Grant Progress Report

Projects and Practices 2022

Grant Title: Granite Lake External Load Reduction as Modelled by PTMApp 3.0

Grant ID: C22-3480

Grantee: Wright SWCD

Fiscal Agent: Wright SWCD

Grant Day-to-Day Contact: Luke Johnson

Grant Award ($): $175,000.00

Required Match (%): 25

Required Match ($): $43,750.00

Grant Execution Date: 05/13/2022

Grant End Date: 12/31/2026

	Total Budgeted	**Total Spent**	Balance Remaining*
Grant Funds	$175,000.00	**$67,136.90**	$107,863.10
Match Funds	$44,000.00	**$7,068.80**	$36,931.20
Other Funds	$0.00	**$0.00**	$0.00
Total	$219,000.00	**$74,205.70**	$144,794.30

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

Project Abstract	The purpose of this grant application is to implement effective practices identified in the Granite Lake watershed using PTMApp. The project area is based on the drainage area to Granite Lake. The watershed is in northwest Wright County and is encompassed by Albion Township. The goal of this application is to improve the quality of water entering Granite Lake by reducing total suspended solids and total phosphorous through construction of best management practices. This watershed has been the target of several modelling efforts. An assessment, conducted in 2017, used PTMApp version 2.0.27, in 2021 new data became available as part of the North Fork Crow Watershed rerun with version 3.0.0271. The models were combined with SWCD staff review of locations to determine the feasibility of the practices PTMApp generated. Based on PTMApp output data and staff assessments, 10 water and sediment control basins were chosen to further investigate and prioritize for possible installation, 1 wetland restoration is being targeted in the watershed but the magnitude of the project requires collaboration of multiple landowners and funding sources. Additionally, staff set a goal of 100 acres of source reduction

	practices (cover crops, no till, prescribed grazing, etc.). Using this grant we intend to continue working with agricultural producer and landowners to implement practices generated by PTMApp. It is estimated that if the 10 water and sediment control basins are built and 100 acres of source reduction are implemented it would reduce the amount of sediment for Granite lake by 192 tons/year from structural practices and 108 tons/year from source reduction and the amount total phosphorus by 33 lbs TP/year from structural practices and 18 lbs TP/year from source reduction.
Proposed Measurable Outcomes	This grant will implement projects and practices prioritized and targeted using PTMApp. We estimate that these practices will reduce the external sediment load by 300 tons/year and the external total phosphorus load by 51 lbs/year.

Budget Details

Activity Name	*Category*	*Source Type*	*Source Description*	*Budgeted*	*Spent*	*Balance Remaining*	*Match Fund?*
Wright SWCD Admin/Coordination	Administration/Coordination	Current State Grant	Granite Lake External Load Reduction as Modelled by PTMApp 3..	$3,000.00	$3,712.00	($712.00)	N
Structural Practices	Agricultural Practices	Current State Grant	Granite Lake External Load Reduction as Modelled by PTMApp 3..	$120,000.00	$21,206.40	$98,793.60	N
Source Reduction	Non-Structural Management Practices	Current State Grant	Granite Lake External Load Reduction as Modelled by PTMApp 3..	$20,000.00	$7,815.00	$12,185.00	N
Wright SWCD Project Development	Project Development	Current State Grant	Granite Lake External Load Reduction as Modelled by PTMApp 3..	$9,000.00	$8,818.00	$182.00	N
Wright SWCD Technical Assistance/Engineering	Technical/Engineering Assistance	Current State Grant	Granite Lake External Load Reduction as Modelled by PTMApp 3..	$23,000.00	$25,585.50	($2,585.50)	N
Agricultural Practices	Agricultural Practices	Federal Funds	Federal Financial Assistance	$26,500.00	$7,068.80	$19,431.20	Y
Agricultural Practices	Agricultural Practices	Landowner Fund	Landowner Contribution	$17,500.00		$17,500.00	Y

Indicator Summary

Indicator Category	*Proposed Indicator*	*Total Value*	*Unit*
Water Pollution (Reduction Estimates)	Sediment (Tss)	300	Tons/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	51	Lbs/Yr

Indicator Category	*Final Indicator*	*Total Value*	*Unit*
Water Pollution (Reduction Estimates)	Nutrients (Nitrate)	11.82	Lbs/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	0.84	Lbs/Yr
Water Pollution (Reduction Estimates)	Sediment (Tss)	5.65	Tons/Yr
Water Pollution (Reduction Estimates)	Nitrogen	793.86	Lbs/Yr
Water Pollution (Reduction Estimates)	Phosphorus (Est. Reduction)	39.26	Lbs/Yr
Water Pollution (Reduction Estimates)	Sediment (Tss)	240.68	Tons/Yr

Grant Activities

Activity Name: Agricultural Practices

Activity Category: Agricultural Practices | **Staff time?:** No

Description: Up to eleven sites will be addressed utilizing practices such as water/sediment control, wetland restoration and/or filter strips. Native grasses and flowers will be planted on the earthen berms, subsurface drains will be installed to reduce peak flow output and rock stilling basins may be placed at the outlets. Additionally, a goal of 100 acres of source reduction practices (including but not limited to cover crops, no till, prescribed grazing, etc.).

Budget Details

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Landowner Fund	Landowner Contribution	$17,500.00		$17,500.00		Y
Federal Funds	Federal Financial Assistance	$26,500.00	$7,068.80	$19,431.20	12/18/2023	Y

Actual Results

Results	*Date Added*
	5/3/2022 9:45:31 AM

Activity Name: Source Reduction

Activity Category: Non-Structural Management Practices | **Staff time?:** No

Description: Up to 100 acres of source reduction practices including but not limited to: cover crops, no till, prescribed grazing, etc.

Budget Details

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Current State Grant	Granite Lake External Load Reduction as Modelled by PTMApp 3..	$20,000.00	$7,815.00	$12,185.00	12/09/2024	N

Actual Results	
Results	***Date Added***
	5/3/2022 9:34:26 AM
2023 - 87 acres of single species cover crops were planted	1/31/2024 11:24:24 AM
2024 - 87 acres of cover crops were planted after corn and soybean harvest	1/16/2025 1:41:00 PM
2025 - no money spent	1/29/2026 12:37:11 PM

Final Indicators		
Indicator	**Total Value**	**Unit**
Nitrogen	793.86	Lbs/Yr
Phosphorus (Est. Reduction)	39.26	Lbs/Yr
Sediment (Tss)	240.68	Tons/Yr

Activity Action Name:	Hill Top Acres	Activity Count: 7
Practice Type:	340 - Cover Crop	Size/Units: 87 - Acres
TA Provider/JAA:	SWCD	Lifespan: 1 Year
Practice Description:	Cover Crop after corn and soybeans	Install Date: 10/26/2024
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Nitrogen	Lbs/Yr	396.93	PTMApp - Catchment	Granite Lake
Phosphorus (Est. Reduction)	Lbs/Yr	19.63	PTMApp - Catchment	Granite Lake
Sediment (Tss)	Tons/Yr	120.34	PTMApp - Catchment	Granite Lake

Activity Action Name:	Hill Top Acres - Cover Crops	Activity Count: 7
Practice Type:	340 - Cover Crop	Size/Units: 87 - Acres
TA Provider/JAA:	SWCD	Lifespan: 1 Year
Practice Description:	Winter rye and oats cover crops into and after corn and soybeans	Install Date: 10/17/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Nitrogen	Lbs/Yr	396.93	PTMApp - Catchment	Granite Lake
Sediment (Tss)	Tons/Yr	120.34	PTMApp - Catchment	Granite Lake
Phosphorus (Est. Reduction)	Lbs/Yr	19.63	PTMApp - Catchment	Granite Lake

Activity Name: Structural Practices

Activity Category: Agricultural Practices **Staff time?:** No

Description: Up to eleven sites will be addressed utilizing practices such as water/sediment control, wetland restoration and/or filter strips. Native grasses and flowers will be planted on the earthen berms, subsurface drains will be installed to reduce peak flow output and rock stilling basins may be placed at the outlets.

Budget Details

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Current State Grant	Granite Lake External Load Reduction as Modelled by PTMApp 3..	$120,000.00	$21,206.40	$98,793.60	12/18/2023	N

Actual Results	
Results	***Date Added***
	5/2/2022 1:47:38 PM
2024 - Installed two water and sediment control basins	1/25/2024 4:18:25 PM
2025 - no money spent	1/29/2026 12:39:10 PM

Final Indicators		
Indicator	**Total Value**	**Unit**
Sediment (Tss)	5.65	Tons/Yr
Phosphorus (Est. Reduction)	0.84	Lbs/Yr
Nutrients (Nitrate)	11.82	Lbs/Yr

Activity Action Name:	Schwebel WaSCOBs	Activity Count: 2
Practice Type:	638 - Water and Sediment Control Basin	Size/Units:
TA Provider/JAA:	SWCD	Lifespan: 10 Years
Practice Description:		Install Date: 12/11/2023
		Mapped: Yes

Indicator Name	Units	Value	Calculation Tool	Waterbody
Nutrients (Nitrate)	Lbs/Yr	11.82	PTMApp - Catchment	Granite Lake
Sediment (Tss)	Tons/Yr	5.65	PTMApp - Catchment	Granite Lake
Phosphorus (Est. Reduction)	Lbs/Yr	0.84	PTMApp - Catchment	Granite Lake

Activity Name: Wright SWCD Admin/Coordination

Activity Category: Administration/Coordination | **Staff time?:** Yes

Description: Wright SWDCD will 1. Review and approve the grant agreement. 2. Submit reports to BWSR as prescribed. 3. Track hours put toward grant initiatives in Excel speadsheet. 4. Prepare contract forms and gather signatures. 5. Make any modification to the grant in eLINK as needed.

Budget Details

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Current State Grant	Granite Lake External Load Reduction as Modelled by PTMApp 3..	$3,000.00	$3,712.00	($712.00)	12/31/2025	N

Actual Results

Results	*Date Added*
	5/2/2022 1:47:52 PM
2023 - money spent went towards staff working through our first project contract, voucher, and E-Linking.	2/5/2024 2:14:57 PM
2025 - Project was engineered and bid out, however landowner passed away, SWCD had to work with POA to cancel contract.	1/29/2026 12:46:45 PM
2024 - staff time towards contracts, vouchers, and payment for two producers	1/29/2025 12:00:00 AM

Activity Name: Wright SWCD Project Development

Activity Category: Project Development | **Staff time?:** Yes

Description: Wright SWCD will: 1. Contact prospective landowners to make them aware of grant funds and determine their interest in participating in the program. 2. Conduct preliminary site assessments to verify which conservation practices would be feasible and to verify the preliminary cost estimate. 4. Work with partnering agencies to acquire other cost share funds

Budget Details

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Current State Grant	Granite Lake External Load Reduction as Modelled by PTMApp 3..	$9,000.00	$8,818.00	$182.00	12/31/2024	N

Actual Results

Results	*Date Added*
	5/2/2022 1:48:13 PM
2023 - attended the lake association meeting to discuss progress made on landowner buy in and project locations. Also site visits with landowners/renters to discuss interest in project and then review of final plan before contract is signed.	2/5/2024 2:17:34 PM
2024 - working with three landowners/renters for potential projects	1/30/2025 12:00:00 AM
2025 - no money spent	1/29/2026 12:47:49 PM

Activity Name: Wright SWCD Technical Assistance/Engineering

Activity Category: Technical/Engineering Assistance	**Staff time?:** Yes

Description: Wright SWCD will 1. Take part in the survey of the project sites for the participating landowners. 2. Assist in the engineered project design and drawing. 3. Be on-site for the practice implementation to verify proper installation. 4. Provide any necessary construction documentation and as-built information. There will be five projects constructed under this initiative: These projects will consist of capturing water that is running off adjacent fields by storing up to a ten year storm event behind a constructed berm, the out-letting that water via underground tile at a reduced rate in a stable location. These structures will be placed at the leading edge of active gullies and will stop the advancement of the gullies by controlling the water entering the system, as well as helping to heal the gully below the structure. The structures will be seeded with native grasses and flowers to help ensure their long-term stability. NRCS Practice Standards Incorporated: 657-Wetland Restoration, 393 - Filter strip, 620-Underground Outlet, 606 - Subsurface Drain, 638 - Water and Sediment Control Basin, The staff working on the project include: Michael Candler, SWCD Natural Resource Engineer, Dan Nadeau, SWCD Resource Conservationist, Luke Johnson, SWCD District Manager, Alicia O'Hare, SWCD Water Resource Specialist, Craig Peterson, NRCS Area Engineer, Katie Evans, NRCS Soil Conservation Technician

Budget Details

Source Type	Source Description	Budgeted	Spent	Balance Remaining	Last Transaction Date	Match Fund?
Current State Grant	Granite Lake External Load Reduction as Modelled by PTMApp 3..	$23,000.00	$25,585.50	($2,585.50)	12/31/2025	N

Actual Results

Results	*Date Added*
	5/2/2022 1:56:47 PM
2023 - surveyed, designed, watched construction on two water and sediment control basins. In addition, two other sites were surveyed for 2024 design and hopeful fall construction.	2/5/2024 2:42:30 PM
2024 - working on a design for a large project on the SW side of Granite Lake	1/29/2025 12:00:00 AM
2025 - working on designing two projects to build in 2026	1/29/2026 12:50:05 PM