

<b>Gully ID:</b> 07:12-10:13	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> July 12, 2021 10:13 AM	
<b>Location:</b> Jackson Township	
<b>Weather:</b> Sunny  <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	High
<b>Approximate Depth:</b>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	3-Medium (1'-5')
<b>Approximate Gully Length:</b>	5-Long (>100')
<b>Condition of Gully Bottom:</b>	3-Some Vegetation
<b>Condition of Gully Banks:</b>	3-Some Vegetation
<b>Gully Bank Angles:</b>	5-Acute (<45 degrees or undercut)
<b>Gully Shape:</b>	5-V-Shaped
<b>Gully Material:</b>	Silt/Clay

<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	1-Yes	
<b>Stormwater Inputs:</b>	0-None	
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>	5-Severe	
<b>Aggradation:</b>	1-Low	
<b>Slumping:</b>	1-Yes	
<b>Additional Notes:</b>	<p>Classification? High</p> <p>Presence of Water? Yes</p> <p>Quantity of Water? Puddles/Stagnant</p> <p>Notes/Comments: Gully connected upstream to a pipe running under the trail. This site runs directly into the MN river</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view of gully from right bank.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view of gully where it connects to the MN River.

**Photo 3 Image**



**Photo 3 View Direction**

Left Bank

**Photo 3 Caption**

View of severe degradation on left bank.

**Photo 4 Image**




**Photo 4 View Direction**

Left Bank

**Photo 4 Caption**

View of large leaning trees on left bank.

<b>Gully ID:</b> 07:12-10:01	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> July 12, 2021 10:01 AM	
<b>Location:</b> Jackson Township	
<b>Weather:</b> Sunny  <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Moderate
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	5-Long (>100')
<b>Condition of Gully Bottom:</b>	3-Some Vegetation
<b>Condition of Gully Banks:</b>	3-Some Vegetation
<b>Gully Bank Angles:</b>	1-Obtuse (>90 degrees or flat)
<b>Gully Shape:</b>	1-Trapezoid
<b>Gully Material:</b>	Silt/Clay

<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	0-No	
<b>Stormwater Inputs:</b>		
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>	3-Moderate	
<b>Aggradation:</b>	0-None	
<b>Slumping:</b>	1-Yes	
<b>Additional Notes:</b>	<p>Classification? Moderate</p> <p>Presence of Water? Yes</p> <p>Quantity of Water? Puddles/Stagnant</p> <p>Notes/Comments: Gully that runs underneath walking trail through huge pipes and eventually connects downstream to another point where it flows into the MN river. The bottom is mainly silt but there are some rocks here and there. Water has algae on top.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view of area where tree roots have severe degradation

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view of right bank which is bare in a large area and has degradation.

**Photo 3 Image**



**Photo 3 View Direction**

Upstream

**Photo 3 Caption**

Upstream view of left bank with a tree beginning to lean over channel.

**Photo 4 Image**




**Photo 4 View Direction**

Upstream

**Photo 4 Caption**

Upstream view of heavily vegetated right bank.



<b>Gully ID:</b> 07:12-10:21	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> July 12, 2021 10:21 AM	
<b>Location:</b> Jackson Township	
<b>Weather:</b> Sunny  <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Moderate
<b>Approximate Depth:</b>	1-Shallow (<3')
<b>Approximate Bottom Width:</b>	5-Narrow/V-Ditch
<b>Approximate Gully Length:</b>	1-Short (<50')
<b>Condition of Gully Bottom:</b>	3-Some Vegetation
<b>Condition of Gully Banks:</b>	5-Bare Soil
<b>Gully Bank Angles:</b>	1-Obtuse (>90 degrees or flat)
<b>Gully Shape:</b>	5-V-Shaped
<b>Gully Material:</b>	Silt/Clay

<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	0-No	
<b>Stormwater Inputs:</b>		
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>	1-Low	
<b>Aggradation:</b>	1-Low	
<b>Slumping:</b>	0-No	
<b>Additional Notes:</b>	<p>Classification? Moderate</p> <p>Presence of Water? Yes</p> <p>Quantity of Water? Puddles/Stagnant</p> <p>Notes/Comments: Small gully that connects to a longer and wider one upstream, and downstream runs through a pipe into a pond. Although the pipe on the pond side appears to be covered in dirt.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view of gully, you can see where it connects to the wider gully upstream.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view of the other side of pipe which appears to be covered in dirt.

**Photo 3 Image**



**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view of pipe from where this small gully begins downstream of the wider gully.

<b>Gully ID:</b> 07:12-10:20	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> July 12, 2021 10:20 AM	
<b>Location:</b> Jackson Township	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Moderate
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	3-Medium (1'-5')
<b>Approximate Gully Length:</b>	1-Short (<50')
<b>Condition of Gully Bottom:</b>	3-Some Vegetation
<b>Condition of Gully Banks:</b>	5-Bare Soil
<b>Gully Bank Angles:</b>	3-Mid-Range (45 to 90 degrees)
<b>Gully Shape:</b>	3-U-Shaped
<b>Gully Material:</b>	Silt/Clay

<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	0-No	
<b>Stormwater Inputs:</b>		
<b>Fallen Trees:</b>	0-No	
<b>Degradation:</b>		3-Moderate
<b>Aggradation:</b>		1-Low
<b>Slumping:</b>		1-Yes
<b>Additional Notes:</b>	<p>Classification? Moderate</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Gully with rocks on the right bank, minor slumping, more vegetation in bottom than banks</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Left bank

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Right bank

**Photo 3 Image**



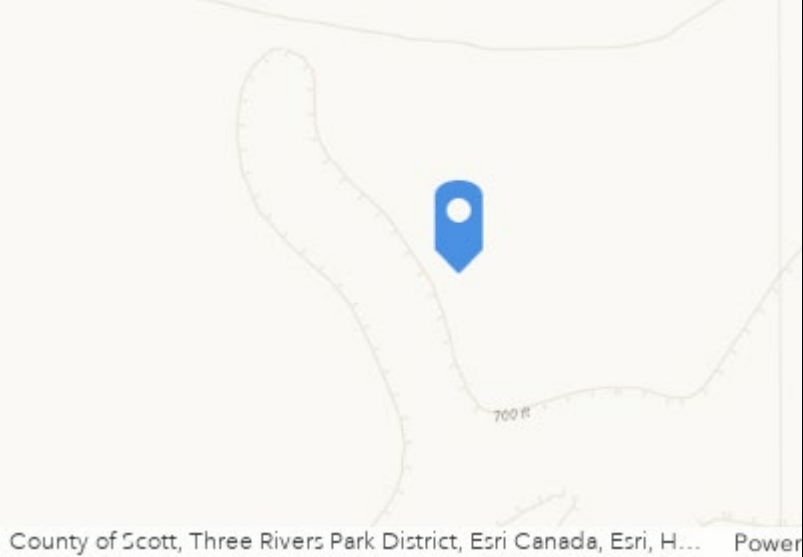
**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Middle and fallen branches



<b>Gully ID:</b> 07:12-10:08	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> July 12, 2021 10:08 AM	
<b>Location:</b> Jackson Township	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Moderate
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	1-Short (<50')
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<b>Condition of Gully Banks:</b>	1-Heavy Vegetation
<b>Gully Bank Angles:</b>	3-Mid-Range (45 to 90 degrees)
<b>Gully Shape:</b>	3-U-Shaped
<b>Gully Material:</b>	Silt/Clay

<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	1-Yes	
<b>Stormwater Inputs:</b>	0-None	
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>	3-Moderate	
<b>Aggradation:</b>	1-Low	
<b>Slumping:</b>	0-No	
<b>Additional Notes:</b>	<p>Classification? Moderate</p> <p>Presence of Water? Yes</p> <p>Quantity of Water? Puddles/Stagnant</p> <p>Notes/Comments: Pipe that leads into short gully, one fallen tree, hard to access due to vegetation so pictures are not gonna be good</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Pipe outfall

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Right bank

**Photo 3 Image**



**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Left bank

**Photo 4 Image**



**Photo 4 View Direction**

Downstream

**Photo 4 Caption**

Gully bottom

<b>Gully ID:</b> 07:12-09:49	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> July 12, 2021 9:49 AM	
<b>Location:</b> Jackson Township	
<b>Weather:</b> Sunny  <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Moderate
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	5-Long (>100')
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<b>Condition of Gully Banks:</b>	3-Some Vegetation
<b>Gully Bank Angles:</b>	1-Obtuse (>90 degrees or flat)
<b>Gully Shape:</b>	1-Trapezoid
<b>Gully Material:</b>	Silt/Clay

<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	0-No	
<b>Stormwater Inputs:</b>		
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>		1-Low
<b>Aggradation:</b>		1-Low
<b>Slumping:</b>		1-Yes
<b>Additional Notes:</b>	<p>Classification? Moderate</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Long gully off of trail, very wide bottom, some fallen branches further downstream and slumping throughout</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Right bank

**Photo 2 Image**



**Photo 2 View Direction**

Right Bank

**Photo 2 Caption**

Left bank

**Photo 3 Image**




**Photo 3 View Direction**

Upstream

**Photo 3 Caption**

Fallen and slumping trees



<b>Gully ID:</b> 07:12-10:29	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> July 12, 2021 10:29 AM	
<b>Location:</b> Jackson Township	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Moderate
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	3-Medium (50'-100')
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<b>Condition of Gully Banks:</b>	3-Some Vegetation
<b>Gully Bank Angles:</b>	3-Mid-Range (45 to 90 degrees)
<b>Gully Shape:</b>	1-Trapezoid
<b>Gully Material:</b>	Silt/Clay

<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	0-No	
<b>Stormwater Inputs:</b>		
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>		5-Severe
<b>Aggradation:</b>		3-Moderate
<b>Slumping:</b>		1-Yes
<b>Additional Notes:</b>	<p>Classification? Moderate</p> <p>Presence of Water? Yes</p> <p>Quantity of Water? Puddles/Stagnant</p> <p>Notes/Comments: Continuation of previous site, many pistol trees, hanging roots on left bank, unmoving water in bottom</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Left bank

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Right bank

**Photo 3 Image**



**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Where it meets previous site