


<b>Gully ID:</b> 07:15-11:41	<b>MAP</b> 
<b>Date &amp; Time:</b> July 15, 2021 11:41 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> Yes-High Intensity	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Low
<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>	1-Heavy Vegetation
<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>	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>	0-No	
<b>Degradation:</b>		1-Low
<b>Aggradation:</b>		1-Low
<b>Slumping:</b>		1-Yes
<b>Additional Notes:</b>	<p>Classification? Low</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Right bank of gully is much shorter than left but heavier in slumping, there is a stream past the right bank</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**

Upstream

**Photo 3 Caption**

Top of gully



<b>Gully ID:</b> 07:21-11:37	<b>MAP</b> 
<b>Date &amp; Time:</b> July 21, 2021 11:37 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy <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>	5-Narrow/V-Ditch
<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>	3-Mid-Range (45 to 90 degrees)
<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>	3-Moderate
<b>Aggradation:</b>	0-None
<b>Slumping:</b>	0-No
<b>Additional Notes:</b>	Classification? High Presence of Water? No Quantity of Water? Notes/Comments: Gully running behind homes. Has lots of yard waste dumped at the beginning and on the left bank in some areas.

**Photo 1 Image**



**Photo 1 View Direction**  
Downstream

**Photo 1 Caption**  
Downstream view of left bank with yard debris piling up behind tree.

**Photo 2 Image**



**Photo 2 View Direction**  
Downstream

**Photo 2 Caption**  
Downstream view of right bank.



**Photo 3 Image**



**Photo 3 View Direction**  
Upstream

**Photo 3 Caption**

Upstream view of left banks large leaning trees at the top of the gully.

**Photo 4 Image**




**Photo 4 View Direction**  
Downstream

**Photo 4 Caption**

Downstream view of area before it cuts down and worsens, another point was taken at that point.



<b>Gully ID:</b> 06:29-11:42	<b>MAP</b> 
<b>Date &amp; Time:</b> June 29, 2021 11:42 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> Yes-Low Intensity	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Moderate
<b>Approximate Depth:</b>	5-Deep (>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>	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>	5-Severe	
<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: Very severe gully eroding into the back yard of a residential property. Has run off pipes and large fallen trees.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view of right bank.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view of left bank.

**Photo 3 Image**



**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view of center of gully. Multiple black drainage pipes and a huge fallen tree in the center.



<b>Gully ID:</b> 06:24-10:08	<p style="text-align: center;"><b>MAP</b></p>  <p style="font-size: small; text-align: center;">County of Dakota, Three Rivers Park District, Esri Canada, Esri, ... Power</p>
<b>Date &amp; Time:</b> June 24, 2021 10:08 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy  <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>	5-Long (>100')
<b>Condition of Gully Bottom:</b>	3-Some Vegetation
<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>	5-V-Shaped
<b>Gully Material:</b>	Gravel/Cobble/Boulders

<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	1-Yes	
<b>Stormwater Inputs:</b>	1-Dripping	
<b>Fallen Trees:</b>	0-No	
<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? Yes</p> <p>Quantity of Water? Puddles/Stagnant</p> <p>Notes/Comments: Gully running parallel to railroad tracks. Three pipe outfall at the beginning (one concrete on the park side and two metal on the track side) and turns into small dry ditch.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view from railroad tracks.

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Upstream view of channel from the bottom. The second and third metal pipe outfalls are on the left hidden behind vegetation.



**Photo 3 Image**



**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view from bottom of gully. Some toys were throwing down here. This part of the channel is very dry.

**Photo 4 Image**




**Photo 4 View Direction**

Upstream

**Photo 4 Caption**

Upstream view of the three pipes. Was hard to get picture with steep slope of loose rocks and heavy vegetation.



<b>Gully ID:</b> 06:23-11:55	<b>MAP</b> 
<b>Date &amp; Time:</b> June 23, 2021 11:55 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Low
<b>Approximate Depth:</b>	1-Shallow (<3')
<b>Approximate Bottom Width:</b>	3-Medium (1'-5')
<b>Approximate Gully Length:</b>	3-Medium (50'-100')
<b>Condition of Gully Bottom:</b>	1-Heavy Vegetation
<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>	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? Low</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Gully behind neighborhood connects into the left bank of another gully downstream</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Upstream view of gully from trail

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view of gully from trail



**Photo 3 Image**



**Photo 3 View Direction**

Left Bank

**Photo 3 Caption**

View of left bank where gully runs through trail.

**Photo 4 Image**




**Photo 4 View Direction**

Upstream

**Photo 4 Caption**

Upstream from right bank where gully falls deeper after trail.



<b>Gully ID:</b> 06:23-08:50	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 23, 2021 8:50 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy  <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>	5-Deep (>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>	3-Mid-Range (45 to 90 degrees)
<b>Gully Shape:</b>	1-Trapezoid
<b>Gully Material:</b>	Gravel/Cobble/Boulders

<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	1-Yes	
<b>Stormwater Inputs:</b>	1-Dripping	
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>	5-Severe	
<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: Large gully upstream of smaller gully in black dog park. Pipe is dripping and we can hear a water flow, but there isn't any water actively flowing through the gully. The bottom has lots of fallen branches and is made of rocks and gravel.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view of right bank and pipe.

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Upstream view of left bank and pipe.



**Photo 3 Image**



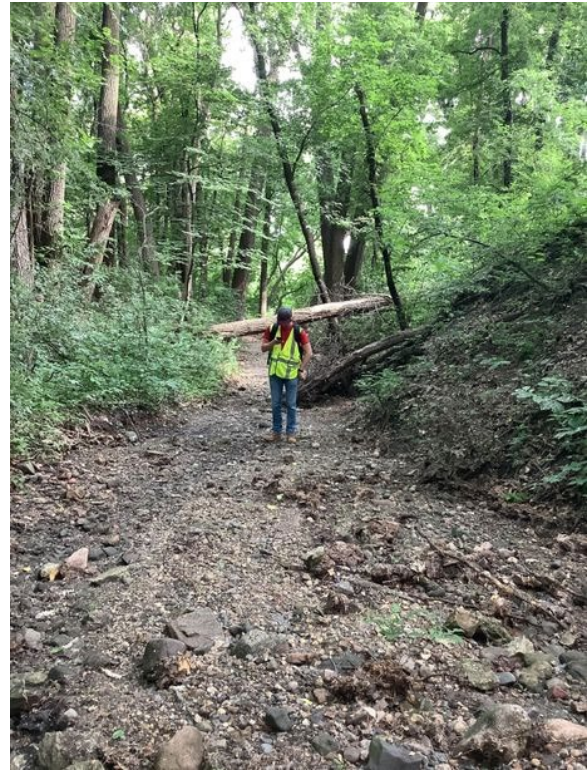
**Photo 3 View Direction**

Upstream

**Photo 3 Caption**

Upstream view of pipe that is armored and has dripping water.

**Photo 4 Image**




**Photo 4 View Direction**

Downstream

**Photo 4 Caption**

Downstream view of gully. Fallen tree in gully with leaning trees on right bank.



<b>Gully ID:</b> 06:22-12:34	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 22, 2021 12:34 PM	
<b>Location:</b> Burnsville	
<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>	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>	3-Some Vegetation
<b>Gully Bank Angles:</b>	5-Acute (<45 degrees or undercut)
<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>	3-Low Flow	
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>	5-Severe	
<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? Trickle/Slow Moving</p> <p>Notes/Comments: Large pipe outfall upstream from a small waterfall leading into a pond which is connected to another gully downstream.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view of pip from tracks.

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Zoomed in view of pipe showing heavy degradation around it

**Photo 3 Image**




**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view of stream from left bank on train tracks.



<b>Gully ID:</b> 07:21-11:43	<b>MAP</b> 
<b>Date &amp; Time:</b> July 21, 2021 11:43 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy  <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>	5-Narrow/V-Ditch
<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>	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>	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? High</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Very bad gully, continued downstream from previous site, many fallen trees and hanging roots, undercut bank angles</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Right bank

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Middle

**Photo 3 Image**




**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Left bank



<b>Gully ID:</b> 07:21-01:33	<b>MAP</b> 
<b>Date &amp; Time:</b> July 21, 2021 1:33 PM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy  <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>	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>	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>	3-Moderate	
<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: Large gully outside district, bottom has puddles of water that look like they may be slowly flowing, many fallen trees in gully, could not get down right bank due to safety so pictures may be rough</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Gully

**Photo 2 Image**




**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Gully

<b>Gully ID:</b> 07:21-01:13	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> July 21, 2021 1:13 PM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy  <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>	5-Acute (<45 degrees or undercut)
<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>	1-Yes	
<b>Degradation:</b>		3-Moderate
<b>Aggradation:</b>		0-None
<b>Slumping:</b>		0-No
<b>Additional Notes:</b>	<p>Classification? Moderate</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Small gully which runs into the right bank of a large gully. No greenery but trees in bottom for vegetation</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view of gully.

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Upstream view of gully.

**Photo 3 Image**




**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view of further downstream in the channel.

<b>Gully ID:</b> 07:21-01:09	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> July 21, 2021 1:09 PM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy  <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>	3-Medium (50'-100')
<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>	1-Yes	
<b>Degradation:</b>	5-Severe	
<b>Aggradation:</b>	0-None	
<b>Slumping:</b>	0-No	
<b>Additional Notes:</b>	<p>Classification? Moderate</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Gully in woods. Severe degradation especially on left bank. Smaller gully runs into its right bank downstream.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view of gully. Severe degradation visible on left bank.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

View further downstream of more fallen branches



**Photo 3 Image**



**Photo 3 View Direction**

Upstream

**Photo 3 Caption**

Upstream view of gully.

**Photo 4 Image**

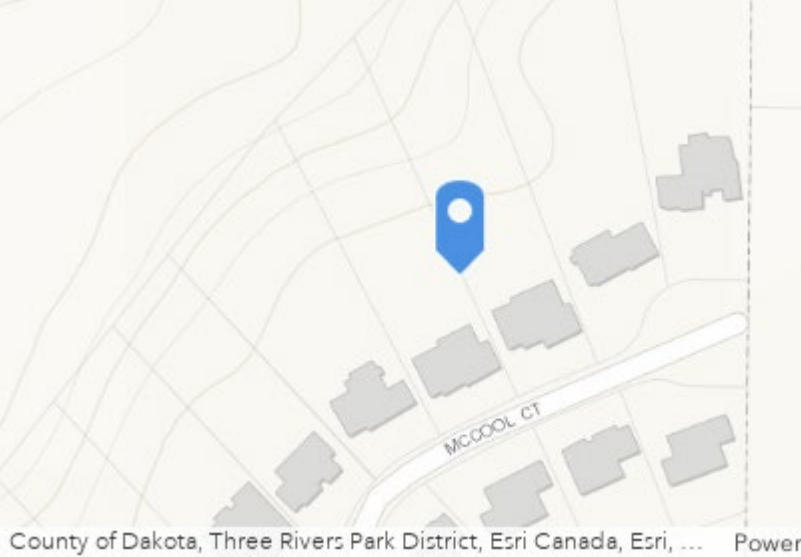


**Photo 4 View Direction**

Left Bank

**Photo 4 Caption**

View of left bank where there are tiny holes in the bank.

<b>Gully ID:</b> 07:21-11:44	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> July 21, 2021 11:44 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy  <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>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	5-Narrow/V-Ditch
<b>Approximate Gully Length:</b>	1-Short (<50')
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<b>Condition of Gully Banks:</b>	5-Bare Soil
<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>	0-No	
<b>Stormwater Inputs:</b>		
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>	5-Severe	
<b>Aggradation:</b>	0-None	
<b>Slumping:</b>	0-No	
<b>Additional Notes:</b>	<p>Classification? High</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Gully that is very severe that connects to the left bank of another larger gully downstream. Lots of yard waste dumped at the top of the gully.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view from top of gully.

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Upstream, view of gully headcut.

**Photo 3 Image**



**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream, view of where this gully connects into the left bank of a large gully.

**Photo 4 Image**



**Photo 4 View Direction**

Downstream

**Photo 4 Caption**

Downstream view of severe degradation on the right bank.



<b>Gully ID:</b> 07:15-11:34	<b>MAP</b> 
<b>Date &amp; Time:</b> July 15, 2021 11:34 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> Yes-High Intensity	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Low
<b>Approximate Depth:</b>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	3-Medium (50'-100')
<b>Condition of Gully Bottom:</b>	1-Heavy Vegetation
<b>Condition of Gully Banks:</b>	1-Heavy Vegetation
<b>Gully Bank Angles:</b>	1-Obtuse (>90 degrees or flat)
<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>	1-Yes	
<b>Degradation:</b>	1-Low	
<b>Aggradation:</b>	0-None	
<b>Slumping:</b>	0-No	
<b>Additional Notes:</b>	<p>Classification? Low</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Very grassy gully located between two homes. The beginning is a large wide grassy area and then it flows into a more traditional looking gully with a grass path at the bottom.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view of gully. Can see some leaning trees.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view of end of gully where it drains into an open grassy area.

**Photo 3 Image**




**Photo 3 View Direction**

Upstream

**Photo 3 Caption**

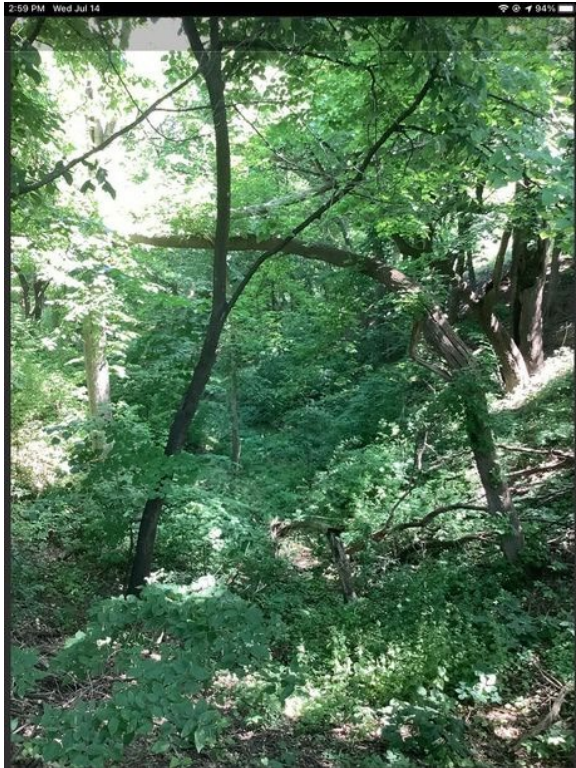
Upstream view of open grassy area at beginning of gully.

<b>Gully ID:</b> 06:10-10:48	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 10, 2021 10:48 AM	
<b>Location:</b> Burnsville	
<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>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	5-Long (>100')
<b>Condition of Gully Bottom:</b>	1-Heavy Vegetation
<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>	0-No	
<b>Stormwater Inputs:</b>		
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>	1-Low	
<b>Aggradation:</b>	0-None	
<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 in between two houses in a neighborhood. Lots of vegetation, banks are slumping and trees are leaning and falling into gully. There is a lot of yard waste dumped here.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

View center downstream from top of gully.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

View of left bank from top of gully.

**Photo 3 Image**




**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

View of right bank from top of gully. Can see fallen and slumping trees.

<b>Gully ID:</b> 06:22-12:17	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 22, 2021 12:17 PM	
<b>Location:</b> Burnsville	
<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>	3-Medium (1'-5')
<b>Approximate Gully Length:</b>	5-Long (>100')
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<b>Condition of Gully Banks:</b>	1-Heavy Vegetation
<b>Gully Bank Angles:</b>	1-Obtuse (>90 degrees or flat)
<b>Gully Shape:</b>	3-U-Shaped
<b>Gully Material:</b>	Gravel/Cobble/Boulders



<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>		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? Torrent/Fast Moving</p> <p>Notes/Comments: Gully beginning under Union Pacific railroad tracks and winding through grassy area into MN river. Source of high flow water is a pond located south of railroad tracks.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view of gully winding through grass and showing its length and proximity to the river.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view of beginning of gully with lots of water flowing through.

**Photo 3 Image**



**Photo 3 View Direction**

Left Bank

**Photo 3 Caption**

View of left bank on south side of railroad tracks. Gully begins after dam which separates the pond from the gully.

**Photo 4 Image**



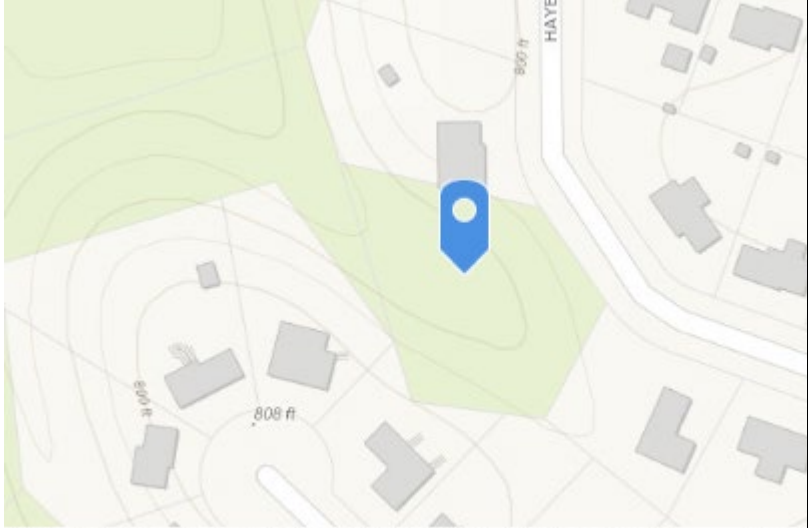
**Photo 4 View Direction**

Upstream

**Photo 4 Caption**

Upstream view of pond south of railroad tracks which is the water source for the gully.

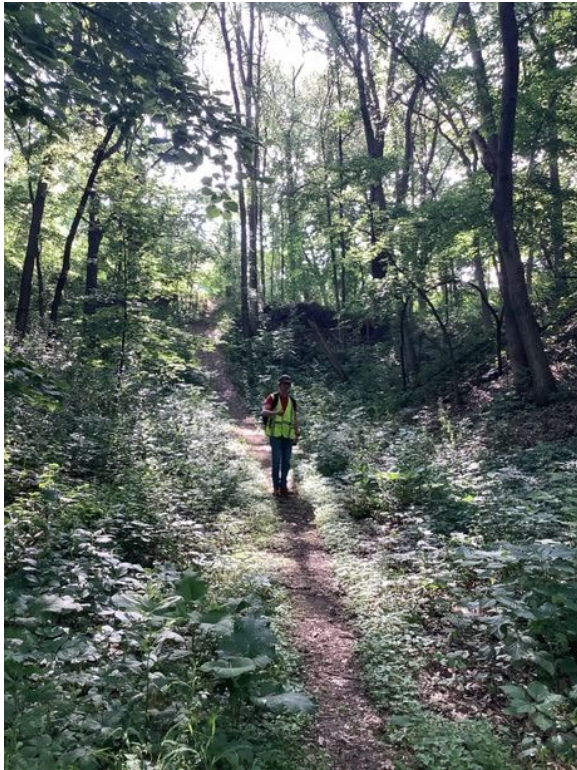


<b>Gully ID:</b> 06:23-09:08	<p style="text-align: center;"><b>MAP</b></p>  <p style="text-align: center;">County of Dakota, Three Rivers Park District, Esri Canada, Esri, ... Power</p>
<b>Date &amp; Time:</b> June 23, 2021 9:08 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy  <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Moderate
<b>Approximate Depth:</b>	5-Deep (>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>	1-Heavy Vegetation
<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>	1-Yes	
<b>Stormwater Inputs:</b>	0-None	
<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? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Gully running from behind neighborhood down towards railroad tracks in black dog park area. Lots of vegetation, the bottom is not vegetated only where the trail is. There is a sewer drain and a couple residential pipe run offs.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view of gully.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view of gully with some leaning trees in the background.

**Photo 3 Image**



**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view of gully. Sewer drain is located in the bottom right of the picture.

**Photo 4 Image**




**Photo 4 View Direction**

Right Bank

**Photo 4 Caption**

With of right bank about 100 ft downstream from the beginning of the gully of residential run off pipes.



<b>Gully ID:</b> 06:22-10:10	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 22, 2021 10:10 AM	
<b>Location:</b> Burnsville	
<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>	5-Deep (>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>	3-Mid-Range (45 to 90 degrees)
<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>		3-Moderate
<b>Aggradation:</b>		0-None
<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 in National wildlife refuge boundary behind neighborhood. Lots of yard waste has been dumped in the gully.</p>	

**Photo 1 Image**



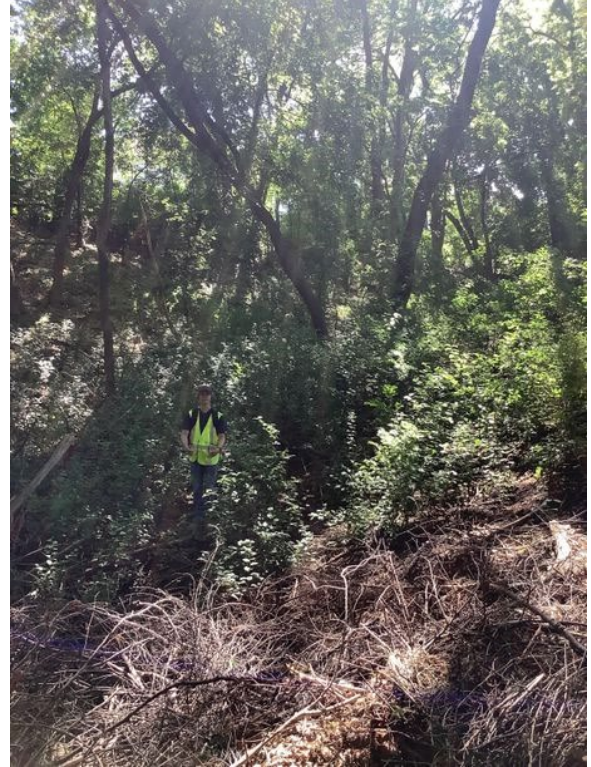
**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view from left bank.

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Upstream view from left bank.

**Photo 3 Image**



**Photo 3 View Direction**

Left Bank

**Photo 3 Caption**

View of left bank covered in yard waste.

**Photo 4 Image**



**Photo 4 View Direction**

Downstream

**Photo 4 Caption**

Downstream view from gully bottom. Leaning trees are visible.



<b>Gully ID:</b> 06:17-10:13	<p style="text-align: center;"><b>MAP</b></p>  <p style="font-size: small; text-align: center;">County of Dakota, Three Rivers Park District, Esri Canada, Esri, ... Power</p>
<b>Date &amp; Time:</b> June 17, 2021 10:13 AM	
<b>Location:</b> Burnsville	
<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>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	3-Medium (1'-5')
<b>Approximate Gully Length:</b>	5-Long (>100')
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<b>Condition of Gully Banks:</b>	1-Heavy Vegetation
<b>Gully Bank Angles:</b>	5-Acute (<45 degrees or undercut)
<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>	5-High Flow	
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>		5-Severe
<b>Aggradation:</b>		0-None
<b>Slumping:</b>		1-Yes
<b>Additional Notes:</b>	<p>Classification? High</p> <p>Presence of Water? Yes</p> <p>Quantity of Water? Torrent/Fast Moving</p> <p>Notes/Comments: Gully behind park beginning from a large pipe runoff which leads into a creek and another gully downstream.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view of pipe outfall, very hard to get picture as area is heavily vegetated and hard to access

**Photo 2 Image**




**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

View downstream from pipe. Left bank is armored but right bank has lots of slumping and degradation

<b>Gully ID:</b> 06:17-10:04	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 17, 2021 10:04 AM	
<b>Location:</b> Burnsville	
<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>	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>	1-Heavy Vegetation
<b>Gully Bank Angles:</b>	5-Acute (<45 degrees or undercut)
<b>Gully Shape:</b>	3-U-Shaped
<b>Gully Material:</b>	Gravel/Cobble/Boulders

<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	1-Yes	
<b>Stormwater Inputs:</b>	5-High Flow	
<b>Fallen Trees:</b>	1-Yes	
<b>Degradation:</b>	5-Severe	
<b>Aggradation:</b>	0-None	
<b>Slumping:</b>	1-Yes	
<b>Additional Notes:</b>	<p>Classification? High</p> <p>Presence of Water? Yes</p> <p>Quantity of Water? Torrent/Fast Moving</p> <p>Notes/Comments: Gully running under railroad tracks and caused by run off from a large sewer pipe and a small creek upstream.</p>	



**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view of gully from railroad bridge.

**Photo 2 Image**



**Photo 2 View Direction**

Left Bank

**Photo 2 Caption**

Left bank view under railroad bridge showing signs of lots of degradation.

**Photo 3 Image**




**Photo 3 View Direction**

Upstream


**Photo 3 Caption**

Upstream view of pipe outfall in center and creek flowing into gully from its left bank near the pipe.

<b>Gully ID:</b> 06:29-12:52	<b>MAP</b> 
<b>Date &amp; Time:</b> June 29, 2021 12:52 PM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> Yes-Low Intensity	
<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>	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>	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>	1-Yes	
<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 behind neighborhood. Downstream it runs into the left bank of another armored gully and ends.</p>	



<b>Gully ID:</b> 06:29-01:23	<b>MAP</b> 
<b>Date &amp; Time:</b> June 29, 2021 1:23 PM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy <b>Storm/Rainfall Event in the Past 24 Hours?</b> Yes-Low Intensity	
<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>	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>	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>	1-Yes	
<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 behind Bosch. Kinda of weird shaped as it is very wide.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view of right bank, lots of degradation around tree roots

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

View downstream of left bank which is a lot less steep than right.

**Photo 3 Image**




**Photo 3 View Direction**

Upstream

**Photo 3 Caption**

Upstream view of top of gully.



<b>Gully ID:</b> 06:29-12:52	<b>MAP</b> 
<b>Date &amp; Time:</b> June 29, 2021 12:52 PM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> Yes-Low Intensity	
<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>	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>	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>	1-Yes	
<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 behind neighborhood. Downstream it runs into the left bank of another armored gully and ends.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view of left bank.

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Upstream view of right bank.



**Photo 3 Image**



**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view where gully flattens out and connects to other site.

**Photo 4 Image**




**Photo 4 View Direction**

Upstream

**Photo 4 Caption**

Upstream view of center of gully showing leaning trees.



<b>Gully ID:</b> 06:29-12:38	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 29, 2021 12:38 PM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy  <b>Storm/Rainfall Event in the Past 24 Hours?</b> Yes-Low Intensity	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Low
<b>Approximate Depth:</b>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	5-Long (>100')
<b>Condition of Gully Bottom:</b>	1-Heavy Vegetation
<b>Condition of Gully Banks:</b>	1-Heavy Vegetation
<b>Gully Bank Angles:</b>	1-Obtuse (>90 degrees or flat)
<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>	1-Yes	
<b>Degradation:</b>		1-Low
<b>Aggradation:</b>		0-None
<b>Slumping:</b>		1-Yes
<b>Additional Notes:</b>	<p>Classification? Low</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Large gully running behind neighborhood. Very heavily vegetated.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view right bank.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view left bank.



**Photo 3 Image**



**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view center

**Photo 4 Image**




**Photo 4 View Direction**

Upstream

**Photo 4 Caption**

Upstream view of gully.



<b>Gully ID:</b> 06:23-01:29	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 23, 2021 1:29 PM	
<b>Location:</b> Burnsville	
<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>	5-Deep (>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>	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>	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: Large gully downstream and connected to another gully. Banks are at a steep angle and lots of loose soil was on the banks making it difficult to descend. Pretty moderate vegetation through out and a lot of slumping trees.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

View upstream of left bank.

**Photo 2 Image**



**Photo 2 View Direction**

Right Bank

**Photo 2 Caption**

Right bank view from bottom of gully.

**Photo 3 Image**




**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view of center of gully, there is a mini gully running through the bottom but it is filled with a lot of branches which makes it hard to see



<b>Gully ID:</b> 06:23-01:12	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 23, 2021 1:12 PM	
<b>Location:</b> Burnsville	
<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>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	3-Medium (50'-100')
<b>Condition of Gully Bottom:</b>	3-Some Vegetation
<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>	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>		3-Moderate
<b>Aggradation:</b>		1-Low
<b>Slumping:</b>		0-No
<b>Additional Notes:</b>	<p>Classification? Moderate</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Large gully behind neighborhood. Very steep slope so we could not access the bottom to get very good pictures.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view of right bank.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view of left bank.

**Photo 3 Image**




**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

More head on downstream pictures showing large trees that are leaning.



<b>Gully ID:</b> 06:23-12:17	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 23, 2021 12:17 PM	
<b>Location:</b> Burnsville	
<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>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	1-Short (<50')
<b>Condition of Gully Bottom:</b>	3-Some Vegetation
<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>	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>	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 behind house which we should not access from the residential side because it was too steep and we could not get very close to the site from the trail side due to thick vegetation. Gully appears to be very steep with leaning trees and some yard waste</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view of gully from trail, located directly in front of the white shed.

**Photo 2 Image**




**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Upstream view of gully from closer point.

<b>Gully ID:</b> 06:23-11:37	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 23, 2021 11:37 AM	
<b>Location:</b> Burnsville	
<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>	1-Shallow (<3')
<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>	3-Moderate	
<b>Slumping:</b>	1-Yes	
<b>Additional Notes:</b>	<p>Classification? High</p> <p>Presence of Water? No</p> <p>Quantity of Water?</p> <p>Notes/Comments: Gully behind neighborhood at the bottom of a very steep slope. Gully begins from pipe that is heavily armored for about 50 feet than turns into bare soil bottom gully.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view of gully about 50 feet downstream from pipe where armoring stops.

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Upstream view from end of rip rap

**Photo 3 Image**



**Photo 3 View Direction**

Upstream

**Photo 3 Caption**

Upstream view of pipe.

**Photo 4 Image**



**Photo 4 View Direction**

Downstream

**Photo 4 Caption**

Downstream view from in front of pipe out fall. The large tree in the background is where the armoring stops and the channel slope dips down.



<b>Gully ID:</b> 06:23-09:32	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 23, 2021 9:32 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy  <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>	1-Shallow (<3')
<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>	5-Acute (<45 degrees or undercut)
<b>Gully Shape:</b>	1-Trapezoid
<b>Gully Material:</b>	Gravel/Cobble/Boulders



<b>Seep:</b>	0-No	
<b>Stormwater Runoff:</b>	1-Yes	
<b>Stormwater Inputs:</b>	3-Low Flow	
<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? Trickle/Slow Moving</p> <p>Notes/Comments: Gully beginning from a huge pipe at the beginning of the gully. We believe the other sewer drains found in the gullies around this gully drain into here. There is severe degradation. Part of the left bank near the trail has riprap and the bottom is rocks.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view of left bank. There is an island in the middle of the gully.

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Upstream view of right bank from end of island.

**Photo 3 Image**



**Photo 3 View Direction**

Upstream

**Photo 3 Caption**

Upstream view of the pipe outfall. Area around pipe is eroding.

**Photo 4 Image**




**Photo 4 View Direction**

Downstream

**Photo 4 Caption**

Downstream view of where the two streams on the side of the gully connect. Lots of fallen and leaning trees.



<b>Gully ID:</b> 06:23-09:20	<b>MAP</b> 
<b>Date &amp; Time:</b> June 23, 2021 9:20 AM	
<b>Location:</b> Burnsville	
<b>Weather:</b> Cloudy <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>	3-Some Vegetation
<b>Gully Bank Angles:</b>	5-Acute (<45 degrees or undercut)
<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>		0-None
<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: Small gully along trail that potentially is connected to another gully downstream although the banks flatten out into the trail between where they would connect. located in the bottom of a large gully.</p>	

**Photo 1 Image**



**Photo 1 View Direction**

Downstream

**Photo 1 Caption**

Downstream view from above head cut.

**Photo 2 Image**



**Photo 2 View Direction**

Downstream

**Photo 2 Caption**

Downstream view of gully. Showing moderate degradation on banks.

**Photo 3 Image**



**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view from end of gully showing where it flattens out and then about 40 feet downstream the other gully begins

**Photo 4 Image**




**Photo 4 View Direction**

Upstream

**Photo 4 Caption**

Upstream view from bottom of gully.



<b>Gully ID:</b> 06:22-10:54	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 22, 2021 10:54 AM	
<b>Location:</b> Burnsville	
<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>	3-Some Vegetation
<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>		3-Moderate
<b>Aggradation:</b>		0-None
<b>Slumping:</b>		1-Yes
<b>Additional Notes:</b>	Classification? Moderate Presence of Water? No Quantity of Water? Notes/Comments: Gully in national wildlife boundary with little vegetation and very steep slope.	

**Photo 1 Image**



**Photo 1 View Direction**

Upstream

**Photo 1 Caption**

Upstream view of steep gully.

**Photo 2 Image**



**Photo 2 View Direction**

Upstream

**Photo 2 Caption**

Upstream view from left bank

**Photo 3 Image**




**Photo 3 View Direction**

Downstream

**Photo 3 Caption**

Downstream view from center of gully

<b>Gully ID:</b> 06:10-08:41	<b>MAP</b> 
<b>Date &amp; Time:</b> June 10, 2021 08:41	
<b>Location:</b> Burnsville	
<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 (x - x)
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	Medium: 50'-100'
<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 and/or Clay



<b>Seep:</b>	No
<b>Stormwater Inputs:</b>	0-Not present
<b>Fallen Trees:</b>	Yes
<b>Degradation:</b>	3-Moderate
<b>Aggradation:</b>	1-Low
<b>Slumping:</b>	3-Moderate
<b>Additional Notes:</b>	<p>Classification? Moderate (x - x)</p> <p>Notes/Comments: Lots of fallen trees, water at bottom barely moving, pipe goes under black dog road and connects it to another gully. Some roots hanging</p>

**Photo1**



**Photo1 View Direction: View Upstream**

**Photo1 Caption**

**Upstream view of gully.**

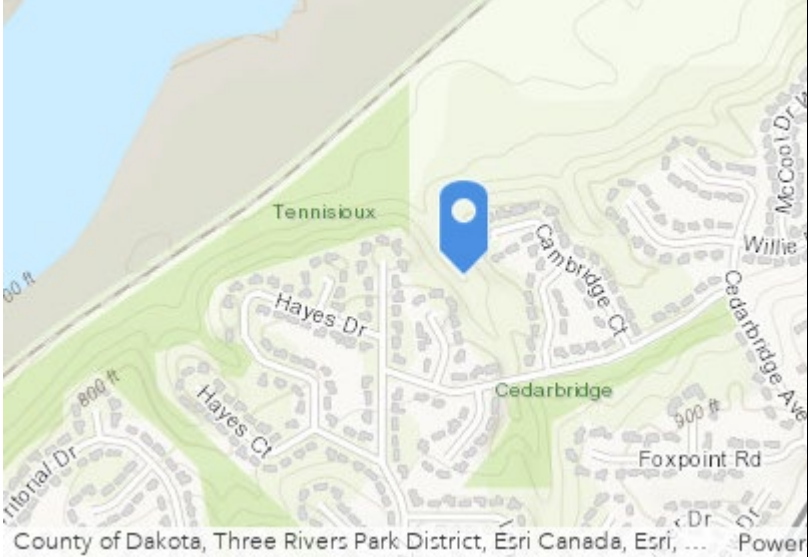
**Photo2**



**Photo2 View Direction: View Upstream**

**Photo2 Caption**

**Upstream view of where water enters pipe.**

<b>Gully ID:</b> 06:08-11:03	<b>MAP</b> 
<b>Date &amp; Time:</b> June 8, 2021 11:03	
<b>Location:</b> Burnsville	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Low (4 - x)
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	Short: <50'
<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)
<b>Gully Shape:</b>	3-U-Shaped
<b>Gully Material:</b>	Silt and/or Clay

<b>Seep:</b>	No
<b>Stormwater Inputs:</b>	0-Not present
<b>Fallen Trees:</b>	No
<b>Degradation:</b>	1-Low
<b>Aggradation:</b>	0-No aggradation
<b>Slumping:</b>	0-No slumping
<b>Additional Notes:</b>	<p>Classification? Low (4 - x)</p> <p>Notes/Comments: To the right of trail off Hayes Ave. small gully with lots of vegetation, but with no water flow. This gully runs into the large gully upstream of it, and is located on the left bank.</p>



**Photo1**



**Photo1 View Direction: View Downstream**

**Photo1 Caption**

**Downstream view from above gully on trail.**


**Photo2**



**Photo2 View Direction: View Upstream**

**Photo2 Caption**

**View from bottom of gully.**

<b>Gully ID:</b> 06:08-10:57	<b>MAP</b> 
<b>Date &amp; Time:</b> June 8, 2021 10:57	
<b>Location:</b> Burnsville	
<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 (x - x)
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	3-Medium (1'-5')
<b>Approximate Gully Length:</b>	Short: <50'
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<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>	5-V-Shaped
<b>Gully Material:</b>	Silt and/or Clay

<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	0-Not present	
<b>Fallen Trees:</b>	Yes	
<b>Degradation:</b>		3-Moderate
<b>Aggradation:</b>		0-No aggradation
<b>Slumping:</b>		3-Moderate
<b>Additional Notes:</b>	<p>Classification? Moderate (x - x)</p> <p>Notes/Comments: Gully appears to be filled with brush from residential area. Steep, with no vegetation on banks or bottom. Minor slumping</p>	



**Photo1**



**Photo1 View Direction: View Upstream**

**Photo1 Caption**

**Upstream view of gully filled with brush.**

**Photo2**



**Photo2 View Direction: View Downstream**

**Photo2 Caption**

**Downstream view of left bank.**




**Photo3**



**Photo3 View Direction: View Downstream**

**Photo3 Caption**

**Downstream view of right bank filled with lawn clipping and brush.**

<b>Gully ID:</b> 06:10-08:51	<b>MAP</b> 
<b>Date &amp; Time:</b> June 10, 2021 08:51	
<b>Location:</b> Burnsville	
<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 (x - x)
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	Short: <50'
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<b>Condition of Gully Banks:</b>	5-Bare Soil
<b>Gully Bank Angles:</b>	5-Acute (< 90 degrees or undercut)
<b>Gully Shape:</b>	5-V-Shaped
<b>Gully Material:</b>	Silt and/or Clay

<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	0-Not present	
<b>Fallen Trees:</b>	No	
<b>Degradation:</b>		5-Severe
<b>Aggradation:</b>		0-No aggradation
<b>Slumping:</b>		0-No slumping
<b>Additional Notes:</b>	<p>Classification? Moderate (x - x)</p> <p>Notes/Comments: Small gully off side of mn river. Has moderate potential due to is steepness and severe degradation, something to keep an eye on in the next few years.</p>	

**Photo1**



**Photo1 View Direction: View Downstream**

**Photo1 Caption**

**View downstream from top of gully. Can see large tree that fell and potentially caused this erosion.**

**Photo2**

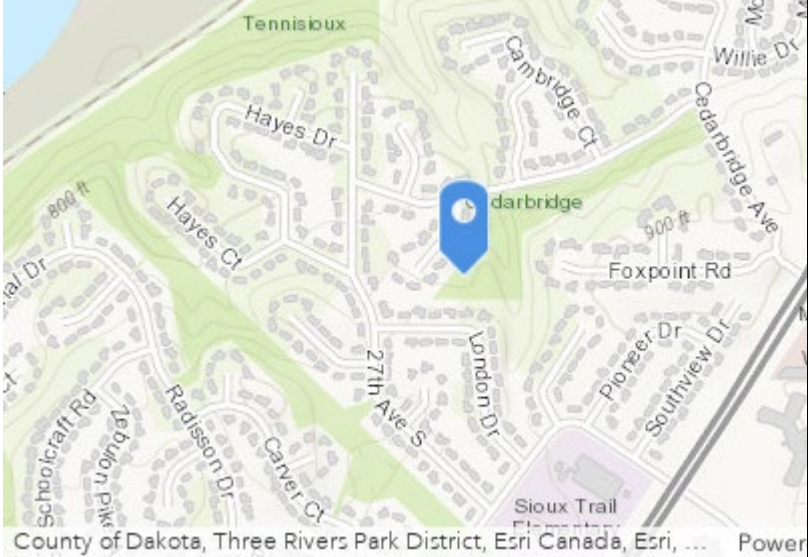


**Photo2 View Direction: View Upstream**

**Photo2 Caption**

**Upstream view from bottom of gully. Can see how steep the slope is and all the degradation through the exposed roots.**



<b>Gully ID:</b> 06:08-13:18	<b>MAP</b>	
<b>Date &amp; Time:</b> June 8, 2021 13:18		
<b>Location:</b> Burnsville		
<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 (x - 49)	
<b>Approximate Depth:</b>	5-Deep (>15')	
<b>Approximate Bottom Width:</b>	3-Medium (1'-5')	
<b>Approximate Gully Length:</b>	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>	3-Mid-range (45 to 90 degrees)	
<b>Gully Shape:</b>	5-V-Shaped	
<b>Gully Material:</b>	Silt and/or Clay	

<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	0-Not present	
<b>Fallen Trees:</b>	Yes	
<b>Degradation:</b>	5-Severe	
<b>Aggradation:</b>	1-Low	
<b>Slumping:</b>	3-Moderate	
<b>Additional Notes:</b>	<p>Classification? High (x - 49)</p> <p>Notes/Comments: Very large gully with water at bottom. Lots of visible degradation, moderate vegetation on banks, lots of pistol shaped trees, and decent slumping</p>	

**Photo1**



**Photo1 View Direction: View Upstream**

**Photo1 Caption**

**Upstream view of gully.**

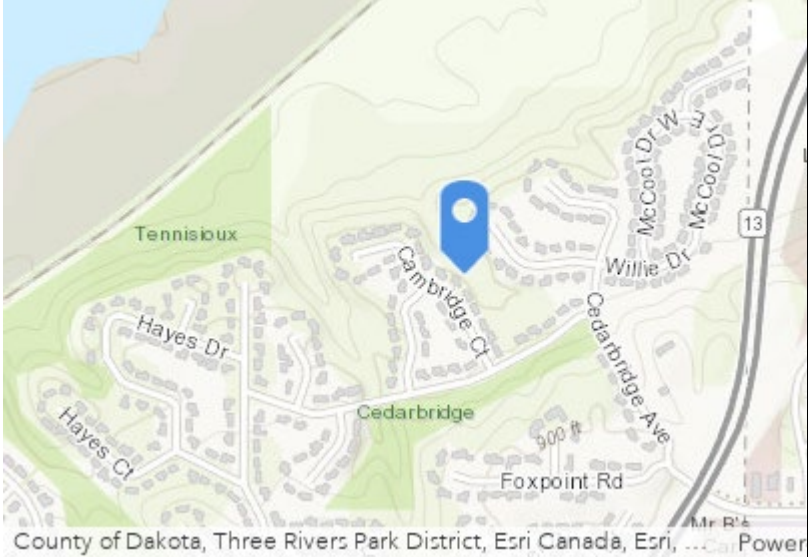
**Photo2**



**Photo2 View Direction: View Downstream**

**Photo2 Caption**

**Downstream view of gully.**

<b>Gully ID:</b> 06:08-11:46	<b>MAP</b> 
<b>Date &amp; Time:</b> June 8, 2021 11:46	
<b>Location:</b> Burnsville	
<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 (x - x)
<b>Approximate Depth:</b>	1-Shallow (<3')
<b>Approximate Bottom Width:</b>	5-Narrow/V-Ditch
<b>Approximate Gully Length:</b>	Short: <50'
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<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>	5-V-Shaped
<b>Gully Material:</b>	Silt and/or Clay



<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	0-Not present	
<b>Fallen Trees:</b>	No	
<b>Degradation:</b>	1-Low	
<b>Aggradation:</b>	0-No aggradation	
<b>Slumping:</b>	0-No slumping	
<b>Additional Notes:</b>	Classification? Moderate (x - x) Notes/Comments: Small gully with a pipe like something at the top. Eroded in a v shape, with no vegetation in banks or bottom.	

**Photo1**



**Photo1 View Direction: View Downstream**

**Photo1 Caption**

**Downstream view of gully.**

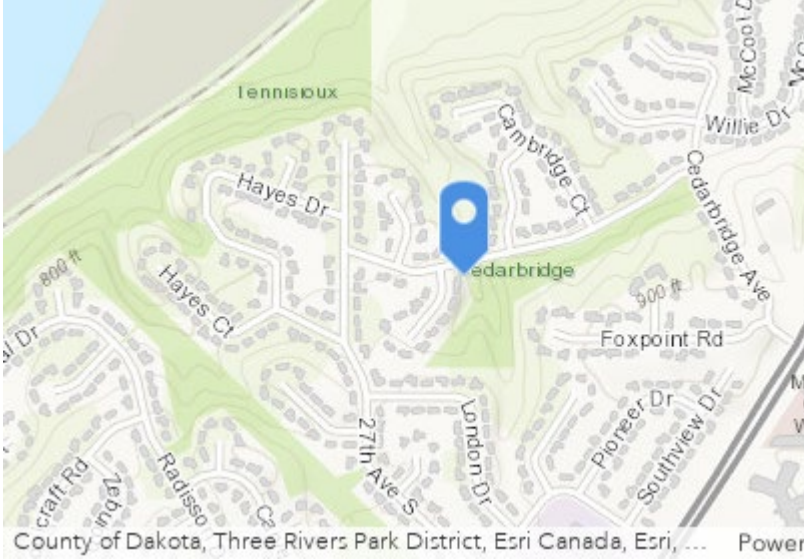
**Photo2**



**Photo2 View Direction: View Upstream**

**Photo2 Caption**

**Upstream view of pipe in gully.**

<b>Gully ID:</b> 06:08-11:22	<b>MAP</b> 
<b>Date &amp; Time:</b> June 8, 2021 11:22	
<b>Location:</b> Burnsville	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Low (4 - x)
<b>Approximate Depth:</b>	1-Shallow (<3')
<b>Approximate Bottom Width:</b>	5-Narrow/V-Ditch
<b>Approximate Gully Length:</b>	Short: <50'
<b>Condition of Gully Bottom:</b>	0-Armored/Riprap
<b>Condition of Gully Banks:</b>	1-Heavy Vegetation
<b>Gully Bank Angles:</b>	1-Obtuse (>90 degrees)
<b>Gully Shape:</b>	3-U-Shaped
<b>Gully Material:</b>	Gravel/Cobble/Boulders

<b>Seep:</b>	No
<b>Stormwater Inputs:</b>	2-Low flow
<b>Fallen Trees:</b>	No
<b>Degradation:</b>	1-Low
<b>Aggradation:</b>	1-Low
<b>Slumping:</b>	0-No slumping
<b>Additional Notes:</b>	<p>Classification? Low (4 - x)</p> <p>Notes/Comments: Water flowing over a bunch of boulders into pipe that leads to another gully across the street. Feeds from little stream. Low slumping, high bank vegetation</p>



**Photo1**



**Photo1 View Direction: View Downstream**

**Photo1 Caption**

**Downstream view of left bank.**

**Photo2**



**Photo2 View Direction: View Downstream**

**Photo2 Caption**

**Downstream view of right bank.**

**Photo3**



**Photo3 View Direction: View Upstream**

**Photo3 Caption**

**Upstream view of where the water is coming from.**

**Photo4**

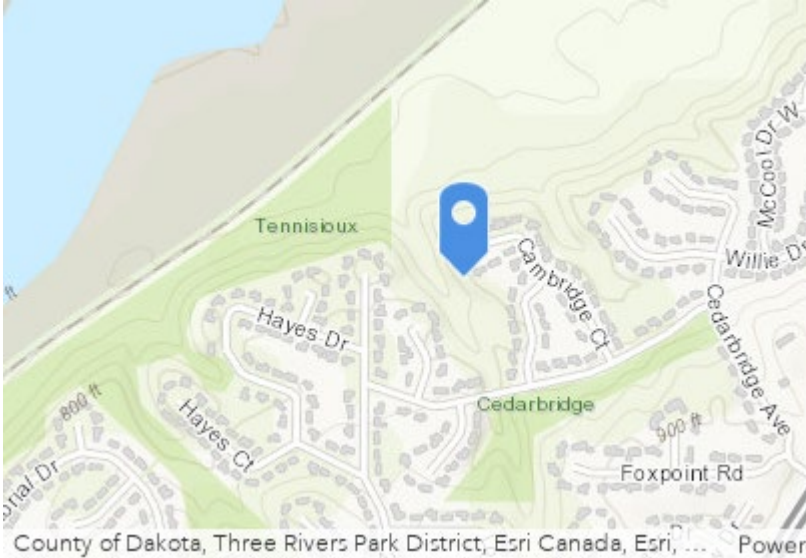


**Photo4 View Direction: View Downstream**

**Photo4 Caption**

**Downstream view of pipe where water feeds into**



<b>Gully ID:</b> 06:08-11:05	<b>MAP</b>  
<b>Date &amp; Time:</b> June 8, 2021 11:05	
<b>Location:</b> Burnsville	
<b>Weather:</b> Sunny  <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Low (4 - x)
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	Medium: 50'-100'
<b>Condition of Gully Bottom:</b>	1-Heavy Vegetation
<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 and/or Clay

<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	0-Not present	
<b>Fallen Trees:</b>	Yes	
<b>Degradation:</b>		1-Low
<b>Aggradation:</b>		0-No aggradation
<b>Slumping:</b>		1-Low
<b>Additional Notes:</b>	Classification? Low (4 - x) Notes/Comments: Looks like people dumped their brush in the gully, the top is armored with boulders, both banks and bottom have heavy vegetation.	



**Photo1**



**Photo1 View Direction: View Upstream**

**Photo1 Caption**

**Upstream view of right bank.**

**Photo2**



**Photo2 View Direction: View Upstream**

**Photo2 Caption**

**Upstream view of left bank.**


**Photo3**



**Photo3 View Direction: View Downstream**

**Photo3 Caption**

**Downstream view of end of gully.**

<b>Gully ID:</b> 06:10-08:35	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 10, 2021 08:35	
<b>Location:</b> Burnsville	
<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 (x - x)
<b>Approximate Depth:</b>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	3-Medium (1'-5')
<b>Approximate Gully Length:</b>	Medium: 50'-100'
<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>	5-V-Shaped
<b>Gully Material:</b>	Silt and/or Clay

<b>Seep:</b>	No
<b>Stormwater Inputs:</b>	1-Dripping
<b>Fallen Trees:</b>	No
<b>Degradation:</b>	1-Low
<b>Aggradation:</b>	0-No aggradation
<b>Slumping:</b>	1-Low
<b>Additional Notes:</b>	<p>Classification? Moderate (x - x)</p> <p>Notes/Comments: Gully off of black dog road near 35w. Runs from pipe into MN river. The pipe runs under the road and comes out the other side to another gully. Lots of vegetation and some large rocks are armoring the pipe.</p>



**Photo1**



**Photo1 View Direction: View Upstream**

**Photo1 Caption**

**Upstream view of pipe from right bank**

**Photo2**



**Photo2 View Direction: View Downstream**

**Photo2 Caption**

**Downstream view from right bank.**

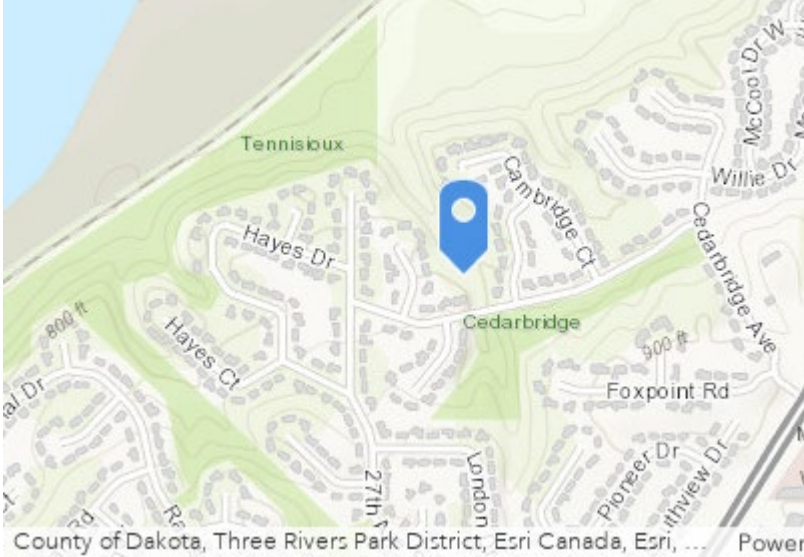
**Photo3**



**Photo3 View Direction: View Downstream**

**Photo3 Caption**

**Downstream view of gully from road. Lots of vegetation made getting a clear picture difficult.**

<b>Gully ID:</b> 06:08-10:45	<b>MAP</b> 
<b>Date &amp; Time:</b> June 8, 2021 10:45	
<b>Location:</b> Burnsville	
<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 (x - 49)
<b>Approximate Depth:</b>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	3-Medium (1'-5')
<b>Approximate Gully Length:</b>	Long: >100'
<b>Condition of Gully Bottom:</b>	0-Armored/Riprap
<b>Condition of Gully Banks:</b>	5-Bare Soil
<b>Gully Bank Angles:</b>	5-Acute (< 90 degrees or undercut)
<b>Gully Shape:</b>	5-V-Shaped
<b>Gully Material:</b>	Gravel/Cobble/Boulders

<b>Seep:</b>	No
<b>Stormwater Inputs:</b>	2-Low flow
<b>Fallen Trees:</b>	Yes
<b>Degradation:</b>	5-Severe
<b>Aggradation:</b>	1-Low
<b>Slumping:</b>	3-Moderate
<b>Additional Notes:</b>	<p>Classification? High (x - 49)</p> <p>Notes/Comments: Boulders at bottom of gully, banks of gully are heavily eroding. Water flow is constant at bottom, decent slumping in the trees. Roots hanging from banks</p>



**Photo1**



**Photo1 View Direction: View Downstream**

**Photo1 Caption**

**Left bank**

**Photo2**



**Photo2 View Direction: View Downstream**

**Photo2 Caption**

**Right bank**

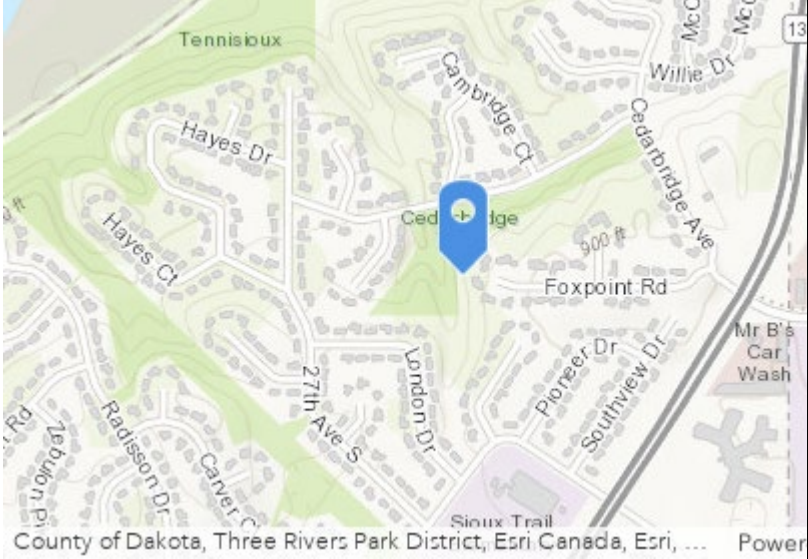
**Photo3**



**Photo3 View Direction: View Upstream**

**Photo3 Caption**

**Confluence with another gully**

<b>Gully ID:</b> 06:0-01:06	<b>MAP</b> 
<b>Date &amp; Time:</b> June 8, 2021 13:06	
<b>Location:</b> Burnsville	
<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 (x - 49)
<b>Approximate Depth:</b>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	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>	5-Acute (< 90 degrees or undercut)
<b>Gully Shape:</b>	5-V-Shaped
<b>Gully Material:</b>	Silt and/or Clay

<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	1-Dripping	
<b>Fallen Trees:</b>	Yes	
<b>Degradation:</b>	5-Severe	
<b>Aggradation:</b>	1-Low	
<b>Slumping:</b>	5-Severe	
<b>Additional Notes:</b>	<p>Classification? High (x - 49)</p> <p>Notes/Comments: Gully in cedar bridge park. Moderate vegetation on banks, mainly soil on bottom of gully with some boulders and larger rocks. The pipe is surrounded by concrete and rip rap.</p>	



**Photo1**



**Photo1 View Direction: View Upstream**

**Photo1 Caption**

**View of pipe and Boulder and fallen trees in middle of gully from right bank.**

**Photo2**



**Photo2 View Direction: View Downstream**

**Photo2 Caption**

**View downstream from right bank of gully**

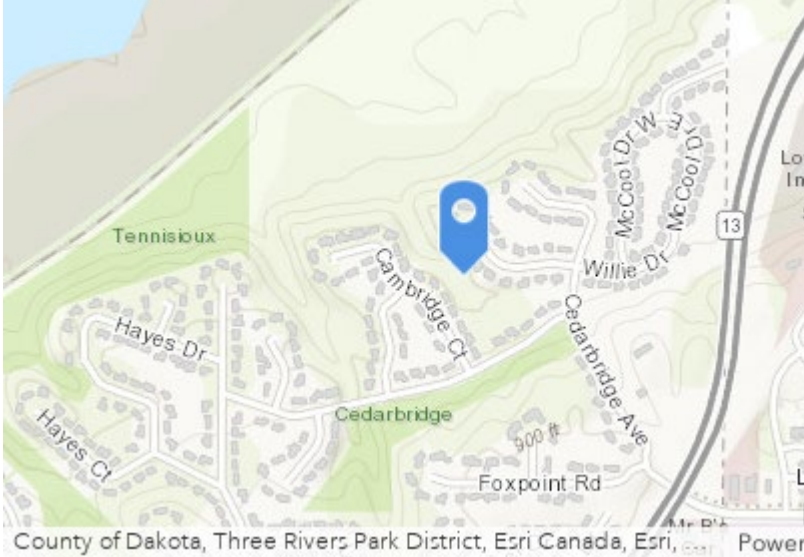
**Photo3**



**Photo3 View Direction: View Upstream**

**Photo3 Caption**

**Zoomed in view of pipe.**

<b>Gully ID:</b> 06:08-11:49	<b>MAP</b>  
<b>Date &amp; Time:</b> June 8, 2021 11:49	
<b>Location:</b> Burnsville	
<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 (x - x)
<b>Approximate Depth:</b>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	Short: <50'
<b>Condition of Gully Bottom:</b>	3-Some Vegetation
<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>	3-U-Shaped
<b>Gully Material:</b>	Silt and/or Clay

<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	1-Dripping	
<b>Fallen Trees:</b>	Yes	
<b>Degradation:</b>	5-Severe	
<b>Aggradation:</b>	0-No aggradation	
<b>Slumping:</b>	3-Moderate	
<b>Additional Notes:</b>	<p>Classification? Moderate (x - x)</p> <p>Notes/Comments: Gully in wildlife refuge boundary behind houses. Has moderate vegetation and lots of dumped yard waste. Very wide gully.</p>	



**Photo1**



**Photo1 View Direction: View Upstream**

**Photo1 Caption**

**View fro, bottom of gully. Can see fallen trees fro, left bank and there are two small drainage pipes from the residential property behind.**

**Photo2**



**Photo2 View Direction: View Upstream**

**Photo2 Caption**

**Left drainage pipe.**

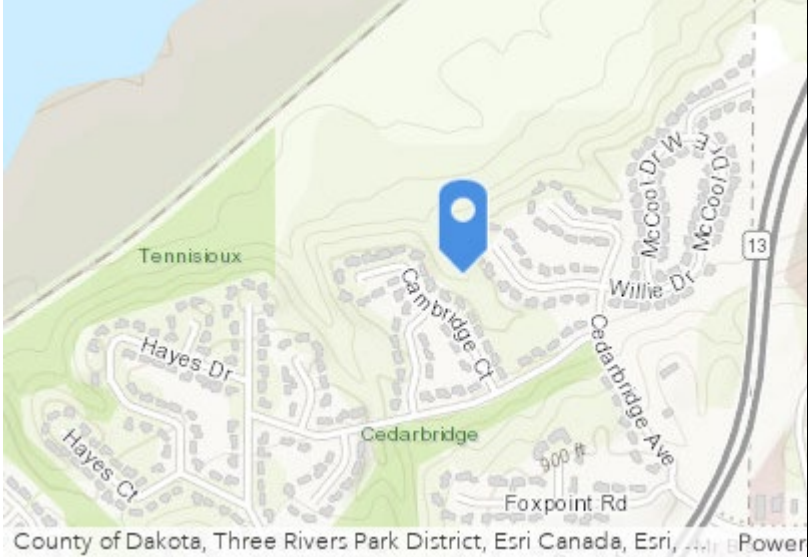
**Photo3**



**Photo3 View Direction: View Upstream**

**Photo3 Caption**

**Right drainage pipe.**

<b>Gully ID:</b> 06:08-11:42	<b>MAP</b>	
<b>Date &amp; Time:</b> June 8, 2021 11:42		
<b>Location:</b> Burnsville		
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> No		
<b>GULLY INFORMATION</b>		
<b>Calculated Erosion Potential:</b>	Low (4 - x)	
<b>Approximate Depth:</b>	5-Deep (>15')	
<b>Approximate Bottom Width:</b>	1-Wide (>5')	
<b>Approximate Gully Length:</b>	Short: <50'	
<b>Condition of Gully Bottom:</b>	1-Heavy Vegetation	
<b>Condition of Gully Banks:</b>	1-Heavy Vegetation	
<b>Gully Bank Angles:</b>	1-Obtuse (>90 degrees)	
<b>Gully Shape:</b>	3-U-Shaped	
<b>Gully Material:</b>	Silt and/or Clay	

<b>Seep:</b>	No
<b>Stormwater Inputs:</b>	0-Not present
<b>Fallen Trees:</b>	No
<b>Degradation:</b>	0-No degradation
<b>Aggradation:</b>	0-No aggradation
<b>Slumping:</b>	0-No slumping
<b>Additional Notes:</b>	<p>Classification? Low (4 - x)</p> <p>Notes/Comments: Gully behind neighborhood in wildlife refuge boundary. Looks like residents above drop their yard waste into the gully there is a sewer drain at the bottom. . A</p>



**Photo1**



**Photo1 View Direction: View Upstream**

**Photo1 Caption**

**View from base of gully**


**Photo2**



**Photo2 View Direction: Bottom of gully**

**Photo2 Caption**

**View of drain at bottom of gully**

<b>Gully ID:</b> 06:08-11:10	<p><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 8, 2021 11:10	
<b>Location:</b> Burnsville	
<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 (x - x)
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	Short: <50'
<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 (< 90 degrees or undercut)
<b>Gully Shape:</b>	5-V-Shaped
<b>Gully Material:</b>	Sand

<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	0-Not present	
<b>Fallen Trees:</b>	Yes	
<b>Degradation:</b>		3-Moderate
<b>Aggradation:</b>		0-No aggradation
<b>Slumping:</b>		3-Moderate
<b>Additional Notes:</b>	<p>Classification? Moderate (x - x)</p> <p>Notes/Comments: Short gully that runs into the main gully along the trail behind Hayes ave. Lots of branches and fallen trees are in this gully. The left and right bank have lots of vegetation but the bank area under the headcut does not.</p>	

**Photo1**

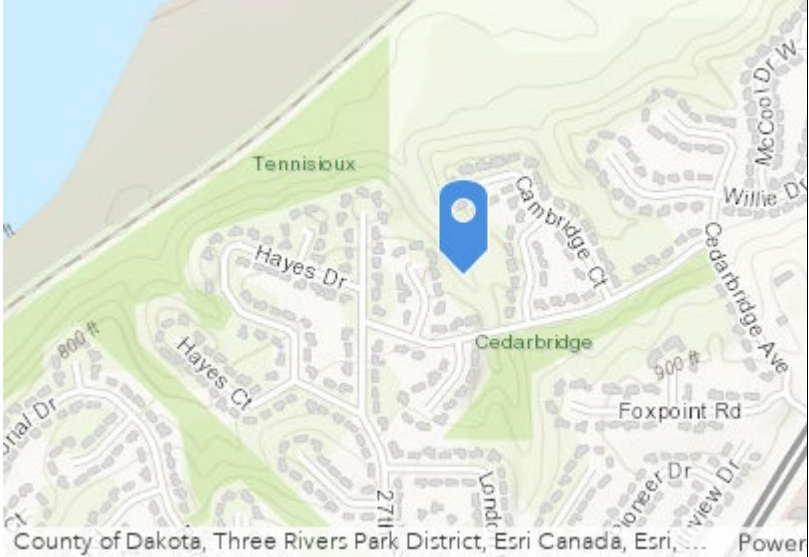


**Photo1 View Direction: View Upstream**

**Photo1 Caption**

**View of gully from base by fallen tree. Couldn't get to top to get second picture.**



<b>Gully ID:</b> 06:08-10:51	<b>MAP</b> 
<b>Date &amp; Time:</b> June 8, 2021 10:51	
<b>Location:</b> Burnsville	
<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 (x - 49)
<b>Approximate Depth:</b>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	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>	5-Acute (< 90 degrees or undercut)
<b>Gully Shape:</b>	5-V-Shaped
<b>Gully Material:</b>	Silt and/or Clay

<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	2-Low flow	
<b>Fallen Trees:</b>	Yes	
<b>Degradation:</b>		5-Severe
<b>Aggradation:</b>		3-Moderate
<b>Slumping:</b>		5-Severe
<b>Additional Notes:</b>	<p>Classification? High (x - 49)</p> <p>Notes/Comments: Gully downstream of previous gullies. Huge pipe which is severely eroded and is armored. The bottom is mainly silt but has some boulders downstream. Can see active erosion on banks and lots of slumping. another pipe downstream with no erosion.</p>	

**Photo1**

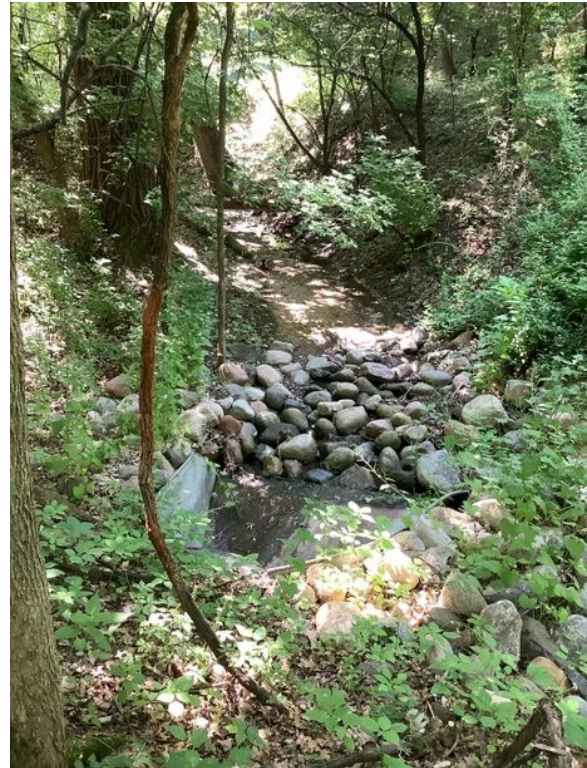


**Photo1 View Direction: View Downstream**

**Photo1 Caption**

**Downstream view of gully from above pipe before gully drop off. Can see fallen tree on left bank and pistol trees on right bank.**

**Photo2**



**Photo2 View Direction: View Upstream**

**Photo2 Caption**

**View of other side of pipe. Not much erosion and the pipe is armored.**

**Photo3**

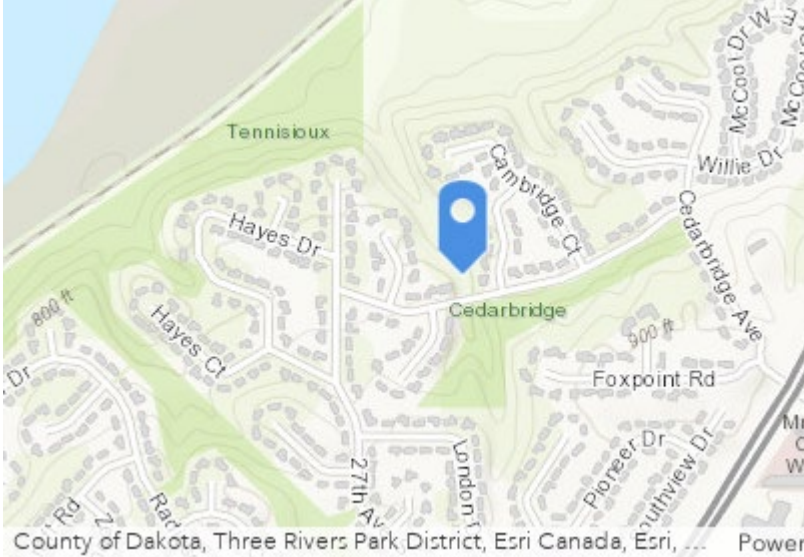


**Photo3 View Direction: View Upstream**

**Photo3 Caption**

**Upstream view of pipe from bottom of the gully.**



<b>Gully ID:</b> 06:08-10:41	<b>MAP</b> 
<b>Date &amp; Time:</b> June 8, 2021 10:41	
<b>Location:</b> Burnsville	
<b>Weather:</b> Sunny <b>Storm/Rainfall Event in the Past 24 Hours?</b> No	
<b>GULLY INFORMATION</b>	
<b>Calculated Erosion Potential:</b>	Low (4 - x)
<b>Approximate Depth:</b>	3-Medium (3'-15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	Short: <50'
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<b>Condition of Gully Banks:</b>	0-Armored/Riprap
<b>Gully Bank Angles:</b>	1-Obtuse (>90 degrees)
<b>Gully Shape:</b>	1-Trapezoid
<b>Gully Material:</b>	Gravel/Cobble/Boulders

<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	2-Low flow	
<b>Fallen Trees:</b>	No	
<b>Degradation:</b>	0-No degradation	
<b>Aggradation:</b>	0-No aggradation	
<b>Slumping:</b>	0-No slumping	
<b>Additional Notes:</b>	<p>Classification? Low (4 - x)</p> <p>Notes/Comments: Drain in wildlife refuge boundary area next to trail in a residential neighborhood. Gully is filled with large rocks and is armored on the sides with lots of vegetation. The water flow is constant, but slow moving. connects to severe gully downstream</p>	

**Photo1**



**Photo1 View Direction: View Downstream**

**Photo1 Caption**

**View from above drain looking downstream at the gully.**


**Photo2**



**Photo2 View Direction: View Upstream**

**Photo2 Caption**

**View upstream of pipe and gully from downstream on right bank trail.**

<b>Gully ID:</b> 06:04-10:16	<b>MAP</b> 
<b>Date &amp; Time:</b> June 4, 2021 10:16	
<b>Location:</b> Burnsville	
<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 (x - x)
<b>Approximate Depth:</b>	1-Shallow (<3')
<b>Approximate Bottom Width:</b>	5-Narrow/V-Ditch
<b>Approximate Gully Length:</b>	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>	5-V-Shaped
<b>Gully Material:</b>	Silt and/or Clay



<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	0-Not present	
<b>Fallen Trees:</b>	No	
<b>Degradation:</b>	1-Low	
<b>Aggradation:</b>	0-No aggradation	
<b>Slumping:</b>	0-No slumping	
<b>Additional Notes:</b>	Classification? Moderate (x - x) Notes/Comments: Pipe with water in it at bottom of v shape gully, no vegetation at bottom, but lots on the banks	


**Photo1**



**Photo1 Caption**

**Entire gully and pipe, showing pool of water near pipe**

**Photo1 View Direction: View Upstream**

<b>Gully ID:</b> 06:04-10:22	<p style="text-align: center;"><b>MAP</b></p> 
<b>Date &amp; Time:</b> June 4, 2021 10:22	
<b>Location:</b> Burnsville	
<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 (x - 49)
<b>Approximate Depth:</b>	1-Shallow (<3')
<b>Approximate Bottom Width:</b>	5-Narrow/V-Ditch
<b>Approximate Gully Length:</b>	Short: <50'
<b>Condition of Gully Bottom:</b>	5-Bare Soil
<b>Condition of Gully Banks:</b>	5-Bare Soil
<b>Gully Bank Angles:</b>	5-Acute (< 90 degrees or undercut)
<b>Gully Shape:</b>	5-V-Shaped

<b>Gully Material:</b>	Gravel/Cobble/Boulders	
<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	0-Not present	
<b>Fallen Trees:</b>	No	
<b>Degradation:</b>		5-Severe
<b>Aggradation:</b>		0-No aggradation
<b>Slumping:</b>		1-Low
<b>Additional Notes:</b>	<p>Classification? High (x - 49)</p> <p>Notes/Comments: Ditch off side of gravel path looks like a place where water drains and heavy erosion occurs, could potentially erode the entire path in a few years.</p>	

**Photo1**

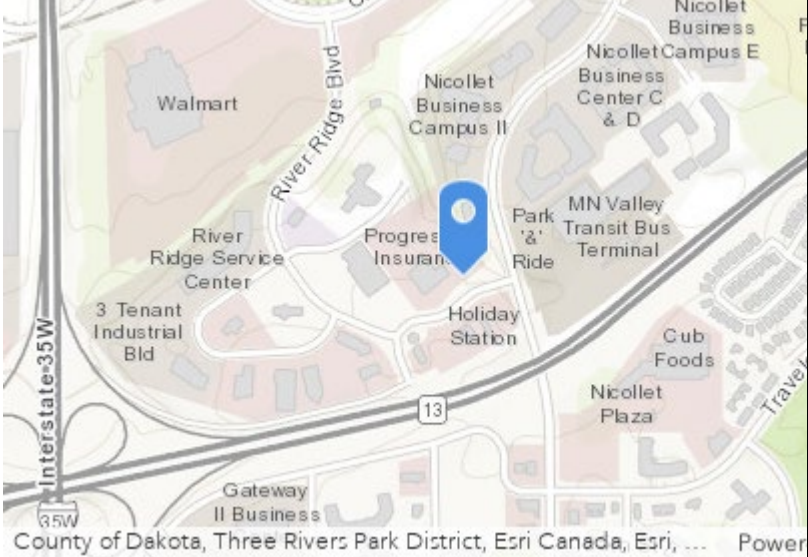


**Photo1 View Direction: View Downstream**

**Photo1 Caption**

**View from headcut of small gully on trail. Can see eroding banks and lack of vegetation in gully. Lots of gravel and dirt make up gully material.**



<b>Gully ID:</b> 21-06-14 10:51:58	<b>MAP</b>  
<b>Date &amp; Time:</b> June 14, 2021 10:51	
<b>Location:</b> Burnsville	
<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 (x - x)
<b>Approximate Depth:</b>	5-Deep (>15')
<b>Approximate Bottom Width:</b>	1-Wide (>5')
<b>Approximate Gully Length:</b>	Medium: 50'-100'
<b>Condition of Gully Bottom:</b>	3-Some Vegetation
<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>	3-U-Shaped
<b>Gully Material:</b>	Silt and/or Clay

<b>Seep:</b>	No	
<b>Stormwater Inputs:</b>	0-Not present	
<b>Fallen Trees:</b>	Yes	
<b>Degradation:</b>		1-Low
<b>Aggradation:</b>		1-Low
<b>Slumping:</b>		3-Moderate
<b>Additional Notes:</b>	Classification? Moderate (x - x) Notes/Comments: Steep gully with vegetation on the banks and bottom. Fallen trees throughout and slumping.	

**Photo1**



**Photo1 View Direction: View Downstream**

**Photo1 Caption**

**Downstream view of right bank.**

**Photo2**



**Photo2 View Direction: View Downstream**

**Photo2 Caption**

**Downstream view of left bank.**