

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-28	<b>Waterbody Survey ID:</b> sasb006p_x2
<b>State:</b> Wisconsin	<b>County/Parish:</b> Ashland	<b>USGS Waterbody Name:</b> Bad River	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.335548	<b>Longitude:</b> -90.652351
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> Northern bank of the Bad River at the edge of the survey corridor.			
Measurements			
<b>Depth of Water:</b> <u>5</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>50</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>50</u> ft.			
<b>OHWM Indicator:</b> <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 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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<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		
Observations			
<b>Riparian Zone Present:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Acer saccharinum, Fraxinus pennsylvanica, Matteuccia struthiopteris			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Runs, pools, woody debris, overhanging vegetation.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Road, bridges.			
<b>Observation Notes:</b> The Bad River is a perennial waterbody that flows through floodplain forest.			



sasb006p\_x2 (across)



sasb006p\_x2 (downstream)





sasb006p\_x2 (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-30	<b>Waterbody Survey ID:</b> sasd1006e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Ashland	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.337397	<b>Longitude:</b> -90.642968
<b>Survey Type:</b> <small>(check one)</small> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other			
<b>Waterbody Type:</b> <small>(check one)</small> <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			
<b>Water Appearance:</b> <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			
<b>Existing Condition<sup>a</sup>:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream			
<b>Feature Description:</b> <small>(check one)</small> <input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
<b>Flow Regime:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale			
<b>Sinuosity within Survey Corridor:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering			
<b>Description Notes:</b> Artificial ditch along N Butler Road.			
Measurements			
<b>Depth of Water:</b> <u>0.1</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>0.5</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>1</u> ft.			
<b>OHWM Indicator:</b> <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 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			
<b>Dominant Substrate:</b> <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 checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic			
Observations			
<b>Riparian Zone Present:</b> <small>(check one)</small> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>Vegetation Layers:</b> <small>(check all that apply)</small> <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs			
<b>Dominant Bank Vegetation (list):</b> Poa pratensis, Equisetum pratense			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Receives runoff from the road.			
<b>Observation Notes:</b> The feature is a narrow roadside ditch. The stream continues to the south a little but becomes drier and less defined.			





sasd1006e\_W (across)



sasd1006e\_N (downstream)





sasd1006e\_S (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-29	<b>Waterbody Survey ID:</b> sasd1005e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Ashland	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.338070	<b>Longitude:</b> -90.629414
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> Ephemeral feature associated with wetland wasd1013f.			
Measurements			
<b>Depth of Water:</b> <u>0.25</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>1</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>1</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<input type="checkbox"/> Bedrock <input checked="" type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic		
Observations			
<b>Riparian Zone Present:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Abies balsamea, Athyrium filix-femina, Osmunda claytoniana			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): None.			
<b>Observation Notes:</b> The feature is an ephemeral waterbody fed by a discharge wetland upslope. There are areas throughout where the water goes below the surface.			





sasd1005e\_W (across)



sasd1005e\_S (downstream)





sasd1005e\_N (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-28	<b>Waterbody Survey ID:</b> sasd1004e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Ashland	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.339164	<b>Longitude:</b> -90.625747
<b>Survey Type:</b> <small>(check one)</small> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other			
<b>Waterbody Type:</b> <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			
<b>Water Appearance:</b> <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			
<b>Existing Condition<sup>a</sup>:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream			
<b>Feature Description:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
<b>Flow Regime:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale			
<b>Sinuosity within Survey Corridor:</b> <small>(check one)</small> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering			
<b>Description Notes:</b> Natural ephemeral stream flowing through a forest.			
Measurements			
<b>Depth of Water:</b> <u>0.25</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>0.5</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>1</u> ft.			
<b>OHWM Indicator:</b> <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 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			
<b>Dominant Substrate:</b> <small>(check all that apply)</small> <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			
Observations			
<b>Riparian Zone Present:</b> <small>(check one)</small> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>Vegetation Layers:</b> <small>(check all that apply)</small> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs			
<b>Dominant Bank Vegetation (list):</b> Abies balsamea, Populus tremuloides, Athyrium filix-femina, Carex sp.			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): None.			
<b>Observation Notes:</b> The feature is a very narrow defined channel with flowing water between two hills. There are exposed rocks present within portions of the channel. There are areas of the feature where the flow goes below ground and then comes back up.			





sasd1004e\_W (across)



sasd1004e\_S (downstream)





sasd1004e\_N (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-06-01	<b>Waterbody Survey ID:</b> sasa005e_x
<b>State:</b> Wisconsin	<b>County/Parish:</b> Ashland	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.366806	<b>Longitude:</b> -90.591153
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		
<b>Description Notes:</b> Extension of ephemeral roadside ditch feature.			
Measurements			
<b>Depth of Water:</b> <u>0.25</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>1</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>1</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 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		
<b>Dominant Substrate:</b> <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			
<b>Riparian Zone Present:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Osmunda claytoniana			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Removal of tree and shrub layer, roads.			
<b>Observation Notes:</b> The feature is an ephemeral ditch running through a maintained powerline corridor along a road.			





sasa005e\_x (across)



sasa005e\_x (downstream)





sasa005e\_x (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-06-02	<b>Waterbody Survey ID:</b> sasd1007i
<b>State:</b> Wisconsin	<b>County/Parish:</b> Ashland	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.389905	<b>Longitude:</b> -90.573070
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> Feature is a manipulated intermittent stream with water flowing at time of survey.			
Measurements			
<b>Depth of Water:</b> <u>  1  </u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>  2  </u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>  2  </u> ft.			
<b>OHWM Indicator:</b> <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 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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic		
Observations			
<b>Riparian Zone Present:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Alnus incana, Glyceria sp.			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Submersed vegetation.			
<b>Aquatic Organisms Observed (list):</b> Invertebrates, minnows.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Stock pond, channel alteration, cattle access.			
<b>Observation Notes:</b> The feature is an intermittent stream that flows through pasture. The banks are dominated by Glyceria sp. and speckled alder. The feature has a man-made diversion that feeds the nearby stock pond and then the channel continues.			





sasd1007i\_NE (across)



sasd1007i\_S (downstream)





sasd1007i\_E (upstream)



# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-06-02	<b>Waterbody Survey ID:</b> sasd1008i
<b>State:</b> Wisconsin	<b>County/Parish:</b> Ashland	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.390366	<b>Longitude:</b> -90.573565
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> Manipulated intermittent channel draining a stock pond.			
Measurements			
<b>Depth of Water:</b> <u>  1  </u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>  1  </u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>  1  </u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>			
<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 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			
<b>Dominant Substrate:</b> <i>(check all that apply)</i>			
<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic			
Observations			
<b>Riparian Zone Present:</b> <i>(check one)</i>			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Vegetation Layers:</b> <i>(check all that apply)</i>			
<input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs			
<b>Dominant Bank Vegetation (list):</b> Glyceria sp., Eleocharis sp., Juncus effusus			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Cattle access.			
<b>Observation Notes:</b> The feature is an intermittent stream that flows through pasture. The headwater of the feature is the adjacent stock pond.			



sasd1008i\_N (across)



sasd1008i\_W (downstream)





sasd1008i\_E (upstream)

## Open Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-06-02	<b>Waterbody Survey ID:</b> oasd1001
<b>State:</b> Wisconsin	<b>County/Parish:</b> Ashland	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.390110	<b>Longitude:</b> -90.572853
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <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		
<b>Water Appearance:</b> <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		
<b>Feature Quality:</b> <i>(check one)</i>	<input type="checkbox"/> High <input type="checkbox"/> Moderate <input type="checkbox"/> Low		
<b>Feature Description:</b> <i>(check one)</i>	<input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Description Notes:</b> The feature is a man-made stock pond.			
Measurements			
<b>Depth of Water:</b> <u>  4  </u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<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		
Observations			
<b>Riparian Zone Present:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation</b> <i>(list):</i> Eleocharis sp., Juncus sp., Glyceria sp., Phalaris arundinacea			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Open water.			
<b>Aquatic Organisms Observed</b> <i>(list):</i> Invertebrates, turtles, amphibians.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Cattle access.			
<b>Observation Notes:</b> The feature is a bermed man-made stock pond located within a pasture.			





oasd1001\_W



oasd1001\_SW



oasd1001\_SW



# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-06-02	<b>Waterbody Survey ID:</b> sasd1009e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Ashland	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.391361	<b>Longitude:</b> -90.572867
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		
<b>Description Notes:</b> Artificial ephemeral ditch feature.			
Measurements			
<b>Depth of Water:</b> <u>0.5</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>1</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>3</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<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		
Observations			
<b>Riparian Zone Present:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Phalaris arundinacea			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> Invertebrates.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Cattle access. Receives runoff from surrounding agricultural field and parking lot.			
<b>Observation Notes:</b> The feature is a narrow ditch located on the edge of an agricultural field and a gravel parking lot. The feature is highly disturbed.			



sasd1009e\_N (across)



sasd1009e\_W (downstream)





sasd1009e\_E (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-25	<b>Waterbody Survey ID:</b> sirb1001e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> KDF/SAM	<b>Latitude:</b> 46.383099	<b>Longitude:</b> -90.546737
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> The stream is located within mesic hardwood forest, connecting two forested wetlands.			
Measurements			
<b>Depth of Water:</b> <0.25 ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> 1 ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> 1 ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 <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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<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		
Observations			
<b>Riparian Zone Present:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Ostrya virginiana, Fraxinus nigra, Erythronium americanum, Athyrium filix-femina, Matteuccia struthiopteris			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Downed woody debris is present along the streambed.			
<b>Aquatic Organisms Observed (list):</b> American Toad, Wood Frog, Northern Leopard Frog.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Minor erosion is evident along the stream channel.			
<b>Observation Notes:</b> None.			





sirb1001e\_S (across)



sirb1001e\_W (downstream)





sirb1001e\_E (upstream)



# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-26	<b>Waterbody Survey ID:</b> sirb1002e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> KDF/SAM	<b>Latitude:</b> 46.384749	<b>Longitude:</b> -90.546191
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> The feature is an ephemeral stream fed by discharge, flowing from a forested wetland.			
Measurements			
<b>Depth of Water:</b> <u>0.25</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>2</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>2</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 <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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<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 checked="" type="checkbox"/> Organic		
Observations			
<b>Riparian Zone Present:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Acer saccharum, Fraxinus nigra, Rubus idaeus, Equisetum pratense			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Downed woody debris is present within the feature.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Minor erosion evident along the shallow banks.			
<b>Observation Notes:</b> None.			



sirb1002e\_N (across)



sirb1002e\_NW (downstream)





sirb1002e\_E (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-26	<b>Waterbody Survey ID:</b> sird1006e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> KDF/AGG	<b>Latitude:</b> 46.387494	<b>Longitude:</b> -90.545033
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> The ephemeral stream is located within mesic hardwood forest flowing through a forested wetland and fed by discharge.			
Measurements			
<b>Depth of Water:</b> <u>0.25</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>1</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>2</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 <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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic		
Observations			
<b>Riparian Zone Present:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Fraxinus nigra, Ostrya virginiana, Athyrium filix-femina, Erythronium americanum			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Downed woody debris is present within the feature.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Minor bank erosion is evident in areas of the stream.			
<b>Observation Notes:</b> None.			





sird1006e\_E (across)



sird1006e\_N (downstream)





sird1006e\_S (upstream)



# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-26	<b>Waterbody Survey ID:</b> sird1005i
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> KDF/AGG	<b>Latitude:</b> 46.388248	<b>Longitude:</b> -90.545324
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> The regime stream is located within mesic hardwood forest and fed by discharge from an adjacent forested wetland.			
Measurements			
<b>Depth of Water:</b> <u>0.25</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>3</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>3</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 <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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic		
Observations			
<b>Riparian Zone Present:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Betula alleghaniensis, Matteuccia struthiopteris, Fraxinus nigra, Athyrium filix-femina			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Downed woody debris and small pools are present within the feature.			
<b>Aquatic Organisms Observed (list):</b> Frogs.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Erosion of banks is more evident along the north end of the feature.			
<b>Observation Notes:</b> None.			



sird1005i\_W (across)



sird1005i\_N (downstream)





sird1005i\_SW (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-26	<b>Waterbody Survey ID:</b> sird1004i
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.390259	<b>Longitude:</b> -90.545537
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> Intermittent feature meandering through a large forested wetland.			
Measurements			
<b>Depth of Water:</b> <u>0.75</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>1.5</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>2</u> ft.			
<b>OHWM Indicator:</b> <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 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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<input type="checkbox"/> Bedrock <input checked="" 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		
Observations			
<b>Riparian Zone Present:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Athyrium filix-femina, Acer rubrum, Fraxinus nigra			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): None.			
<b>Observation Notes:</b> None.			





sird1004i\_S (across)



sird1004i\_W (downstream)





sird1004i\_E (upstream)



# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-26	<b>Waterbody Survey ID:</b> sird1003e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.390893	<b>Longitude:</b> -90.544778
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> Natural ephemeral stream located at the edge of the survey corridor.			
Measurements			
<b>Depth of Water:</b> <u>0.5</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>2</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>2</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>			
<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 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			
<b>Dominant Substrate:</b> <i>(check all that apply)</i>			
<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			
Observations			
<b>Riparian Zone Present:</b> <i>(check one)</i>			
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>Vegetation Layers:</b> <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs			
<b>Dominant Bank Vegetation (list):</b> Acer saccharum, Fraxinus nigra, Athyrium filix-femina			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> Insects.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): None.			
<b>Observation Notes:</b> The feature is an ephemeral waterbody that terminates in wetland wirb1007f.			



sird1003e\_E (across)



sird1003e\_N (downstream)





sird1003e\_S (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-26	<b>Waterbody Survey ID:</b> sird1002e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.391364	<b>Longitude:</b> -90.545729
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> Feature is a natural ephemeral stream flowing through a large forested wetland.			
Measurements			
<b>Depth of Water:</b> <u>0.5</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>1</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>1</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>			
<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 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			
<b>Dominant Substrate:</b> <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			
<b>Riparian Zone Present:</b> <i>(check one)</i>			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Vegetation Layers:</b> <i>(check all that apply)</i>			
<input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs			
<b>Dominant Bank Vegetation (list):</b> Fraxinus nigra, Athyrium filix-femina, Acer rubrum			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> Frogs, insects.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): None.			
<b>Observation Notes:</b> The feature is a channelized stream that flows through wetland wirb1007f. The feature is surrounded by wetland on all sides.			





sird1002e\_N (across)



sird1002e\_W (downstream)





sird1002e\_E (upstream)



# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-25	<b>Waterbody Survey ID:</b> sird1001e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.392546	<b>Longitude:</b> -90.544835
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> None.			
Measurements			
<b>Depth of Water:</b> <u>  0  </u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>  0  </u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>  3  </u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<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		
Observations			
<b>Riparian Zone Present:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Tilia americana, Erythronium americanum, Athyrium filix-femina			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): None.			
<b>Observation Notes:</b> The feature is an ephemeral stream that terminates in a nearby hardwood swamp.			



sird1001e\_E (across)



sird1001e\_N (downstream)





sird1001e\_S (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-06-03	<b>Waterbody Survey ID:</b> sasd1010e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Ashland	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/OTG	<b>Latitude:</b> 46.394030	<b>Longitude:</b> -90.562698
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input checked="" type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		
<b>Description Notes:</b> Artificial ephemeral ditch feature.			
Measurements			
<b>Depth of Water:</b> <u>.25</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>.5</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>1</u> ft.			
<b>OHWM Indicator:</b> <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 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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<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		
Observations			
<b>Riparian Zone Present:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Carex sp., Phalaris arundinacea			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): The feature is ditched.			
<b>Observation Notes:</b> The feature is a man-made ditch created to drain feature wasa134s.			





sasd1010e\_E (across)



sasd1010e\_S (downstream)





sasd1010e\_N (upstream)



# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-07-03	<b>Waterbody Survey ID:</b> sirb012p_x
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> Tyler Forks	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> AGG/DMP	<b>Latitude:</b> 46.423457	<b>Longitude:</b> -90.517518
<b>Survey Type:</b> <small>(check one)</small> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other			
<b>Waterbody Type:</b> <small>(check one)</small> <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			
<b>Water Appearance:</b> <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			
<b>Existing Condition<sup>a</sup>:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream			
<b>Feature Description:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
<b>Flow Regime:</b> <small>(check one)</small> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale			
<b>Sinuosity within Survey Corridor:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering			
<b>Description Notes:</b> The feature is a perennial waterbody that follows through mesic forest. There is a large floodplain associated with the feature.			
Measurements			
<b>Depth of Water:</b> <u>4</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>30</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>30</u> ft.			
<b>OHWM Indicator:</b> <small>(check all that apply)</small> <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 <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			
<b>Dominant Substrate:</b> <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			
<b>Riparian Zone Present:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Vegetation Layers:</b> <small>(check all that apply)</small> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs			
<b>Dominant Bank Vegetation (list):</b> Acer saccharinum, Fraxinus nigra, Matteuccia struthiopteris			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Litter and debris, pools.			
<b>Aquatic Organisms Observed (list):</b> None.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): None.			
<b>Observation Notes:</b> None.			



sirb012p\_x (across)



sirb012p\_x (downstream)





sirb012p\_x (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-19	<b>Waterbody Survey ID:</b> sirc1004e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> EJO/JSW	<b>Latitude:</b> 46.456397	<b>Longitude:</b> -90.477437
<b>Survey Type:</b> <i>(check one)</i>	<input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		
<b>Description Notes:</b> Feature is a small ditch adjacent to forest road. It flows into an intermittent stream within the survey area.			
Measurements			
<b>Depth of Water:</b> <u>NA</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>NA</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>1</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 <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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<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		
Observations			
<b>Riparian Zone Present:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input type="checkbox"/> Trees <input type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Taraxacum officinale, Impatiens capensis, Carex crinita, Trifolium repens			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None observed.			
<b>Aquatic Organisms Observed (list):</b> None observed.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Stream is in ditch of cleared forest road.			
<b>Observation Notes:</b> Narrow stream in ditch at edge of forest road, vegetated with non-native herbs and Carex crinita.			





sirc1004e\_SW (across)



sirc1004e\_NW (downstream)





sirc1004e\_SE (upstream)



# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-19	<b>Waterbody Survey ID:</b> sirc1003i
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> EJO/JSW	<b>Latitude:</b> 46.456632	<b>Longitude:</b> -90.477577
<b>Survey Type:</b> <small>(check one)</small> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other			
<b>Waterbody Type:</b> <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			
<b>Water Appearance:</b> <small>(check one)</small> <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			
<b>Existing Condition<sup>a</sup>:</b> <small>(check one)</small> <input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream			
<b>Feature Description:</b> <small>(check one)</small> <input type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input checked="" type="checkbox"/> Manipulated			
<b>Flow Regime:</b> <small>(check one)</small> <input type="checkbox"/> Ephemeral <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale			
<b>Sinuosity within Survey Corridor:</b> <small>(check one)</small> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering			
<b>Description Notes:</b> Stream flows across forest road. Stream likely manipulated during construction/clearing of road.			
Measurements			
<b>Depth of Water:</b> <u>0.5</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>2</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>3</u> ft.			
<b>OHWM Indicator:</b> <small>(check all that apply)</small> <input type="checkbox"/> Clear line on bank <input type="checkbox"/> Shelving <input checked="" type="checkbox"/> Wrested vegetation <input type="checkbox"/> Scouring <input checked="" 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			
<b>Dominant Substrate:</b> <small>(check all that apply)</small> <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			
Observations			
<b>Riparian Zone Present:</b> <small>(check one)</small> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>Vegetation Layers:</b> <small>(check all that apply)</small> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs			
<b>Dominant Bank Vegetation (list):</b> Scirpus cf. hattorianus, Carex crinita, Rubus idaeus, Impatiens capensis, Tsuga canadensis, Abies balsamea			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Pools, overhanging vegetation, coarse woody debris.			
<b>Aquatic Organisms Observed (list):</b> Frogs and frog eggs.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Portion of stream runs through open forest road.			
<b>Observation Notes:</b> Narrow intermittent stream running across open forest road.			



sirc1003i\_SE (across)



sirc1003i\_NE (downstream)





sirc1003i\_SW (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-19	<b>Waterbody Survey ID:</b> sirc1002e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> EJO/JSW	<b>Latitude:</b> 46.459887	<b>Longitude:</b> -90.507550
<b>Survey Type:</b> <i>(check one)</i>	<input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input checked="" type="checkbox"/> Other		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<input type="checkbox"/> No Water <input type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Sheen on Surface <input type="checkbox"/> Surface Scum <input checked="" type="checkbox"/> Algal Mats <input type="checkbox"/> Other		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> Feature is a small stream running through excavated area/gravel pit.			
Measurements			
<b>Depth of Water:</b> <u>0.5</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>2</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>2</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 <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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<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		
Observations			
<b>Riparian Zone Present:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Salix sp., Plantago cf. lanceolata, Trifolium repens, Agrostis gigantea			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Low quality pool present.			
<b>Aquatic Organisms Observed (list):</b> None observed.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Waterbody located within excavated gravel pit.			
<b>Observation Notes:</b> Feature runs through gravel pit, flows under culvert, and drains outside of survey area to forest to the north.			





sirc1002e\_SW (across)



sirc1002e\_N (downstream)





sirc1002e\_S (upstream)



# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-30	<b>Waterbody Survey ID:</b> sirc1005p
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> Potato River	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> EJO/JSW	<b>Latitude:</b> 46.467955	<b>Longitude:</b> -90.483484
<b>Survey Type:</b> <i>(check one)</i>	<input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input checked="" type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Highly Functional Stream <input type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering		
<b>Description Notes:</b> Feature is a perennial stream with clear water and cobble/gravel substrate.			
Measurements			
<b>Depth of Water:</b> <u>3</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>45</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>50</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 <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		
<b>Dominant Substrate:</b> <i>(check all that apply)</i>	<input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input type="checkbox"/> Sand <input type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic		
Observations			
<b>Riparian Zone Present:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Acer saccharinum, Fraxinus nigra, Fraxinus pennsylvanica, Matteuccia struthiopteris, Onoclea sensibilis, Cardamine diphylla, Alnus incana			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Runs and riffles, perennial flow, overhanging bank vegetation, coarse woody debris.			
<b>Aquatic Organisms Observed (list):</b> Minnows.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): None observed at sample point.			
<b>Observation Notes:</b> The river is intact at the sample point.			



sirc1005p\_W (across)



sirc1005p\_SW (downstream)





sirc1005p\_N (upstream)

# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-06-16	<b>Waterbody Survey ID:</b> sird016p_x
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> Vaughn Creek	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> SBR/DGL	<b>Latitude:</b> 46.492310	<b>Longitude:</b> -90.486297
<b>Survey Type:</b> <small>(check one)</small> <input type="checkbox"/> Centerline <input type="checkbox"/> Re-Route <input type="checkbox"/> Access Road <input type="checkbox"/> Facility <input type="checkbox"/> Other			
<b>Waterbody Type:</b> <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			
<b>Water Appearance:</b> <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			
<b>Existing Condition<sup>a</sup>:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream			
<b>Feature Description:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Natural <input type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated			
<b>Flow Regime:</b> <small>(check one)</small> <input type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale			
<b>Sinuosity within Survey Corridor:</b> <small>(check one)</small> <input type="checkbox"/> Straight <input checked="" type="checkbox"/> Meandering			
<b>Description Notes:</b> The feature is a perennial stream which meanders through the survey area.			
Measurements			
<b>Depth of Water:</b> <u>0.3</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>5</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>10</u> ft.			
<b>OHWM Indicator:</b> <small>(check all that apply)</small> <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 <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			
<b>Dominant Substrate:</b> <small>(check all that apply)</small> <input type="checkbox"/> Bedrock <input type="checkbox"/> Boulder <input checked="" type="checkbox"/> Cobble <input checked="" type="checkbox"/> Gravel <input checked="" type="checkbox"/> Sand <input checked="" type="checkbox"/> Silt/ clay <input type="checkbox"/> Organic			
Observations			
<b>Riparian Zone Present:</b> <small>(check one)</small> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
<b>Vegetation Layers:</b> <small>(check all that apply)</small> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs			
<b>Dominant Bank Vegetation (list):</b> Acer saccharum, Betula alleghaniensis, Abies balsamea, Carex crinita, Carex lacustris, Phalaris arundinacea			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): Pools, riffles, gravel bars.			
<b>Aquatic Organisms Observed (list):</b> Aquatic invertebrates.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Some invasive species.			
<b>Observation Notes:</b> Adjacent to a steep slope.			





sird016p\_x (across)



sird016p\_x (downstream)





sird016p\_x (upstream)



# Waterbody Data Sheet

Description			
<b>Project Name:</b> Line 5 Relocation Project		<b>Date:</b> 2020-05-18	<b>Waterbody Survey ID:</b> sirc1001e
<b>State:</b> Wisconsin	<b>County/Parish:</b> Iron	<b>USGS Waterbody Name:</b> None	
<b>Company:</b> Enbridge	<b>Crew Member Initials:</b> EJO/JSW	<b>Latitude:</b> 46.503690	<b>Longitude:</b> -90.482615
<b>Survey Type:</b> <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		
<b>Waterbody Type:</b> <i>(check one)</i>	<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		
<b>Water Appearance:</b> <i>(check one)</i>	<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		
<b>Existing Condition<sup>a</sup>:</b> <i>(check one)</i>	<input type="checkbox"/> Highly Functional Stream <input checked="" type="checkbox"/> Moderately Functional Stream <input type="checkbox"/> Functionally Impaired Stream		
<b>Feature Description:</b> <i>(check one)</i>	<input type="checkbox"/> Natural <input checked="" type="checkbox"/> Artificial, man-made <input type="checkbox"/> Manipulated		
<b>Flow Regime:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Ephemeral <input type="checkbox"/> Intermittent <input type="checkbox"/> Perennial <input type="checkbox"/> Connecting Swale		
<b>Sinuosity within Survey Corridor:</b> <i>(check one)</i>	<input checked="" type="checkbox"/> Straight <input type="checkbox"/> Meandering		
<b>Description Notes:</b> Roadside ditch with old railroad ties scattered throughout. Dominant ditch vegetation includes red maple, big-tooth aspen, and Canada mayflower at time of survey.			
Measurements			
<b>Depth of Water:</b> <u>1</u> ft.    N/A <input type="checkbox"/> Unknown <input type="checkbox"/>		<b>Water Edge to Water Edge:</b> <u>NA</u> ft.    N/A <input type="checkbox"/>	
<b>OHWM Width:</b> <u>2</u> ft.			
<b>OHWM Indicator:</b> <i>(check all that apply)</i>	<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 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		
<b>Dominant Substrate:</b> <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			
<b>Riparian Zone Present:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>(check one)</i>			
<b>Vegetation Layers:</b> <input checked="" type="checkbox"/> Trees <input checked="" type="checkbox"/> Saplings/Shrubs <input checked="" type="checkbox"/> Herbs <i>(check all that apply)</i>			
<b>Dominant Bank Vegetation (list):</b> Populus grandidentata, Acer rubrum, Corylus cornuta, Prunus serotina, Carex pedunculata, Maianthemum canadense, Mitchella repens			
<b>Aquatic Habitats</b> (ex: submerged or emerged aquatic vegetation, overhanging banks/roots, leaf packs, large submerged wood, riffles, deep pools, etc.): None observed.			
<b>Aquatic Organisms Observed (list):</b> None observed.			
<b>Disturbances</b> (ex: livestock access, manure in waterbody, waste discharge pipes): Runoff from adjacent roads.			
<b>Observation Notes:</b> Ditch adjacent to snowmobile trail.			



sirc1001e\_S (across)



sirc1001e\_SE (downstream)





sirc1001e\_NW (upstream)