



Grant All-Detail Report

Watershed Based Implementation Phase II 2020

Grant Title - 2020 - Lake of the Woods Watershed 1W1P

Grant ID - C20-9994

Organization - Lake of the Woods Watershed Joint Powers Board

Original Awarded Amount	\$621,173.00	Grant Execution Date	5/7/2020
Required Match Amount	\$62,117.30	Original Grant End Date	12/31/2022
Required Match %	10%	Grant Day To Day Contact	Corryn Trask
Current Awarded Amount	\$621,173.00	Current End Date	12/31/2022

Budget Summary

	Budgeted	Spent	Balance Remaining*
Total Grant Amount	\$621,173.00	\$86,504.65	\$534,668.35
Total Match Amount	\$90,000.00	\$0.00	\$90,000.00
Total Other Funds	\$0.00	\$0.00	\$0.00
Total	\$711,173.00	\$86,504.65	\$624,668.35

*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
Cost Share - Ag practices	Agricultural Practices	Current State Grant	2020 - Lake of the Woods Watershed 1W1P	\$20,000.00			N
Cost Share - Forest Stewardship Management Plans	Planning and Assessment	Current State Grant	2020 - Lake of the Woods Watershed 1W1P	\$20,000.00			N
Cost Share - Non-structural management practices	Non-Structural Management Practices	Current State Grant	2020 - Lake of the Woods Watershed 1W1P	\$25,000.00			N

Activity Name	Activity Category	Source Type	Source Description	Budgeted	Spent	Last Transaction Date	Matching Fund
Education Initiatives	Education/Information	Current State Grant	2020 - Lake of the Woods Watershed 1W1P	\$15,700.00	\$5,899.86	12/31/2020	N
Engineering and Technical Assistance	Technical/Engineering Assistance	Current State Grant	2020 - Lake of the Woods Watershed 1W1P	\$138,997.00	\$41,921.55	12/31/2020	N
Joint Powers Board - Administration	Administration/Coordination	Current State Grant	2020 - Lake of the Woods Watershed 1W1P	\$70,476.00	\$17,603.32	12/31/2020	N
Project Development	Project Development	Current State Grant	2020 - Lake of the Woods Watershed 1W1P	\$41,700.00	\$13,491.84	12/31/2020	N
Special projects - Keep it Clean	Special Projects	Current State Grant	2020 - Lake of the Woods Watershed 1W1P	\$7,500.00			N
Streambank and Shoreland Projects	Streambank or Shoreline Protection	Current State Grant	2020 - Lake of the Woods Watershed 1W1P	\$256,800.00			N
Streambank and Shoreland Projects	Streambank or Shoreline Protection	Federal Funds	FEMA	\$90,000.00			Y
Well location for MN Geologic Atlas	Inventory/Mapping	Current State Grant	2020 - Lake of the Woods Watershed 1W1P	\$25,000.00	\$7,588.08	12/31/2020	N

Activity Details Summary

Activity Details	Total Action Count	Total Activity Mapped	Proposed Size / Unit	Actual Size / Unit
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Proposed Activity Indicators

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
Streambank and Shoreland Projects	PHOSPHORUS (EST. REDUCTION)	13.6 LBS/YR	Lake of the Woods	BWSR CALC (STREAM & DITCH STABILIZATION)	Silt, 400 ft long x 4 ft high x 2 ft deep over 10 years
Streambank and Shoreland Projects	PHOSPHORUS (EST. REDUCTION)	9 LBS/YR	Warroad	Other	From 1W1P plan 4-45 and stated PTMApp value

Activity Name	Indicator Name	Value & Units	Waterbody	Calculation Tool	Comments
Cost Share - Non-structural management practices	PHOSPHORUS (EST. REDUCTION)	21.6 LBS/YR	Zippel	Other	PTMApp. 2 year event on sample 51 acre field, used multiplier of 4
Cost Share - Ag practices	PHOSPHORUS (EST. REDUCTION)	17 LBS/YR	Zpl, Warroad, Bostic, Muskeg	BWSR CALC (GULLY STABILIZATION)	5 gullies, silt soil, 1 year, .5 feet deep x 80 feet long x 2 feet wide
Cost Share - Non-structural management practices	NITROGEN	43.39 LBS/YR	Zippel	Other	PTMApp. 2 year event on sample 51 acre field, used multiplier of 4
Streambank and Shoreland Projects	SOIL (EST. SAVINGS)	13.6 TONS/YR	Lake of the Woods	BWSR CALC (STREAM & DITCH STABILIZATION)	Silt, 400 ft long x 4 ft high x 2 ft deep over 10 years
Cost Share - Ag practices	SOIL (EST. SAVINGS)	17 TONS/YR	Zpl, Warroad, Bostic, Muskeg	BWSR CALC (GULLY STABILIZATION)	5 gullies, silt soil, 1 year, .5 feet deep x 80 feet long x 2 feet wide
Streambank and Shoreland Projects	SEDIMENT (TSS)	13.6 TONS/YR	Lake of the Woods	BWSR CALC (STREAM & DITCH STABILIZATION)	Silt, 400 ft long x 4 ft high x 2 ft deep over 10 years
Streambank and Shoreland Projects	SEDIMENT (TSS)	15 TONS/YR	Warroad	BWSR CALC (STREAM & DITCH STABILIZATION)	From 1W1P plan 4-45 and stated PTMApp value
Cost Share - Non-structural management practices	SEDIMENT (TSS)	48.48 TONS/YR	Zippel	Other	PTMApp. 2 year event on sample 51 acre field, used multiplier of 4
Cost Share - Ag practices	SEDIMENT (TSS)	17 TONS/YR	Zpl, Warroad, Bostic, Muskeg	BWSR CALC (GULLY STABILIZATION)	5 gullies, silt soil, 1 year, .5 feet deep x 80 feet long x 2 feet wide

Final Indicators Summary

Indicator Name	Total Value	Unit
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Grant Activity

Grant Activity - Cost Share - Ag practices

Description	Funding will be utilized for an Ag Best Management Practices cost share program for the Muskeg, Bostic, Zippel and Warroad watersheds targeting structural ag practices. Utilize the PTMApp to identify and target locations for practices and perform site investigations and landowner outreach. A total of 5 sidewater inlets or other grade stabilization structures will be installed utilizing available funding. Other structural practices may be allowed if they meet the NRCS eFOTG or other acceptable standards and will reduce sediment, soil and phosphorus contributions. Roseau and Lake of the Woods County Highway Departments may also request funding for projects that will provide multi-purpose drainage water management. A cost share policy will be developed and approved by the BWSR BC prior to implementation.		
Category	AGRICULTURAL PRACTICES		
Start Date		End Date	
Has Rates and Hours?	No		
Actual Results	12/31/20 - no cost share has been disbursed for Ag Practices. Program is under development.		

Grant Activity - Cost Share - Forest Stewardship Management Plans

Description	Cost share program for private forest management plans within riparian areas in the Bostic, Warroad, Muskeg and Zippel watersheds. The cost share program will supplement EQIP program funding for forest management plans, or will provide standalone funding if EQIP funding is unavailable. Targeted areas will include privately owned forests >20 acres in size currently not enrolled in the Sustainable Forests Incentive Act. The goal will be to provide forest management plans that include actions to protect water quality or sensitive habitat areas, along with providing further guidance on how to enroll in the SFIA easement program. Twenty forest stewardship plans, at 80 acres per plan, or 1600 acres total is the target goal. SWCD staff will work with the Area GIS specialist and BWSR Board Conservationist to develop a targeting strategy for projects based on RAQ scoring or other acceptable targeting tools. This targeting strategy will be approved by the JPB prior to implementing the program.		
Category	PLANNING AND ASSESSMENT		
Start Date		End Date	
Has Rates and Hours?	No		
Actual Results	12/31/20 - no cost share has been disbursed for Forest Management Plans. The program is under development.		

Grant Activity - Cost Share - Non-structural management practices

Description	Funding will be utilized for an Ag Best Management Practices cost share program for the Muskeg, Bostic, Zippel and Warroad watersheds for non-structural management practices on priority parcels targeted by the PTMApp. Non-structural management practices will include cover crops, no-till, residue management, nutrient management, reduced till, or other acceptable non-structural management practices that will provide source reduction. Non-structural management practices will be targeted on 200 acres in years 2020 and 2021. A non-structural cost share policy will be developed and approved by the BWSR BC prior to implementation.		
Category	NON-STRUCTURAL MANAGEMENT PRACTICES		
Start Date		End Date	
Has Rates and Hours?	No		
Actual Results	12/31/20 - no cost share has been disbursed for non-structural management practices. The program is under development.		

Grant Activity - Education Initiatives

<p>Description</p>	<p>Implement education initiatives that will accomplish goals outlined in the Lake of the Woods One Watershed One Plan. Education efforts will specifically support projects and practices identified in the 2020-21 implementation funding.</p> <p>Activities include:</p> <p>*Roseau well protection - coordinate efforts for an annual well testing clinic for Warroad and Muskeg planning regions. Target of 50 wells tested per year for year one and year two. A drop off location will be arranged in the planning region and promotions will include newspaper articles and flyers at local businesses. Funding will cover approximately 32 hours of SWCD staff time per year.</p> <p>*Roseau Stormwater Practices - provide education efforts as part of the city of Warroad stormwater retrofit plan to encourage adoption of practices such as rain gardens and stormwater practices to target phosphorus and sediment reductions. Education will include promotion of practices to reduce phosphorus to the lake, and encourage adoption of stormwater practices. Information will be disseminated through social media, posters, newspaper articles and other promotional items or events.</p> <p>*Lake of the Woods Keep it Clean Program - Keep it Clean is a movement to support sustainable use of Lake of the Woods, especially during the ice fishing season, and encourages recreationists to clean up their trash and use the lake responsibly. This funding will cover costs for 10 banners and other promotional materials for the Keep it Clean Program which will be distributed throughout the LOW Watershed to over 20 businesses. Staff time will be spent on organizing an annual shoreline cleanup covering over 10 miles, 6 or more committee meetings per year, monthly newspaper articles, ads or Facebook posts and acquisition and distribution of promotional materials.</p>		
<p>Category</p>	<p>EDUCATION/INFORMATION</p>		
<p>Start Date</p>		<p>End Date</p>	
<p>Has Rates and Hours?</p>	<p>Yes</p>		
<p>Actual Results</p>	<p>12/31/21 -</p> <p>*Well Testing Clinic held October 1st (testing was not paid for with Clean Water Funding). 54 analysis (90% return) completed for nitrate, Total Coliform Bacteria, and E.coli. 3 samples tested positive for nitrate, but were below 10 ppm (highest was 5.71 ppm). 6 samples tested positive for TCB, but not E. coli. Drinking water brochures were provided to each well owner.</p> <p>*Four Keep It Clean Meetings held in 2020 (April 28, July 28, September 29, November 24).</p>		

Grant Activity - Engineering and Technical Assistance

<p>Description</p>	<p>Utilize services of TSA Engineers, private consultants or local staff with the necessary JAA to complete field investigations, surveys, design and construction inspection for projects conducted through watershed based implementation funding.</p> <p>Activities include:</p> <p>*Lake of the Woods Shoreline Protection Projects - Survey and design for a total of 400 linear feet. Design services will be provided through a private licensed engineering consultant experienced with designing riprap projects on Lake of the Woods.</p> <p>*Warroad River Watershed Shoreline Protection Projects - Survey and design of 3 shoreline protection projects on the Warroad River, for a total of 455 linear feet. Design services will be provided through a private licensed engineering consultant currently retained by the Warroad River Watershed District.</p> <p>*Funding to contract with engineering consultants to perform survey and design for project sites identified through the City of Warroad Stormwater Retrofit Analysis or the Warroad River Project Alternatives Investigation. These studies will identify locations in 2020 for future practices, but it will be necessary to complete site-specific plans for implementation. The goal will be to complete the survey and design in 2021, and be prepared for installation of practices in 2022. Funding for these projects will be determined by the Joint Powers Board, in consultation with the BWSR BC, based on project readiness and landowner cooperation.</p>	
<p>Category</p>	<p>TECHNICAL/ENGINEERING ASSISTANCE</p>	
<p>Start Date</p>		<p>End Date</p>
<p>Has Rates and Hours?</p>	<p>No</p>	
<p>Actual Results</p>	<p>12/31/20</p> <p>*LOW SWCD is currently evaluating parcels for eligibility.</p> <p>*Warroad River Watershed District has contracted with Houston Engineering to provide survey and design services for 3 sites identified on the Warroad River. Design is underway. Construction expected in 2021. Three additional sites are being investigated.</p>	

Grant Activity - Joint Powers Board - Administration

<p>Description</p>	<p>Perform actions essential for the coordination and implementation of the One Watershed One Plan. A Joint Powers Board has been formed to govern and oversee the implementation of the funds. Lake of the Woods SWCD will provide fiscal coordination, and Roseau and Lake of the Woods SWCDs will serve as co-coordinators.</p> <p>Duties of the Co-coordinator positions: Coordinate and participate in monthly project team meetings and quarterly board meetings for the purpose of administering the plan. Ensure that meetings of the JPE follow Open Meeting Law requirements. Document meetings and create board agendas. Oversee and advise on policy development. Review all requests for payment to ensure they meet BWSR and CWF funding policies. Provide quarterly financial reports and progress towards measurable goals to JPE and BWSR. Complete BWSR reporting requirements for the implementation of the funds. Maintain communication and build relationships with agency partners to further implement and document accomplishment towards goals of the plan. Track and measure progress towards goals and milestones. Total estimated staff time is 360 hours per year.</p> <p>Duties for fiscal coordination will include: set up accounting system in Quickbooks to track funds, develop a separate financial accounting system to track individual grants and activity balances, review and process all requests for payment on a monthly basis, provide quarterly financial reports to the JPE board, oversee expenditures of grants according to BWSR policy, document match requirements, submit payroll reports and manage insurance and audit requirements. Total estimated hours is 140 per year.</p> <p>JPE Base Costs: This funding will also cover base costs for the Joint Powers Entity, including but not limited to: annual MCIT insurance, member per diems and mileage, independent audit, meeting space, website, checks and office supplies, payroll expenses. Approximately \$10,000 per year is needed to cover these costs.</p>		
<p>Category</p>	<p>ADMINISTRATION/COORDINATION</p>		
<p>Start Date</p>		<p>End Date</p>	
<p>Has Rates and Hours?</p>	<p>Yes</p>		
<p>Actual Results</p>	<p>12/31/20</p> <ul style="list-style-type: none"> *Bylaws adopted *Quickbooks set up for finance tracking. Further development is needed for grant tracking. Participated in BWSR workshop on reporting requirements. *annual independent audit requirements will be met during LOW SWCD annual audit. *Implementation committee addressing policy and procedures for implementation programs during committee meetings. 		

*11 sub-agreements in place

*Milestone reporting to JPB in progress

*eLink mid-term reporting complete for BWSR

*quarterly JPB meetings scheduled (January, March, June, September). Additional meetings held in 2020 to establish JPB (April 22, May 11 and June 15). COVID-19 delayed the start of the JPB scheuled meeting by one month.

*monthly implementation committee meetings (April 9, 22, May 20, June 10, July 8, August 11, September 9, October 14 and December 9).

Grant Activity - Project Development

Description	<p>Efforts will include measurable steps towards accomplishing goals and activities outlined in the Plan. Actions include furthering knowledge of groundwater resources, identifying water storage opportunities to reduce downstream erosion and flooding, and implementation of BMPs to conserve soil and protect water quality.</p> <p>*Stormwater Retrofit Analysis - utilize a private consultant to complete a stormwater retrofit analysis for the City of Warroad, including inventory and inspection of existing infrastructure. The project will include: desktop and field assessment, alternatives analysis, and final report. The final report will be in a format that can be used for implementation of best management practices.</p> <p>*Agriculture Best Management Practices Cost Share Program - Conduct a series of 6 meetings to explore cost share programs to encourage Agricultural Best Management Practices such as reduced tillage, residue management, nutrient management, cover crops, and structural practices. The goal of the sessions will be to promote NRCS practices and also identify roadblocks to local adoption. A locally-led cost share program will be developed as a result of these meetings. Funding will be utilized to hire local speakers or technical expertise to help support the adoption of new practices.</p> <p>*Warroad River Water Storage - Identify alternatives in the east and west branches of the Warroad River and County Ditch 10. The focus will be on water retention, with the purpose of reducing downstream erosive peak flows and sediment transport. Project development will include meetings with MNDNR, local governments, Warroad Watershed District and others deemed necessary. A private consultant will coordinate these efforts on behalf of the Warroad Watershed District who currently has no staff.</p> <p>*Local Capacity funding will be utilized for SWCD staff time to develop and implement the AgBMP Cost Share Program and the Forest Stewardship Management Plan Cost Share Program.</p>	
Category	PROJECT DEVELOPMENT	
Start Date		End Date
Has Rates and Hours?	No	
Actual Results	<p>12/31/20</p> <p>*LOW and Roseau SWCDs met with two local experts and NRCS to discuss development of a local cost share program. COVID 19 has caused setbacks for development of program policy or outreach events.</p> <p>*SWCDs are developing a policy for a cover crop program and will work to roll out the program in 2021.</p>	

*City of Warroad has contracted with WSN Engineering to conduct a stormwater retrofit analysis for the City of Warroad. WSN is completing the report. The modeling needed extra work, but it is within the budget. Results/recommendations are imminent. The blue-green algae brochure done in conjunction with this project has been completed and will be available at lake public accesses in 2021.

*Project work team has been assembled for the Warroad River Water Storage Analysis. Houston Engineering is providing the consulting services. Pre-work and project planning is underway, and a kickoff meeting has been held. Additional input by state/regional agencies has been solicited. Stacked hydrographs and a map of contributing areas have been completed. Project is ongoing.

Grant Activity - Special projects - Keep it Clean

Description	Lake of the Woods Keep it Clean program - SWCD staff will conduct a shoreline cleanup on over 10 miles on Lake of the Woods southern shore, from Wheelers Point to Rocky Point and along Muskeg Bay. A Conservation Corps of Minnesota crew will perform the cleanup, with oversight from SWCD staff.		
Category	SPECIAL PROJECTS		
Start Date		End Date	
Has Rates and Hours?	Yes		
Actual Results	12/31/20 - no action taken. This activity is scheduled for spring 2021.		

Grant Activity - Streambank and Shoreland Projects

<p>Description</p>	<p>Complete shoreline stabilization practices in the Lake of the Woods watershed to prevent erosion and sedimentation, protect infrastructure and repair areas damaged from high water events.</p> <p>Activities include:</p> <p>*Lake of the Woods Shoreline Protection Projects - Implementation of 400 feet of shoreline protection projects on Lake of the Woods utilizing a DNR-authorized riprap design. The LOW SWCD will utilize state cost share program policy to implement the practices. Survey will be completed by the NC MN TSA 8 staff, and design will be completed by WSN Engineering who has experience in designing projects for Lake of the Woods.</p> <p>*Warroad River Watershed Streambank Protection Projects - Implementation of 3 streambank protection projects on the Warroad River, for a total of 455 linear feet of protection. WRWD will oversee the projects and will work with private landowners and a private consultant to survey, design and implement. Progress toward goal = 20 T/year sediment reduction = 1% STG for sediment; 90 lbs/yr TP reduction = 5% STG for TP. 8% of Stream Restoration Goal.</p> <p>*Roseau County Ditch 10 Slope Stabilization - Implementation of slope stabilization on 17 identified areas of Ditch 10 in the Warroad River Watershed for a total of 1452 linear feet. Engineering and design will be overseen by the Roseau County Engineer. Progress towards goal = 48.13 T/yr sediment reduction = 5.54% STG; 40.91 lbs/yr P reduction = 3.74% STG; 27.5% of aquatic habitat goal; and 0.69% of stream shoreline goal) .</p>
<p>Category</p>	<p>STREAMBANK OR SHORELINE PROTECTION</p>
<p>Start Date</p>	<p>End Date</p>
<p>Has Rates and Hours?</p>	<p>No</p>
<p>Actual Results</p>	<p>12/31/21 - no streambank or shoreline projects have been cost-shared. This activity is in the development stages.</p>

Grant Activity - Well location for MN Geologic Atlas

Description	As part of an effort to gather information which will aid in groundwater protection, Roseau SWCD staff will assist the MN US Geological Survey and MN DNR with verification of 635 wells in the Roseau County portion of the Lake of the Woods planning area. These efforts will help fill data gaps related to the groundwater in the region by completing the first step towards the development of a groundwater atlas. Staff time will include training, gathering information and historical data to assist with the inventory, office and field verification, landowner interviews, and monthly meetings with USGS staff. Estimated time per well for in-office verification is .5 - 1 hours depending on data available, with a goal of 300 wells per year. Field visits will be required when locations cannot be verified from aerial photography. Field work will begin in 2021.		
Category	INVENTORY/MAPPING		
Start Date		End Date	
Has Rates and Hours?	Yes		
Actual Results	12/31/2020 - ArcGIS mapping and attributing have been completed for 240 wells. Potential field verification for 100 wells. (400 wells are remaining.) Roseau County has not signed a contract with MGS.		

Grant Attachments

Document Name	Document Type	Description
2020 Watershed Based Implementation Funding	Grant Agreement	2020 Watershed Based Implementation Funding - Lake of the Woods Watershed Joint Powers Board
2020 Watershed Based Implementation Funding EXECUTED	Grant Agreement	2020 Watershed Based Implementation Funding - Lake of the Woods Watershed Joint Powers Board
All Details Report	Workflow Generated	Workflow Generated - All Details Report - 08/17/2020
Application	Workflow Generated	Workflow Generated - Application - 03/27/2020
Milestones	Grant	2020 - Lake of the Woods Watershed 1W1P
Work Plan	Workflow Generated	Workflow Generated - Work Plan - 04/06/2020