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Juncus effusus, Scirpus cyperinus			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Some emergent/overhanging vegetation observed in areas of the feature.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature is an artificial stock pond.			
Observation Notes: The stock pond is within a large wetland complex. The waterbody continues outside of the survey corridor.			



oase1001_S



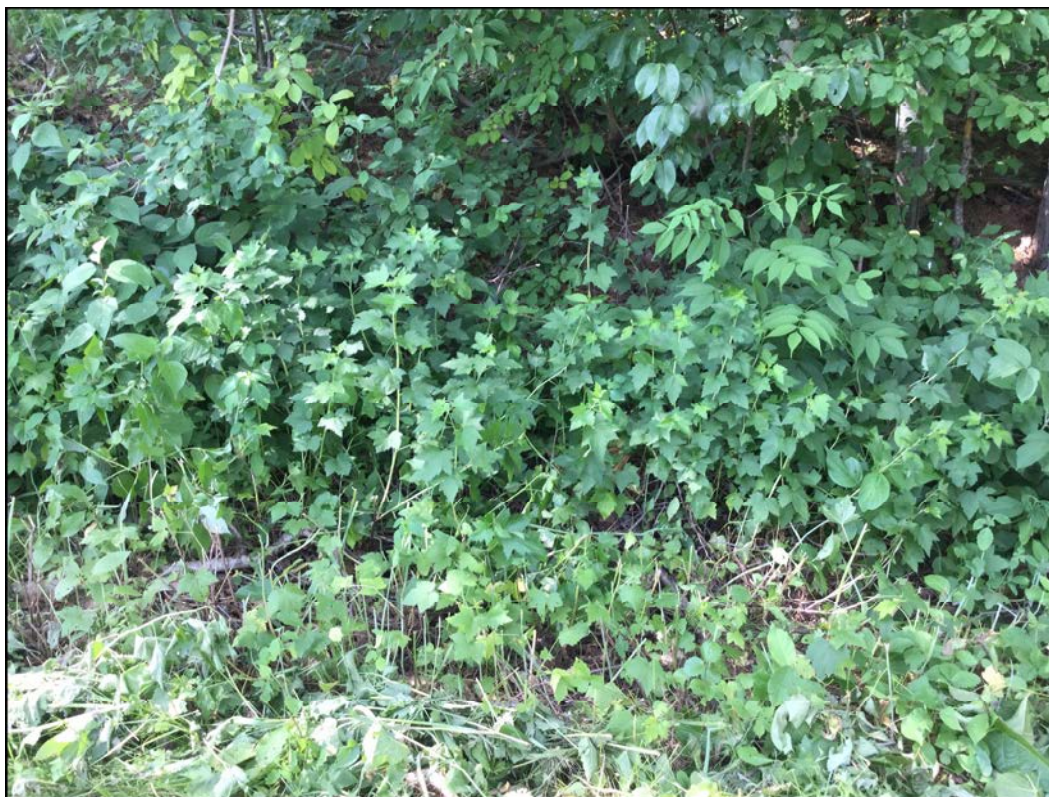
oase1001_SW



oase1001_W

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-07-01	Waterbody Survey ID: sasc012e_x
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: DMP/AGG	Latitude: 46.450146	Longitude: -90.900655
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: There was no flowing water within the feature during the survey.			
Measurements			
Depth of Water: <u>0</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>0</u> ft. N/A <input type="checkbox"/>	
OHWM Width: <u>1</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Poa pratensis, Ribes americanum, Viburnum lentago, Prunus virginiana, Pinus resinosa, Betula papyrifera			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature occurs between a road and a corn field. The stream flows into a culvert at the western end.			
Observation Notes: The ephemeral stream flows east to west through a roadside ditch. There is a corn field located just to the south of the stream. The feature flows into a larger intermittent feature to the west just outside of the survey corridor. Some areas of the stream have overhanging vegetation that hides the bed and bank. Other areas to the east are more clearly defined.			



sasc012e_x (across)



sasc012e_x (downstream)



sasc012e_x (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-19	Waterbody Survey ID: sase1001e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.437269	Longitude: -90.884386
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Ditch <input checked="" type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: The artificial swale feature meanders through a tilled agricultural field. Water was not flowing at the time of survey, however there are pools of turbid water.			
Measurements			
Depth of Water: <u>0</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>0</u> ft. <input type="checkbox"/> N/A	
OHWM Width: <u>5</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Lolium perenne			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Pools of standing water were observed.			
Aquatic Organisms Observed (list): There were minnows observed in the pools of stream.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The stream is artificial and occurs within an agricultural field.			
Observation Notes: The ephemeral stream is artificial and occurs within an agricultural field.			



sase1001e_E (across)



sase1001e_N (downstream)



sase1001e_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-20	Waterbody Survey ID: sase1002e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.437060	Longitude: -90.881213
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Ditch <input checked="" type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: There was no water observed within the feature during the field survey.			
Measurements			
Depth of Water: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>N/A</u> ft. <input checked="" type="checkbox"/> N/A	
OHWM Width: <u>1</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Salix petiolaris, Phleum pratense, Scirpus cyperinus			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): No aquatic habitat was observed.			
Aquatic Organisms Observed (list): No aquatic organisms were observed.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature occurs at the edge of a tilled crop field.			
Observation Notes: The ephemeral swale flows south to north and begins at the edge of a tilled crop field.			



sase1002e_N (across)



sase1002e_W (downstream)



sase1002e_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-23	Waterbody Survey ID: sase1003e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: ARK/DMP	Latitude: 46.430508	Longitude: -90.861430
Survey Type: <input checked="" type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: Ephemeral feature with bed and bank naturally formed in the bottom of a roadside ditch. Bank measurements indicate naturally formed banks within the ditch, where the water would rise to at flood stage, and not the higher, constructed banks. Water is supplied from a culvert to the north, as well as from runoff from the adjacent gravel road and forest.			
Measurements			
Depth of Water: <u>0</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>0</u> ft. N/A <input type="checkbox"/>	
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>		<input type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input checked="" type="checkbox"/> Soil characteristic change	
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Mosses, Hieracium cf. aurantiacum, Poa annua			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Mowing.			
Observation Notes: No water present at time of survey.			



sase1003e_E (across)



sase1003e_S (downstream)



sase1003e_N (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-27	Waterbody Survey ID: sase1004e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.432600	Longitude: -90.842150
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Ditch <input checked="" type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: The ephemeral stream was flowing during the field survey. The water is turbid.			
Measurements			
Depth of Water: <u>0.25</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>2</u> ft. N/A <input type="checkbox"/>	
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Zea mays			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): No aquatic habitat was observed.			
Aquatic Organisms Observed (list): No aquatic organisms were observed.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature occurs within a recently planted corn field. A field road cuts through the feature.			
Observation Notes: The ephemeral stream flows through an agricultural field. A field road cuts through the feature and there are rubber mats placed on it.			



sase1004e_W (across)



sase1004e_S (downstream)



sase1004e_N (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-05	Waterbody Survey ID: sase1019i
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.429293	Longitude: -90.849109
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: There was clear flowing water during the field survey. Seepage was observed on the southwest end of the stream.			
Measurements			
Depth of Water: <u>0.25</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>1</u> ft. <input type="checkbox"/> N/A	
OHWM Width: <u>1</u> ft.			
OHWM Indicator: <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Acer negundo, Carex crinita, Matteuccia struthiopteris, Onoclea sensibilis, Sambucus nigra, Alnus incana, Ribes americanum, Impatiens capensis, Stachys palustris, Laportea canadensis			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Litter and debris, small pools.			
Aquatic Organisms Observed (list): Minnows and aquatic insects.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): No anthropogenic disturbances were observed within the feature. Although, there is a corn field located to be north outside of the forest.			
Observation Notes: The intermittent stream flows through the forested floodplain of the Marengo River. There was groundwater seepage observed within the channel.			



sase1019i_NW (across)



sase1019i_NE (downstream)



sase1019i_SW (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-05	Waterbody Survey ID: sase1018i
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.430197	Longitude: -90.848799
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: There was clear flowing water during the field survey.			
Measurements			
Depth of Water: <u>1</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>4</u> ft. N/A <input type="checkbox"/>	
OHWM Width: <u>7</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Salix petiolaris, Phalaris arundinacea, Typha sp.			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Small pools and runs. Emergent and overhanging vegetation.			
Aquatic Organisms Observed (list): Aquatic insects, minnows and toads.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature is surrounded by a corn field. There is also a field road that runs over the stream/wetland towards the north end.			
Observation Notes: The intermittent stream flows north to south through a corn field and into a wooded area, where it becomes much wider. The stream is associated with wetland waste1055.			



sase1018i_E (across)



sase1018i_S (downstream)



sase1018i_N (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-05	Waterbody Survey ID: sase1020p
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.427114	Longitude: -90.847481
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input checked="" type="checkbox"/> River <input type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: The river had clear flowing water during the field survey.			
Measurements			
Depth of Water: <u>2</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>44</u> ft. <input type="checkbox"/> N/A	OHWM Width: <u>50</u> ft.
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input checked="" type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Ulmus americana, Acer saccharinum, Tsuga canadensis, Thuja occidentalis, Fraxinus pennsylvanica, Taxus canadensis, Betula alleghaniensis, Equisetum pratense			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Large woody debris and overhanging vegetation.			
Aquatic Organisms Observed (list): Minnows and a wood frog.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): There is a road bridge over the stream to the north outside of the survey corridor.			
Observation Notes: The Marengo River makes a deep bend south to north within the survey corridor. There are not many herbaceous plants along the sandy banks.			



sase1020p_E (across)



sase1020p_N (downstream)



sase1020p_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-05	Waterbody Survey ID: sase1021e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.426124	Longitude: -90.847376
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: There was no flowing water within the feature during the field survey.			
Measurements			
Depth of Water: <u>0</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>0</u> ft. <input type="checkbox"/> N/A	
OHWM Width: <u>1</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input checked="" type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Thuja occidentalis, Tsuga canadensis, Acer saccharum, Anemone quinquefolia, Equisetum hyemale, Maianthemum canadense, Aralia nudicaulis			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): No aquatic habitat was observed.			
Aquatic Organisms Observed (list): No aquatic organisms were observed.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): An agricultural swale leads to the feature.			
Observation Notes: The ephemeral stream is a washout feature that is derived from an agricultural swale to the south. The banks are eroded and there is a downed tree within the channel.			



sase1021e_E (across)



sase1021e_N (downstream)



sase1021e_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-05-30	Waterbody Survey ID: sase1008e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: None	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.421293	Longitude: -90.840533
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: There was no flowing water during the field survey, but water was observed in the small depressions within the feature.			
Measurements			
Depth of Water: <u>0</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>0</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> OHWM Width: <u>1</u> ft.	
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Phalaris arundinacea, Scirpus cyperinus, Ranunculus acris, Viburnum lentago, Anemone canadensis			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Small pools of standing water were observed during the field survey.			
Aquatic Organisms Observed (list): No aquatic organisms were observed.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature occurs within a roadside ditch and receives runoff from the road and surrounding fields.			
Observation Notes: The ephemeral stream flows north through a roadside ditch. The feature flows through a culvert underneath a field approach.			



sase1008e_W (across)



sase1008e_N (downstream)



sase1008e_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-02	Waterbody Survey ID: sase1009e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.421019	Longitude: -90.830934
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: The feature has turbid, trickling water during the field survey. Water was observed within the small pools throughout the stream.			
Measurements			
Depth of Water: <u>0.25</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>0.5</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/>	
OHWM Width: <u>1</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Abies balsamea, Micranthes pensylvanica, Asarum canadense, Athyrium filix-femina			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Pools and large woody debris.			
Aquatic Organisms Observed (list): No aquatic organisms were observed.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The banks of the stream are eroded.			
Observation Notes: Th ephemeral stream begins at wetland wase1043f and flows east through a woodland until it reaches an intermittent stream.			



sase1009e_S (across)



sase1009e_E (downstream)



sase1009e_W (upstream)

Waterbody Data Sheet

Description					
Project Name: Line 5 Relocation Project		Date: 2020-06-02		Waterbody Survey ID: sase1012e	
State: Wisconsin		County/Parish: Ashland		USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge		Crew Member Initials: DMP/ARK		Latitude: 46.421104	
				Longitude: -90.831099	
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>					
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>					
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>					
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>					
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <i>(check one)</i>					
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>					
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>					
Description Notes: The ephemeral stream has turbid, flowing water during the field survey.					
Measurements					
Depth of Water: <u>0.25</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>1</u> ft. N/A <input type="checkbox"/>		OHWM Width: <u>1</u> ft.	
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i>					
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change					
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>					
Observations					
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>					
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>					
Dominant Bank Vegetation (list): Fraxinus nigra, Viburnum lentago, Taraxacum officinale, Rubus idaeus, Cornus alba					
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Small pools and large woody debris were observed within the feature.					
Aquatic Organisms Observed (list): None.					
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature occurs along the edge of an agricultural field. The feature has been filled with sticks, stones, and a tire.					
Observation Notes: The ephemeral stream occurs along the edge of a woodland and crop field. The headwater begins at wase1041e and it flows into sase1009e.					



sase1012e_N (across)



sase1012e_SE (downstream)



sase1012e_W (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-02	Waterbody Survey ID: sase1010i
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.420914	Longitude: -90.830760
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: The intermittent stream has turbid flowing water during the field survey.			
Measurements			
Depth of Water: <u>1</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>4</u> ft. N/A <input type="checkbox"/>	
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i> <input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Abies balsamea, Tilia americana, Viola pubescens, Asarum canadense, Solidago flexicaulis			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Large woody debris and pools.			
Aquatic Organisms Observed (list): Aquatic insects were observed. Potential for amphibians and reptiles.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The banks are eroded.			
Observation Notes: The feature is contiguous with sase1011i. The feature meanders through a woodland. Sase1009e empties into this reach of the stream.			



sase1010i_E (across)



sase1010i_N (downstream)



sase1010i_S (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-02	Waterbody Survey ID: sase1011i
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.420995	Longitude: -90.830433
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <i>(check one)</i>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <i>(check one)</i>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <i>(check one)</i>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <i>(check one)</i>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <i>(check one)</i>			
Flow Regime: <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <i>(check one)</i>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <i>(check one)</i>			
Description Notes: There is turbid, flowing water within the feature during the field survey.			
Measurements			
Depth of Water: <u>1</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>5</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> OHWM Width: <u>5</u> ft.	
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input checked="" type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <i>(check all that apply)</i> <input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <i>(check all that apply)</i>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
Dominant Bank Vegetation (list): Tilia americana, Abies balsamea, Prunus virginiana, Carex gracillima, Equisetum arvense, Caltha palustris, Salix petiolaris, Adiantum pedatum, Calamagrostis canadensis, Bromus inermis			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Small riffles, runs, and pools. Large woody debris.			
Aquatic Organisms Observed (list): Aquatic insects were observed on the surface of the stream, and there is potential for amphibians and reptiles to utilize the feature.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The banks of the feature are eroded.			
Observation Notes: The feature is an intermittent stream that meanders through a forest. The stream exits the forest into an opening at the north end. The banks are eroded, and the water is turbid. The forest is bordered by agricultural land. Sase1009e and wase1043f drain into this stream.			



sase1011i_S (across)



sase1011i_NW (downstream)



sase1011i_SW (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-03	Waterbody Survey ID: sase1015i
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.419167	Longitude: -90.824596
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: There was clear flowing water within the stream during the field survey.			
Measurements			
Depth of Water: <u>1</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>2</u> ft. N/A <input type="checkbox"/>	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input checked="" type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input checked="" type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Salix petiolaris, Ribes americanum, Cornus alba, Solidago gigantea, Bromus inermis			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Small riffles and pools, overhanging vegetation.			
Aquatic Organisms Observed (list): Aquatic insects were observed. Amphibians and reptiles are assumed to use the feature.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature flows through a culvert under a lightly used field road on the north end.			
Observation Notes: The intermittent stream flows south to north through the survey area. The feature is located between a small woodland and an alfalfa field. There is a small, lightly used field road with culverts on the north end of the feature.			



sase1015i_W (across)



sase1015i_NW (downstream)



sase1015i_SW (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-04	Waterbody Survey ID: sase1016e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: ARK/DMP	Latitude: 46.419857	Longitude: -90.819312
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input type="checkbox"/> Stream <input checked="" type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: Ephemeral stream in the bottom of a roadside ditch. The land across the ditch from the road is a hay field. Receives input from culvert to the north.			
Measurements			
Depth of Water: <u>0</u> ft. N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>0</u> ft. N/A <input type="checkbox"/>	
OHWM Width: <u>1</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input checked="" type="checkbox"/> Abrupt plant community change <input checked="" type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Phalaris arundinacea, Equisetum arvense, Ranunculus acris, Carex stipata			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): Stormwater runoff from adjacent road and hay field.			
Observation Notes: None.			



sase1016e_W (across)



sase1016e_S (downstream)



sase1016e_N (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-03	Waterbody Survey ID: sase1013e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.418837	Longitude: -90.821168
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input type="checkbox"/> No Water <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: There was turbid water within the feature during the field survey.			
Measurements			
Depth of Water: <u>1</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>4</u> ft. <input type="checkbox"/> N/A	
OHWM Width: <u>4</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Bromus inermis, Glyceria cf striata, Fraxinus pennsylvanica, Populus tremuloides, Ribes americanum			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Pools, overhanging vegetation, and large woody debris.			
Aquatic Organisms Observed (list): We only observed aquatic insects, but reptiles and amphibians could utilize the feature.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature is surrounded by alfalfa fields.			
Observation Notes: The feature flows west to east through agricultural land. The feature terminates into wetland wase1048e.			



sase1013e_N (across)



sase1013e_E (downstream)



sase1013e_SW (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-03	Waterbody Survey ID: sase1014e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.418461	Longitude: -90.822181
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: There was turbid standing water within the pools of the feature, but it was not flowing during the survey.			
Measurements			
Depth of Water: <u>0</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		Water Edge to Water Edge: <u>0</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/>	
OHWM Width: <u>1</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input checked="" type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Fraxinus nigra, Crataegus sp., Malus pumila, Bromus inermis, Scirpus microcarpus, Lysimachia ciliata			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Pools and overhanging vegetation.			
Aquatic Organisms Observed (list): None.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The stream is surrounded by alfalfa field.			
Observation Notes: The ephemeral stream flows west to east through agricultural land. This feature is contiguous with stream sase1013e and eventually leads to wetland wase1048e to the east.			



sase1014e_N (across)



sase1014e_E (downstream)



sase1014e_W (upstream)

Waterbody Data Sheet

Description			
Project Name: Line 5 Relocation Project		Date: 2020-06-04	Waterbody Survey ID: sase1017e
State: Wisconsin	County/Parish: Ashland	USGS Waterbody Name: UNT to Marengo River	
Company: Enbridge	Crew Member Initials: DMP/ARK	Latitude: 46.414109	Longitude: -90.822288
Survey Type: <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other <small>(check one)</small>			
Waterbody Type: <input type="checkbox"/> River <input checked="" type="checkbox"/> Stream <input type="checkbox"/> Ditch <input type="checkbox"/> Swale <input type="checkbox"/> Canal <input type="checkbox"/> Other <small>(check one)</small>			
Water Appearance: <input checked="" type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input type="checkbox"/> Algal Mats <input type="checkbox"/> Other <small>(check one)</small>			
Existing Condition^a: <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream <small>(check one)</small>			
Feature Description: <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated <small>(check one)</small>			
Flow Regime: <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale <small>(check one)</small>			
Sinuosity within Survey Corridor: <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering <small>(check one)</small>			
Description Notes: There was no flowing water within the stream during the survey. However, a turbid pool of water was observed near the culvert.			
Measurements			
Depth of Water: <u>0</u> ft. <input type="checkbox"/> N/A <input type="checkbox"/> Unknown		Water Edge to Water Edge: <u>0</u> ft. <input type="checkbox"/> N/A	
OHWM Width: <u>2</u> ft.			
OHWM Indicator: <input checked="" type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input type="checkbox"/> Water staining <small>(check all that apply)</small>			
<input checked="" type="checkbox"/> Bent, matted, or missing vegetation <input type="checkbox"/> Wrack line <input type="checkbox"/> Litter and debris <input type="checkbox"/> Abrupt plant community change <input type="checkbox"/> Soil characteristic change			
Dominant Substrate: <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic <small>(check all that apply)</small>			
Observations			
Riparian Zone Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(check one)</small>			
Vegetation Layers: <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <small>(check all that apply)</small>			
Dominant Bank Vegetation (list): Barbarea vulgaris, Bromus inermis			
Aquatic Habitats (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Small pool.			
Aquatic Organisms Observed (list): Aquatic insects.			
Disturbances (ex: livestock access, manure in waterbody, waste discharge pipes): The feature flows under a road through a culvert. The feature also flows into a planted corn field.			
Observation Notes: The ephemeral stream flows south to north through crop fields. The feature begins on the south side of the road within a swale in a corn field. It flows under the road through a culvert and terminates in another cropland swale.			



sase1017e_SW (across)



sase1017e_NE (downstream)



sase1017e_SW (upstream)