



## Grant All-Detail Report Projects and Practices 2016

**Grant Title** - 2016 St. Croix River Escarpment Taylors Falls Gully Stabilization

**Grant ID** - C16-4658

**Organization** - Chisago SWCD

Original Awarded Amount	<b>\$220,500.00</b>	Grant Execution Date	<b>2/16/2016</b>
Required Match Amount	\$55,125.00	Original Grant End Date	12/31/2018
Required Match %	25%	Grant Day To Day Contact	Craig Mell
Current Awarded Amount	\$220,500.00	Current End Date	12/31/2018

### Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$220,500.00	\$220,500.00	\$0.00
Total Match Amount	\$61,500.00	\$71,000.00	\$-9,500.00
Total Other Funds	\$120,000.00	\$131,936.62	\$-11,936.62
<b>Total</b>	<b>\$402,000.00</b>	<b>\$423,436.62</b>	<b>\$-21,436.62</b>

*\*Grant balance remaining is the difference between the Awarded Amount and the Spent Amount. Other values compare budgeted and spent amounts.*

### Budget Details

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Administration	Administration /Coordination	Current State Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabiliz..	\$2,500.00	\$2,644.50	1/2/2018	N
Brue Wall Stabilization	Agricultural Practices	Current State Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabiliz..	\$65,047.91	\$65,500.00	9/21/2018	N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Brue Wall Stabilization	Agricultural Practices	Local Fund	St. Croix River Association	\$6,000.00	\$15,500.00	9/21/2018	Y
Debra Scott Construction	Agricultural Practices	Local Fund	St Croix River Association	\$5,000.00	\$5,000.00	7/18/2017	Y
Lapinski Stabilization Construction	Agricultural Practices	Current State Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabiliz..	\$15,000.00	\$12,876.37	10/12/2017	N
Lapinski Stabilization Construction	Agricultural Practices	Local Fund	St. Croix River Association	\$5,000.00	\$5,000.00	10/12/2017	Y
Outreach/Education	Education/Information	Local Fund	St. Croix River Association	\$500.00	\$500.00	10/26/2017	Y
Spring Creek North Gully Construction	Agricultural Practices	Current State Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabiliz..	\$50,000.00	\$50,000.00	7/26/2016	N
Spring Creek North Gully Construction	Agricultural Practices	Federal Funds	St. Croix River Association	\$5,000.00	\$5,000.00	7/26/2016	Y
Spring Creek North Gully Construction	Agricultural Practices	Local Fund	City of Taylors Falls	\$6,000.00	\$6,000.00	7/26/2016	Y
Spring Creek South Gully Construction	Agricultural Practices	Current State Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabiliz..	\$59,202.60	\$59,202.60	9/19/2016	N
Spring Creek South Gully Construction	Agricultural Practices	Federal Funds	St. Croix River Association	\$24,000.00	\$24,000.00	7/26/2016	Y
Spring Creek South Gully Construction	Agricultural Practices	Local Fund	City of Taylors Falls	\$10,000.00	\$10,000.00	7/26/2016	Y
St. Croix River Escarpment Implementation Construction	Agricultural Practices	Current State Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabiliz..	\$8,749.49	\$8,749.94	8/22/2017	N
St. Croix River Escarpment Implementation Construction	Agricultural Practices	Other Funds	Landowner Match	\$30,000.00	\$43,803.12	8/11/2015	Y
St. Croix River Escarpment Implementation Construction	Agricultural Practices	Other Funds	St. Croix River Escarpment Gully Stabilization Implementatio..	\$90,000.00	\$88,133.50	6/13/2017	N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Technical Assistance/Engineering	Technical/Engineering Assistance	Current State Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabiliz..	\$20,000.00	\$21,526.59	10/8/2018	N

### Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
638 - Water and Sediment Control Basin	1		275 LINEAR FEET	275 LINEAR FEET
412 - Grassed Waterway and Swales	4		2850 LINEAR FEET	2934 LINEAR FEET
638 - Water and Sediment Control Basin	1	1	609 LINEAR FEET	592 LINEAR FEET
638 - Water and Sediment Control Basin	1		151 LINEAR FEET	161 LINEAR FEET
638 - Water and Sediment Control Basin	1	1	1 COUNT	COUNT
410 - Grade Stabilization Structure	1	1	241 LINEAR FEET	241 LINEAR FEET
468 - Lined Waterway or Outlet	1	1	55 LINEAR FEET	55 LINEAR FEET
412 - Grassed Waterway and Swales	1		665 LINEAR FEET	665 LINEAR FEET
468 - Lined Waterway or Outlet	1	1	1 LINEAR FEET	740 LINEAR FEET
412 - Grassed Waterway and Swales	1		400 LINEAR FEET	400 LINEAR FEET
638 - Water and Sediment Control Basin	1		230 LINEAR FEET	230 LINEAR FEET
362 - Diversion	1		560 LINEAR FEET	598 LINEAR FEET
468 - Lined Waterway or Outlet	1	1	1 LINEAR FEET	760 LINEAR FEET
638 - Water and Sediment Control Basin	1		400 LINEAR FEET	467 LINEAR FEET
362 - Diversion	3		100 LINEAR FEET	108 LINEAR FEET
155M - Storm Water Retention Basins	1	1	1 COUNT	1 COUNT

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
638 - Water and Sediment Control Basin	2		407 LINEAR FEET	407 LINEAR FEET
410 - Grade Stabilization Structure	1		450 LINEAR FEET	450 LINEAR FEET
410 - Grade Stabilization Structure	1	1	1 COUNT	1 COUNT

### Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
<b>Spring Creek North Gully Construction</b>	PHOSPHORUS (EST. REDUCTION)	14.5 LBS/YR	St. Croix River	BWSR CALC (GULLY STABILIZATION)	
<b>Spring Creek South Gully Construction</b>	PHOSPHORUS (EST. REDUCTION)	29.1 LBS/YR	St. Croix River	BWSR CALC (GULLY STABILIZATION)	
<b>Interstate State Park Gully Construction</b>	PHOSPHORUS (EST. REDUCTION)	32 LBS/YR	St. Croix River	BWSR CALC (GULLY STABILIZATION)	
<b>Spring Creek North Gully Construction</b>	SOIL (EST. SAVINGS)	17 TONS/YR	St. Croix River	BWSR CALC (GULLY STABILIZATION)	
<b>Spring Creek South Gully Construction</b>	SOIL (EST. SAVINGS)	34 TONS/YR	St. Croix River	BWSR CALC (GULLY STABILIZATION)	
<b>Interstate State Park Gully Construction</b>	SOIL (EST. SAVINGS)	64 TONS/YR	St. Croix River	BWSR CALC (GULLY STABILIZATION)	
<b>Spring Creek North Gully Construction</b>	SEDIMENT (TSS)	16.5 TONS/YR	St. Croix River	BWSR CALC (GULLY STABILIZATION)	
<b>Spring Creek South Gully Construction</b>	SEDIMENT (TSS)	33.1 TONS/YR	St. Croix River	BWSR CALC (GULLY STABILIZATION)	
<b>Interstate State Park Gully Construction</b>	SEDIMENT (TSS)	32 TONS/YR	St. Croix River	BWSR CALC (GULLY STABILIZATION)	

### Final Indicators Summary

Indicator Name	Total Value	Unit
<b>SEDIMENT (TSS)</b>	234.01	TONS/YR
<b>SOIL (EST. SAVINGS)</b>	319.78	TONS/YR

<b>VOLUME REDUCED (ACRE-FEET/YEAR)</b>	6.50	ACRE-FEET/YR
<b>PHOSPHORUS (EST. REDUCTION)</b>	319.06	LBS/YR

## Grant Activity

Grant Activity - Administration			
<b>Description</b>	Administrative duties including eLINK reporting, contracts, board meetings, billing, etc.		
<b>Category</b>	ADMINISTRATION/COORDINATION		
<b>Start Date</b>	3-Mar-16	<b>End Date</b>	04-Jan-18
<b>Has Rates and Hours?</b>	Yes		
<b>Actual Results</b>	<p>As of January 17, 2017 ELINK reporting is up to date. Contract and payment reimbursement was completed for the Spring Creek Gully (North and South) project.</p> <p>As of January 4, 2018 Contracts and payment vouchers are complete for the Pam Lapinski project. We will utilize funds from Technical/Engineering to cover the overage in Administration.</p>		

Grant Activity - Brue Wall Stabilization			
Description	The Spring Creek Gully was stabilized last year. There is a large failing retaining wall made of railroad timbers, rock, and logs, at the south end of the gully on the Brue property. The wall is at the top of the bluff and there are many seeps throughout the hillside. The wall has been slowly sluffing and is likely to have a major failure in the near future. This project will stabilize the hillside and allow the seeps to run through without causing erosion.		
Category	AGRICULTURAL PRACTICES		
Start Date	7-Nov-17	End Date	21-Sep-18
Has Rates and Hours?	No		
Actual Results	<p>As of July 31, 2017 The Brue/Lapinski activity was split into two separate activities. No work has been done on the Brue wall project.</p> <p>As of January 4, 2018 The design is complete for the Brue Wall portion. Bids will be solicited in early 2018 with construction planned for the summer.</p> <p>As of September 18, 2018 On August 14, 2018, the Chisago SWCD Board approved a contract amendment to increase the cost share amount in order to complete an additional storm water basin with this project. The project was installed during the week of September 4th and finished on September 12th. A series of 3 gabion rock wall terraces were installed to stabilize the bluff at the Brue property. A rock lined channel was installed to stabilize gully erosion from road runoff to the channel bottom. A storm water basin was installed at the intersection of First Avenue and Chestnut Street.</p>		

Activity Action - Brue Wall Stabilization			
Practice	410 - Grade Stabilization Structure	Count of Activities	1
Description	Series of 3 gabion rock terraces		
Proposed Size / Units	241.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	241.00 LINEAR FEET	Installed Date	12-Sep-18
Mapped Activities	1 Point(s)		

Final Indicator for Brue Wall Stabilization			
Indicator Name	SEDIMENT (TSS)	Value	55.25
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (STREAM & DITCH STABILIZATION)

<b>Waterbody</b>	St. Croix River		
<b>Final Indicator for Brue Wall Stabilization</b>			
<b>Indicator Name</b>	PHOSPHORUS (EST. REDUCTION)	<b>Value</b>	55.25
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	BWSR CALC (STREAM & DITCH STABILIZATION)
<b>Waterbody</b>	St. Croix River		
<b>Final Indicator for Brue Wall Stabilization</b>			
<b>Indicator Name</b>	SOIL (EST. SAVINGS)	<b>Value</b>	55.25
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	BWSR CALC (STREAM & DITCH STABILIZATION)
<b>Waterbody</b>	St. Croix River		

<b>Activity Action - Rock-lined Channel</b>			
<b>Practice</b>	468 - Lined Waterway or Outlet	<b>Count of Activities</b>	1
<b>Description</b>	Rock-lined channel to safely transport water from road side to channel bottom.		
<b>Proposed Size / Units</b>	55.00 LINEAR FEET	<b>Lifespan</b>	10 Years
<b>Actual Size/Units</b>	55.00 LINEAR FEET	<b>Installed Date</b>	12-Sep-18
<b>Mapped Activities</b>	1 Line(s)		

<b>Final Indicator for Rock-lined Channel</b>			
<b>Indicator Name</b>	SOIL (EST. SAVINGS)	<b>Value</b>	1.7
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		
<b>Final Indicator for Rock-lined Channel</b>			
<b>Indicator Name</b>	SEDIMENT (TSS)	<b>Value</b>	1.7
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		
<b>Final Indicator for Rock-lined Channel</b>			
<b>Indicator Name</b>	PHOSPHORUS (EST. REDUCTION)	<b>Value</b>	1.7
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		

Activity Action - Chestnut St. Basin			
Practice	155M - Storm Water Retention Basins	Count of Activities	1
Description	Stormwater basin to capture road runoff and culvert water to transport it safely into the existing channel.		
Proposed Size / Units	1.00 COUNT	Lifespan	10 Years
Actual Size/Units	1.00 COUNT	Installed Date	12-Sep-18
Mapped Activities	1 Point(s)		

Grant Activity - Debra Scott Construction			
Description	This project has been funded with a combination of grant money from the FY14 Escarpment funds, St. Croix River Association matching funds, and this grant (2016). A larger gully is stabilized with a water and sediment control basin.		
Category	AGRICULTURAL PRACTICES		
Start Date	20-Apr-17	End Date	17-May-17
Has Rates and Hours?	No		
Actual Results	<p>Refer to the St. Croix River Escarpment Implementation Construction grant activity for additional information and Activity Details.</p> <p>As of July 31, 2017</p> <p>Project was completed in May. A water and sediment control basin was installed at the head of a gully to stabilize the erosion. Project has been certified and payment was issued.</p>		

Activity Action - Debra Scott WASC0B			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description			
Proposed Size / Units	609.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	592.00 LINEAR FEET	Installed Date	17-May-17
Mapped Activities	1 Point(s)		

Final Indicator for Debra Scott WASC0B			
Indicator Name	SOIL (EST. SAVINGS)	Value	14
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)



<b>Waterbody</b>	St. Croix River		
<b>Final Indicator for Debra Scott WASCOB</b>			
<b>Indicator Name</b>	PHOSPHORUS (EST. REDUCTION)	<b>Value</b>	7
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		
<b>Final Indicator for Debra Scott WASCOB</b>			
<b>Indicator Name</b>	SEDIMENT (TSS)	<b>Value</b>	7
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		

## Grant Activity - Lapinski Stabilization Construction

<b>Description</b>	The Spring Creek gully was stabilized last year. However, there is a direct source of runoff that must be addressed for the stabilization to remain stable in one location, at the Lapinski property. Runoff water from the street, house, and yard of Pam Lapinski's property concentrates and runs down the ravine side slope in one location, causing extensive erosion. A design to stabilize this issue includes a trench drain across a driveway, a rock holding basin, and a pipe to redirect water to the bottom of the gully in a direction that allows water to run straight rather than around a 90 degree corner as it does currently.		
<b>Category</b>	AGRICULTURAL PRACTICES		
<b>Start Date</b>	31-Jan-17	<b>End Date</b>	14-Nov-17
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>As of January 18, 2017</p> <p>This project was not part of the original application. A work plan amendment was approved on 1/18/2017 to re-allocate the funds from the Interstate State Park Gully Stabilization project to this project. The Interstate State Park Gully project was rejected by the DNR after a full design had been completed. This project is similar to the one it replaces; they both stabilize major gully erosion concerns along the St. Croix River escarpment. Both projects directly affect the St. Croix River. At this time, project exploration has been done, including speaking with the landowners, having an engineer on site to discuss potential solutions, and some initial survey work. A design is expected to be completed in 2017; the goal is also to complete construction in 2017.</p> <p>As of July 31, 2017</p> <p>The Brue and Lapinski projects were separated into two activities in eLINK. A design is completed for the Lapinski stabilization project. A contractor has been hired and expects to begin the project in September or October of 2017.</p> <p>As of November 14, 2017</p> <p>Construction began on September 26 and wrapped up on October 11. A trench drain was installed in the driveway to capture runoff coming into the yard. The water enters a rock basin which has an outlet at the base of the ravine. This prevents extra water from running over the top of the ravine, where it was causing a gully. The SWCD Board certified the project and approved reimbursement on November 14, 2017.</p>		

Activity Action - Lapinski Stabilization Project			
Practice	410 - Grade Stabilization Structure	Count of Activities	1
Description	Trench drain, rock basin, pipe outlet		
Proposed Size / Units	1.00 COUNT	Lifespan	10 Years
Actual Size/Units	1.00 COUNT	Installed Date	28-Sep-17
Mapped Activities	1 Point(s)		

Final Indicator for Lapinski Stabilization Project

Indicator Name	SOIL (EST. SAVINGS)	Value	3.83
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Final Indicator for Lapinski Stabilization Project

Indicator Name	SEDIMENT (TSS)	Value	3.83
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Final Indicator for Lapinski Stabilization Project

Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	3.83
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

**Grant Activity - Outreach/Education**

<b>Description</b>	<p>The Chisago SWCD is partnering with the St. Croix River Association (SCRA) on this project. Aside from providing matching funding, SCRA has an in-depth outreach, awareness, and celebration program to help promote knowledge and awareness of the St. Croix River. Their outreach program has engaged thousands of citizens in public education and stewardship activities. This includes invasive species identification and detection training, urban storm water education, and group celebrations. SCRA hosts a week long Paddle the Namekagon River (the direct tributary that becomes the St. Croix River), runs an annual photography contest, recognizes an individual or group making a significant contribution through a Stewardship Award, and coordinates a volunteer program.</p> <p>SCRA will promote the gully restoration projects through their newsletters, articles, project spotlights, and website. Any additional potential events have not yet been planned. The Chisago SWCD will also promote the projects via their website, Conservation Notes articles in local newspapers, newsletters, and Facebook site.</p>		
<b>Category</b>	EDUCATION/INFORMATION		
<b>Start Date</b>	8-Aug-16	<b>End Date</b>	26-Oct-17
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>As of January 18, 2017 The St. Croix River Association wrote and published an article about the projects on the North and South Spring Creek Gully restorations. The article is attached.</p> <p>As of November 15, 2017 The funds were used to purchase supplies for and to run a station at the Children's Water Festival called Raging Runoff Results. The station compares simulated runoff from four different landscapes: urban (concrete), agriculture/construction (bare soil), residential (sod), and forest (leaves). Water is poured over each landscape and the runoff is captured to be compared for amount and quality. The students discuss if the runoff is good or bad for the local lakes and rivers. The Children's Water Festival event brings together 700 fifth graders from schools across Chisago County.</p>		

## Grant Activity - Spring Creek North Gully Construction

<b>Description</b>	<p>Spring Creek Gully is located in the residential area of Taylors Falls. The gully starts at a wetland outlet and continues through the back yards of houses before entering a large pipe that outlets directly into the St. Croix River. The north portion of the gully consists of the gully head to the point where the gully goes beneath Walnut Street. A large culvert enters this portion of the gully, carrying runoff from a watershed of approximately 16 acres. There is severe erosion occurring in the gully channel.</p> <p>The draft design calls for a series of heavy checks, using wood and rock. A rock bowl will be installed where the culvert enters the gully to dissipate the energy of the water coming through the culvert. Some trees may be thinned from the canopy to allow sunlight to reach the floor so that vegetation can establish on the gully banks.</p>		
<b>Category</b>	AGRICULTURAL PRACTICES		
<b>Start Date</b>	27-Jun-16	<b>End Date</b>	22-Jul-16
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>As of July 26, 2016</p> <p>A series of log and rock check dams were installed along the channel. The existing culvert was extended to outlet at the same elevation as the channel bottom. Permanent turf reinforcement mat was installed along the channel bottom to stabilize it. Trees were removed to allow 50% canopy opening, which lets sunlight reach the forest floor so vegetation is able to grow. Native shrubs, plant plugs and seed were installed to help re-vegetate the most sensitive areas, including the banks. Deeply undercut banks were stabilized using brush waddles, logs, and rock.</p> <p>As of January 18, 2017</p> <p>Construction was completed in September. Shortly after completion, the area received a major rainfall, which caused damage to the culvert outlet area in the north gully. Additional funds were used to correct and reinforce this area so that future events will not cause similar damage.</p>		

Activity Action - Spring Creek North Gully			
Practice	468 - Lined Waterway or Outlet	Count of Activities	1
Description	A series of check dams made of logs and/or rock will be installed to help stabilize the eroding banks. Rock protection will be added to a culvert inlet.		
Proposed Size / Units	1.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	760.00 LINEAR FEET	Installed Date	15-Jul-16
Mapped Activities	1 Line(s)		

Final Indicator for Spring Creek North Gully			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	26
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		
Final Indicator for Spring Creek North Gully			
Indicator Name	SEDIMENT (TSS)	Value	26
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		
Final Indicator for Spring Creek North Gully			
Indicator Name	SOIL (EST. SAVINGS)	Value	51
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

## Grant Activity - Spring Creek South Gully Construction

<b>Description</b>	<p>Spring Creek Gully is located in the residential area of Taylors Falls. The gully starts at a wetland outlet and continues through the back yards of houses before entering a large pipe that outlets directly into the St. Croix River. The south portion of the gully starts at the outlet under Walnut Street and continues to the point where the gully enters a very large pipe. There is no chance for treatment once the water enters the pipe. There is active erosion occurring within the channel.</p> <p>The draft design calls for a series of heavy checks made from wood and rocks. Some trees may be thinned from the canopy to allow sunlight to reach the floor so that vegetation can grow on the gully banks.</p>		
<b>Category</b>	AGRICULTURAL PRACTICES		
<b>Start Date</b>	27-Jun-16	<b>End Date</b>	15-Jul-16
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>As of July 26, 2016</p> <p>A series of log and rock check dams were installed along the channel. The existing culvert was extended to outlet at the same elevation as the channel bottom. Permanent turf reinforcement mat was installed along the channel bottom to stabilize it. Trees were removed to allow 50% canopy opening, which lets sunlight reach the forest floor so vegetation is able to grow. Native shrubs, plant plugs and seed were installed to help re-vegetate the most sensitive areas, including the banks. Deeply undercut banks were stabilized using brush waddles, logs, and rock.</p> <p>As of January 17, 2017</p> <p>Construction was completed in September.</p>		

Activity Action - Spring Creek South Gully			
<b>Practice</b>	468 - Lined Waterway or Outlet	<b>Count of Activities</b>	1
<b>Description</b>	Check dams of rock and/or logs will be used in the gully channel to stabilize erosion. Some trees may be removed to increase sunlight that reaches the forest floor, thereby allowing more vegetation to grow.		
<b>Proposed Size / Units</b>	1.00 LINEAR FEET	<b>Lifespan</b>	10 Years
<b>Actual Size/Units</b>	740.00 LINEAR FEET	<b>Installed Date</b>	15-Jul-16
<b>Mapped Activities</b>	1 Line(s)		

Final Indicator for Spring Creek South Gully			
<b>Indicator Name</b>	SOIL (EST. SAVINGS)	<b>Value</b>	51
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		

Final Indicator for Spring Creek South Gully			
Indicator Name	SEDIMENT (TSS)	Value	25
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		
Final Indicator for Spring Creek South Gully			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	25
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		



**Grant Activity - St. Croix River Escarpment Implementation Construction**

<b>Description</b>	With this funding, we intend to continue implementing BMPs such as water and sediment control basins, ditch checks, rain gardens, etc. on sites that are identified in the St. Croix River Escarpment Gully Inventory report. We have made contact with landowners of gullies 5, 6, 11, and 12, and hope to begin project planning in early 2014 (see map). We anticipate stabilizing up to 8 identified gullies with this grant, which we estimate would reduce Total Phosphorus and Total Suspended Solids by 52 pounds per year and 52 tons per year, respectively (per BWSR Pollution Reduction Estimator-Gully).		
<b>Category</b>	AGRICULTURAL PRACTICES		
<b>Start Date</b>	31-Mar-14	<b>End Date</b>	18-Jul-17
<b>Has Rates and Hours?</b>	No		
<b>Actual Results</b>	<p>2/3/2015-vegetated swale with rock checks (Taylors Falls Elementary School), grassed waterway (Mallery), and WASCOB (Thibodeau) have been installed.</p> <p>September 2, 2015-Grade stabilization installed at Wayne Johnsons. Projects at Mallery Jerseyes (Wascobs, Diversions), Dibbles (Wascob), Loens (Grassed waterways, Diversions), and Andersons (Grassed waterways, Wascobs) have completed designs. All remaining construction funds have been encumbered towards these projects. All projects except for Andersons (spring 2016) are scheduled to be installed this fall.</p> <p>1/19/2016-Projects are complete at Wayne Johnsons (Grade stabilization), Mallery Jerseyes (3 WASCOS and Diversion), Dibble (WASCOB), and Loen (4 grass waterways and 2 diversions). These projects have been certified and payment has been issued. Two projects, both for Richard Anderson, are designed and will be installed in the spring of 2016. The project will include 3 WASCOS and a grass waterway.</p> <p>After completion of the first 8 projects, there is a balance of about \$2,400 due to the projects costing less than was allocated. As approved by Dan Fabian on 12/22/2015, these funds will be used for Administration (\$500) and Technical/Engineering (\$1,901.56) in 2016.</p> <p>6/12/2016-Richard Anderson has cancelled his contracts. The funding has been re-allocated to a similar project for Debra Scott.</p> <p>1/17/2017-No construction has taken place on the Debra Scott. The remaining funding in this grant has been allocated for this project.</p> <p>3/31/2017-A work plan amendment for the FY16 St. Croix River Escarpment Taylors Falls Gully Stabilization grant (C16-4658) was approved to allocate some of the funds that were originally planned for the Interstate State Park gully stabilization project. Since that project has fallen through, a portion of the funding will be used to contribute to the cost share for the Debra Scott project.</p> <p>As of July 18, 2017 Debra Scott project is complete and certified.</p>		

Activity Action - Thibodeau WASCOB			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description			
Proposed Size / Units	275.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	275.00 LINEAR FEET	Installed Date	19-May-14
Mapped Activities	No		

Final Indicator for Thibodeau WASCOB			
Indicator Name	SEDIMENT (TSS)	Value	12
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		
Final Indicator for Thibodeau WASCOB			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	11
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Activity Action - Taylors Falls Elementary School			
Practice	412 - Grassed Waterway and Swales	Count of Activities	1
Description	Vegetated swale with rock check dams		
Proposed Size / Units	400.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	400.00 LINEAR FEET	Installed Date	26-Aug-14
Mapped Activities	No		

Final Indicator for Taylors Falls Elementary School			
Indicator Name	VOLUME REDUCED (ACRE-FEET/YEAR)	Value	6.5
Indicator Subcategory/Units	STORMWATER MANAGEMENT ACRE-FEET/YR	Calculation Tool	P8 Urban Catchment Model
Waterbody	St. Croix River		
Final Indicator for Taylors Falls Elementary School			
Indicator Name	SEDIMENT (TSS)	Value	1.35
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	P8 Urban Catchment Model
Waterbody	St. Croix River		
Final Indicator for Taylors Falls Elementary School			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	7.4

<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	P8 Urban Catchment Model
<b>Waterbody</b>	St. Croix River		

Activity Action - Mallery Grassed Waterway			
<b>Practice</b>	412 - Grassed Waterway and Swales	<b>Count of Activities</b>	1
<b>Description</b>			
<b>Proposed Size / Units</b>	665.00 LINEAR FEET	<b>Lifespan</b>	10 Years
<b>Actual Size/Units</b>	665.00 LINEAR FEET	<b>Installed Date</b>	8-Aug-14
<b>Mapped Activities</b>	No		

Final Indicator for Mallery Grassed Waterway			
<b>Indicator Name</b>	PHOSPHORUS (EST. REDUCTION)	<b>Value</b>	2.88
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		

Final Indicator for Mallery Grassed Waterway			
<b>Indicator Name</b>	SEDIMENT (TSS)	<b>Value</b>	2.88
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		

Activity Action - Wayne Johnson			
<b>Practice</b>	410 - Grade Stabilization Structure	<b>Count of Activities</b>	1
<b>Description</b>			
<b>Proposed Size / Units</b>	450.00 LINEAR FEET	<b>Lifespan</b>	10 Years
<b>Actual Size/Units</b>	450.00 LINEAR FEET	<b>Installed Date</b>	20-May-15
<b>Mapped Activities</b>	No		

Final Indicator for Wayne Johnson			
<b>Indicator Name</b>	PHOSPHORUS (EST. REDUCTION)	<b>Value</b>	28
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		

Final Indicator for Wayne Johnson			
<b>Indicator Name</b>	SEDIMENT (TSS)	<b>Value</b>	28
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		

Final Indicator for Wayne Johnson			
Indicator Name	SOIL (EST. SAVINGS)	Value	129
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Activity Action - Mallery WASCObS 1 & 2			
Practice	638 - Water and Sediment Control Basin	Count of Activities	2
Description			
Proposed Size / Units	407.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	407.00 LINEAR FEET	Installed Date	6-Oct-15
Mapped Activities	No		

Final Indicator for Mallery WASCObS 1 & 2			
Indicator Name	SEDIMENT (TSS)	Value	21
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Final Indicator for Mallery WASCObS 1 & 2			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	21
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Activity Action - Mallery WASCOb 3			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description			
Proposed Size / Units	151.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	161.00 LINEAR FEET	Installed Date	6-Oct-15
Mapped Activities	No		

Final Indicator for Mallery WASCOb 3			
Indicator Name	SEDIMENT (TSS)	Value	10
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Final Indicator for Mallery WASC0B 3			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	10
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Activity Action - Tom Dibble			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description	Water and sediment control basin to stabilize gully downstream from practice.		
Proposed Size / Units	230.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	230.00 LINEAR FEET	Installed Date	1-Oct-15
Mapped Activities	No		

Final Indicator for Tom Dibble			
Indicator Name	SEDIMENT (TSS)	Value	8
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Final Indicator for Tom Dibble			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	7
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Activity Action - Craig Loen			
Practice	412 - Grassed Waterway and Swales	Count of Activities	4
Description			
Proposed Size / Units	2,850.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	2,934.00 LINEAR FEET	Installed Date	6-Oct-15
Mapped Activities	No		

Final Indicator for Craig Loen			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	100
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Final Indicator for Craig Loen			
Indicator Name	SEDIMENT (TSS)	Value	20
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Activity Action - Craig Loen Diversions			
Practice	362 - Diversion	Count of Activities	3
Description			
Proposed Size / Units	100.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	108.00 LINEAR FEET	Installed Date	6-Oct-15
Mapped Activities	No		

Final Indicator for Craig Loen Diversions			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	6
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Final Indicator for Craig Loen Diversions			
Indicator Name	SEDIMENT (TSS)	Value	5
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Activity Action - Debra Scott			
Practice	638 - Water and Sediment Control Basin	Count of Activities	1
Description			
Proposed Size / Units	400.00 LINEAR FEET	Lifespan	10 Years
Actual Size/Units	467.00 LINEAR FEET	Installed Date	13-Jun-17
Mapped Activities	No		

Final Indicator for Debra Scott			
Indicator Name	SOIL (EST. SAVINGS)	Value	14
Indicator Subcategory/Units	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	Calculation Tool	BWSR CALC (GULLY STABILIZATION)
Waterbody	St. Croix River		

Final Indicator for Debra Scott			
Indicator Name	PHOSPHORUS (EST. REDUCTION)	Value	7

<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) LBS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		
<b>Final Indicator for Debra Scott</b>			
<b>Indicator Name</b>	SEDIMENT (TSS)	<b>Value</b>	7
<b>Indicator Subcategory/Units</b>	WATER POLLUTION (REDUCTION ESTIMATES) TONS/YR	<b>Calculation Tool</b>	BWSR CALC (GULLY STABILIZATION)
<b>Waterbody</b>	St. Croix River		

<b>Activity Action - Debra Scott Diversion</b>			
<b>Practice</b>	362 - Diversion	<b>Count of Activities</b>	1
<b>Description</b>	Indicators listed with WASCOB		
<b>Proposed Size / Units</b>	560.00 LINEAR FEET	<b>Lifespan</b>	10 Years
<b>Actual Size/Units</b>	598.00 LINEAR FEET	<b>Installed Date</b>	13-Jun-17
<b>Mapped Activities</b>	No		

**Grant Activity - Technical Assistance/Engineering**

<p><b>Description</b></p>	<p>On-site technical assistance and oversight by James Landini, PE, of Washington Conservation District, and Chisago SWCD staff (Mary Jo Youngbauer, Casey Thiel, Shane Hultman) as needed. Final engineering design and check out by James Landini.</p> <p>James Landini is a professional engineer (PE #44939) with experience in designing and overseeing construction of gully stabilization projects. James will be responsible for final design work, creating the spec book, overseeing construction, and conducting final construction approval.</p> <p>Mary Jo Youngbauer (SWCD Water Resource Technician) will be coordinating all partners on the projects (including the City of Taylors Falls and private landowners for the Spring Creek gully and the DNR for the Interstate State Park gully) with the contractor and engineer.</p> <p>Shane Hultman (SWCD Resource Conservationist) will assist James Landini with construction oversight. Shane is in the process of receiving Technical Approval Authority from NRCS and will use these projects to help learn from James.</p> <p>NRCS Standards included in Spring Creek Gully project: (342) Critical Area Planting, (468) Lined Waterway or Outlet, (484) Mulching, (500) Obstruction Removal. NRCS Standards included in the Interstate State Park Gully project: (342) Critical Area Planting, (468) Lined Waterway or Outlet, (484) Mulching, (500) Obstruction Removal, (638) Water and Sediment Control Basin.</p>		
<p><b>Category</b></p>	<p>TECHNICAL/ENGINEERING ASSISTANCE</p>		
<p><b>Start Date</b></p>	<p>3-Mar-16</p>	<p><b>End Date</b></p>	<p>08-Oct-18</p>
<p><b>Has Rates and Hours?</b></p>	<p>Yes</p>		
<p><b>Actual Results</b></p>	<p>As of January 18, 2017</p> <p>The Interstate State Park Gully restoration project was replaced with the Brue/Lapinski Stabilization project in a work plan amendment approved by Dan Fabian on 1/18/2017. The amendment was required because the DNR rejected the project that was designed for Interstate State Park after having agreed to it previously. An amount of \$10,000 was budgeted from the Technical Assistance/Engineering category to pay for an archaeological survey of the Interstate State Park gully site. This money will instead be used for survey, design, and construction oversight of the Brue/Lapinski Stabilization project. At this time, the engineer James Landini has been on the Brue/Lapinski site and has taken initial survey points. Full survey and design are expected in early 2017.</p> <p>As of January 4, 2018</p> <p>Survey and design are complete for the Brue wall. The wall will include stabilizing a slumping bluff with rock gabions, as well as some rock-lined channels from the road and driveway to the bottom of the slope to eliminate erosion. The design was</p>		



completed by James Landini, Washington CD.

As of October 8, 2018

Design certification was completed by Jacob Guznik of Bolton and Menk. Jacob was brought in because the original engineer on the project, James Landini, took a new job in Florida before the completion of the project. Jacob Guznik also serves as the City of Taylors Falls' city engineer so he was familiar with the project and the city.

## Grant Attachments

Document Name	Document Type	Description
<b>2016 Competitive Grant</b>	Grant Agreement	2016 Competitive Grant - Chisago SWCD
<b>2016 Competitive Grant executed</b>	Grant Agreement	2016 Competitive Grant - Chisago SWCD
<b>2017-08-22_BC_comments_workPlan_Revisions</b>	Journal	Journal Dated - 08/22/2017
<b>342 Critical Area Seeding</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>468 Lined Waterway or Outlet</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>484 Mulching</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>500 Obstruction Removal</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>638 Water and Sediment Control Basin</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 11/06/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 11/14/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 07/26/2016
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 05/18/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 05/14/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/04/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 10/09/2018
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 03/30/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 01/18/2017
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 08/19/2016
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 08/17/2016
<b>All Details Report</b>	Workflow Generated	Workflow Generated - All Details Report - 11/06/2018
<b>Application</b>	Workflow Generated	Workflow Generated - Application - 08/19/2015
<b>Application image</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization

Document Name	Document Type	Description
<b>Education Receipts</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Example Contracts</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Example O and M</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Expenses Etc.</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Final Financial Report</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Financial Report</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Interstate State Park Gully Concept Design/Estimate</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Lapinski Project</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Map - Interstate State Park Gully</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Map - Spring Creek Gully</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Payment Voucher/Practice Certification</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Press Release</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Spring Creek Gully Concept Design and Estimate</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Spring Creek Gully Spec Book</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 08/22/2017
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 07/27/2017
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 03/30/2017
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 01/18/2017
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 02/11/2016
<b>Work Plan</b>	Workflow Generated	Workflow Generated - Work Plan - 12/16/2015
<b>Work Plan Additional Information Needs</b>	Journal	Journal Dated - 02/11/2016
<b>Work Plan Revision Request</b>	Journal	Journal Dated - 01/18/2017
<b>approved Work Plan rev req 03-30-2017</b>	Journal	Journal Dated - 03/30/2017
<b>grantmap_13978_2015-07-29_08-09-57-AM.jpg</b>	Grant	2016 St. Croix River Escarpment Taylors Falls Gully Stabilization