

PROJECT SUMMARY SHEET

Project Title: Upper Reaches of the Turtle River-North and South Branch Watersheds Project

Lead Project Sponsor:

Grand Forks County Soil Conservation District
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State: North Dakota **Watershed:** Turtle River

Hydrologic Unit Code: 09020307

High Priority Watershed: Yes

Project Type

Watershed

Waterbody Types

Lakes/Reservoirs
Rivers
Streams
Wetlands

NPS Category

Agriculture

Project Location: Latitude: 47.9° N

Longitude: 97.5° W

Summarization of Major Goals:

The primary goal of this project is to restore the North and South Branches of the Turtle River to fully supporting recreational activities. The secondary goal is to provide education and information to residents of Grand Forks County through outreach and demonstration.

Project Description:

The North and South Branches of the Turtle River are located in the upper portion of the watershed. This project will implement systematic BMP's that will help reduce non-point source pollution and to restore these two reaches to fully supporting status of recreational activities. Education will be a large component of the project through workshops, tours, and demonstrations. These efforts will hope to eliminate the E. coli impairments currently in existence.

Funding:

319 funds requested: \$250,000.00

Match: \$228,892.00

Other Federal Funding: \$12,500.00

319 Funded Full Time Personnel: 1

Total Project Cost: \$491,392.00

2.0 Statement of Need

Fecal Coliform Bacteria

Effective January 2011, the Department revised the state water quality standards (NDDoH, 2011). In these latest revisions the Department eliminated the fecal coliform bacteria standard, retaining only the E. coli bacteria standard for the protection of recreational uses. Table 1 provides a summary of the current numeric E. coli bacteria criteria that applies to all streams as well as the former fecal coliform bacteria standard. The E. coli bacteria standard applies only during the recreation season from May 1 to September 30.

Table 1. North Dakota Fecal Coliform and E. coli Bacteria Numeric Standards for all Streams.

Parameter	Standard	
	Geometric Mean ¹	Maximum ²
E. coli Bacteria	126 CFU/100 mL	409 CFU/100 mL
Fecal Coliform Bacteria ³	200 CFU/100 mL ³	400 CFU/100 mL ³

¹Expressed as a geometric mean of representative samples collected during any consecutive 30-day period.

²No more than 10 percent of samples collected during any consecutive 30-day period shall individually exceed the standard.

³Previous State water quality standard.

While the state of North Dakota is now using an E. coli bacteria standard, it should be noted, very little E. coli data is available for north and south branch Turtle River, therefore fecal coliform bacteria data was used to calculate a geometric mean, percent exceeded and recreational use assessment for this data summary. However, to evaluate project progress, the department will assess attainment of the E. coli standard through additional monitoring consistent with the state's water quality standards and beneficial use assessment methodology.

The Turtle River Project Phase 3 will focus on two reaches of the Turtle River based on the North Dakota 2012 Integrated Section 303(d) List of Waters Needing Total Maximum Daily Loads (303(d) List). The North Dakota Department of Health identified 33.68 miles on the north and south branches of the Turtle River as impaired for fecal coliform bacteria. The following describes the details of these listings (Figure 1).

- 18.42 mile segment (ND-09020307-024-S_00) of the South Branch Turtle River downstream to Larimore Dam as
 - fully supporting but threatened for fish and other aquatic biota due to combination of benthic/fish bioassessments, cadmium, and selenium,

- fully supporting but threatened for recreational uses due to fecal coliform bacteria,
- and a 15.26 mile segment (ND-09020307-031-S_00) of the North Branch Turtle River from its confluence with Whiskey Creek, downstream to its confluence with South Branch Turtle River as
 - fully supporting but threatened for fish and other aquatic biota due to selenium and cadmium,
 - fully supporting but threatened for recreational uses due to fecal coliform bacteria.

Although, the 303(d) List identifies a fish and other aquatic biota use impairment due to selenium and cadmium the focus of the Turtle River Watershed Project Phase 3 will only address the bacterial recreational use impairment.

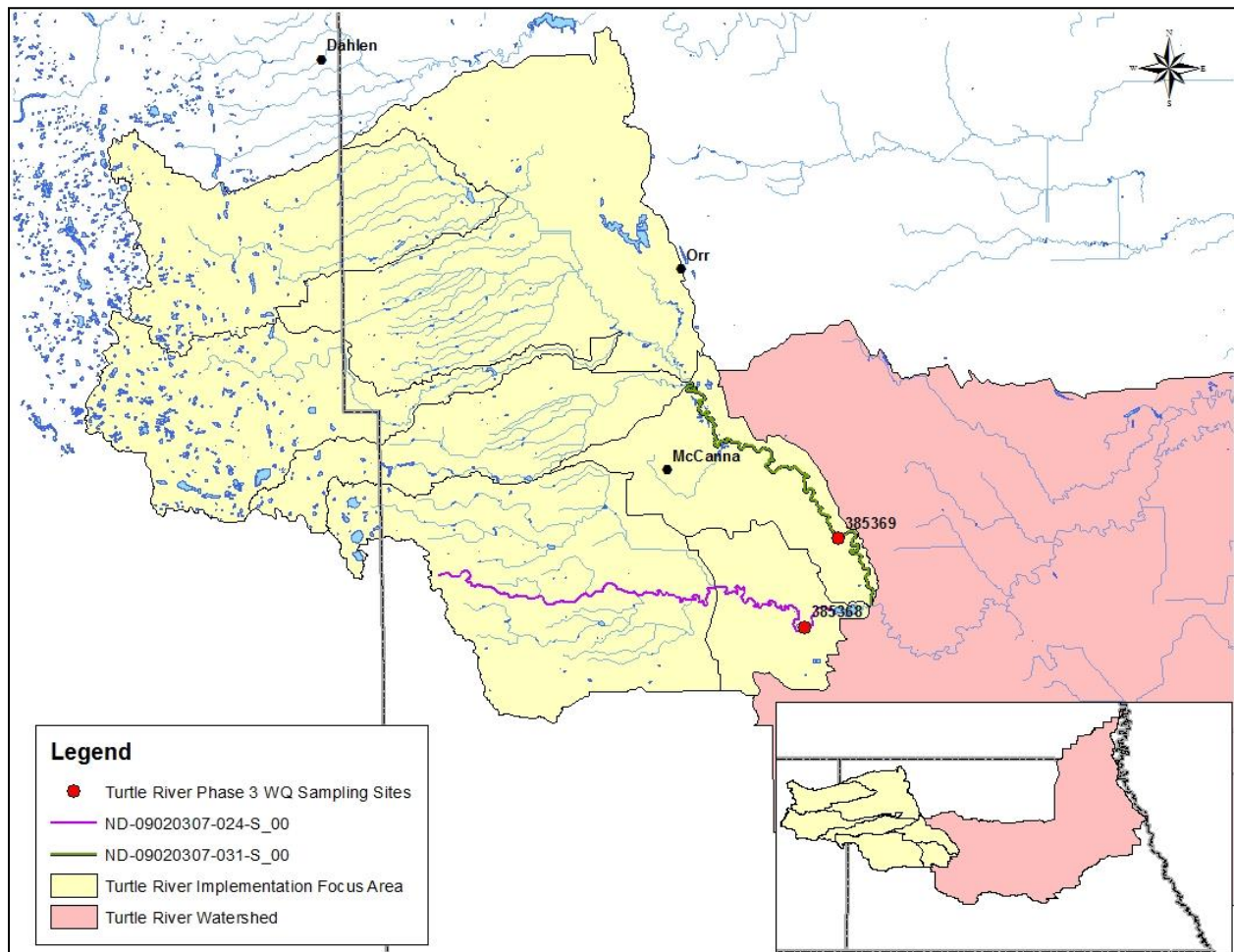


Figure 1. Turtle River Phase 3 Focus Area, Impaired Segments, and Water Quality Sampling Sites.

Turtle River Water Quality and Watershed Assessment 2006-2007

In 2006 and 2007 the Turtle River Water Quality and Watershed Assessment collected fecal coliform bacteria samples at one location within each TMDL listed reaches (Figure 1). Monitoring site 385368, is located on the South Branch of the Turtle River (ND-09020307-24-S_00) one mile north of Larimore, ND. Monitoring site 385369 is located on the North Branch of the Turtle River (ND-09020307-31-S_00) one mile east and 3.5 miles north of Larimore, ND. An analysis of the 2006 and 2007 fecal coliform bacteria data collected at site 385368, showed that for the months of May, June, and September, recreational use was fully supporting (Table 2). For the months of July and August, results for both the geometric mean concentration and the percentage of samples exceeding the previous fecal coliform bacteria water quality standard should recreational use was not supporting (Table 1).

Table 2. Summary of Fecal Coliform Bacteria Data for Site 385368 Data Collected in 2006 and 2007.

	May		June		July		August		September	
	01-May-06	20	01-Jun-06	190	05-Jul-06	370	07-Aug-06	120	05-Sep-06	130
	03-May-06	40	05-Jun-06	190	10-Jul-06	1600	14-Aug-06	200	20-Sep-06	20
	08-May-06	130	07-Jun-06	90	17-Jul-06	390	21-Aug-06	680	25-Sep-06	110
	11-May-06	160	12-Jun-06	50	24-Jul-06	1200	30-Aug-06	240	04-Sep-07	380
	16-May-06	5	19-Jun-06	20	31-Jul-06	140	06-Aug-07	160	13-Sep-07	90
	18-May-06	10	26-Jun-06	280	02-Jul-07	400	13-Aug-07	150	17-Sep-07	5
	22-May-06	20	04-Jun-07	110	12-Jul-07	210	20-Aug-07	150	24-Sep-07	120
	24-May-06	40	11-Jun-07	240	16-Jul-07	300	28-Aug-07	250		
	30-May-06	30	18-Jun-07	540	23-Jul-07	80				
	03-May-07	50	26-Jun-07	280	30-Jul-07	240				
	07-May-07	100								
	09-May-07	60								
	14-May-07	80								
	16-May-07	60								
	21-May-07	140								
	23-May-07	150								
	29-May-07	280								
	31-May-07	220								
N		18		10		10		8		7
Geometric Mean		57		143		337		208		67
% Exceeded		0%		10%		30%		13%		0%
Recreational Use Assessment		FS		FS		NS		NS		FS

FS – Fully Supporting; FSbT- Fully Supporting but Threatened; NS – Not Supporting; INSFD – Insufficient Data

Monthly results for site 385369 showed that during the months of June, August, and September recreation use was not supporting, while May and July were assessed as fully supporting recreational beneficial uses (Table 3).

Table 3. Summary of Fecal Coliform Bacteria Data for Site 385369 Data Collected in 2006 and 2007.

	May		June		July		August		September	
	01-May-06	60	01-Jun-06	1600	05-Jul-06	110	07-Aug-06	100	05-Sep-06	250
	03-May-06	5	05-Jun-06	140	10-Jul-06	50	14-Aug-06	170	20-Sep-06	120
	08-May-06	10	07-Jun-06	1600	17-Jul-06	150	21-Aug-06	160	25-Sep-06	250
	11-May-06	20	12-Jun-06	60	24-Jul-06	210	30-Aug-06	320	06-Aug-07	1600
	16-May-06	20	19-Jun-06	90	31-Jul-06	220	06-Aug-07	1600	13-Aug-07	230
	18-May-06	20	26-Jun-06	130	02-Jul-07	450	13-Aug-07	230	20-Aug-07	150
	22-May-06	10	04-Jun-07	110	12-Jul-07	200	20-Aug-07	150	28-Aug-07	170
	24-May-06	5	11-Jun-07	810	16-Jul-07	280	28-Aug-07	170		
	30-May-06	110	18-Jun-07	410	23-Jul-07	50				
	03-May-07	30	26-Jun-07	720	30-Jul-07	120				
	07-May-07	40								
	09-May-07	70								
	14-May-07	30								
	16-May-07	5								
	21-May-07	5								
	23-May-07	50								
	29-May-07	110								
	31-May-07	50								
N		18		10		10		8		7
Geometric Mean		23		303		150		231		255
% Exceeded		0%		50%		10%		13%		14%
Recreational Use		FS		NS		FS		NS		NS

FS – Fully Supporting; FSbT- Fully Supporting but Threatened; NS – Not Supporting; INSFD – Insufficient Data

Turtle River Fecal Coliform Bacteria TMDL

A fecal coliform bacteria TMDL was approved for the Turtle River in 2013. The focus area for the Turtle River Watershed Project Phase 3 was included in the TMDL. The fecal coliform bacteria data collected during the 2006-2007 assessment was used to calculate loads for the TMDL. During, the development of the TMDL load duration curves were calculated for sites 385368 and 385369. The load duration curves indicated exceedences of the fecal coliform bacteria standard occur during two flow regimes (i.e., Moist and Dry Conditions) at site 385368, representing assessment unit ND-09020307-031-S_00 (Figure 2 and Table 4) and in three flow regimes (i.e., High Flow, Moist and Dry Conditions) at site 385369, representing assessment unit ND-09020307-024-S_00 (Figure 3 and Table 5).

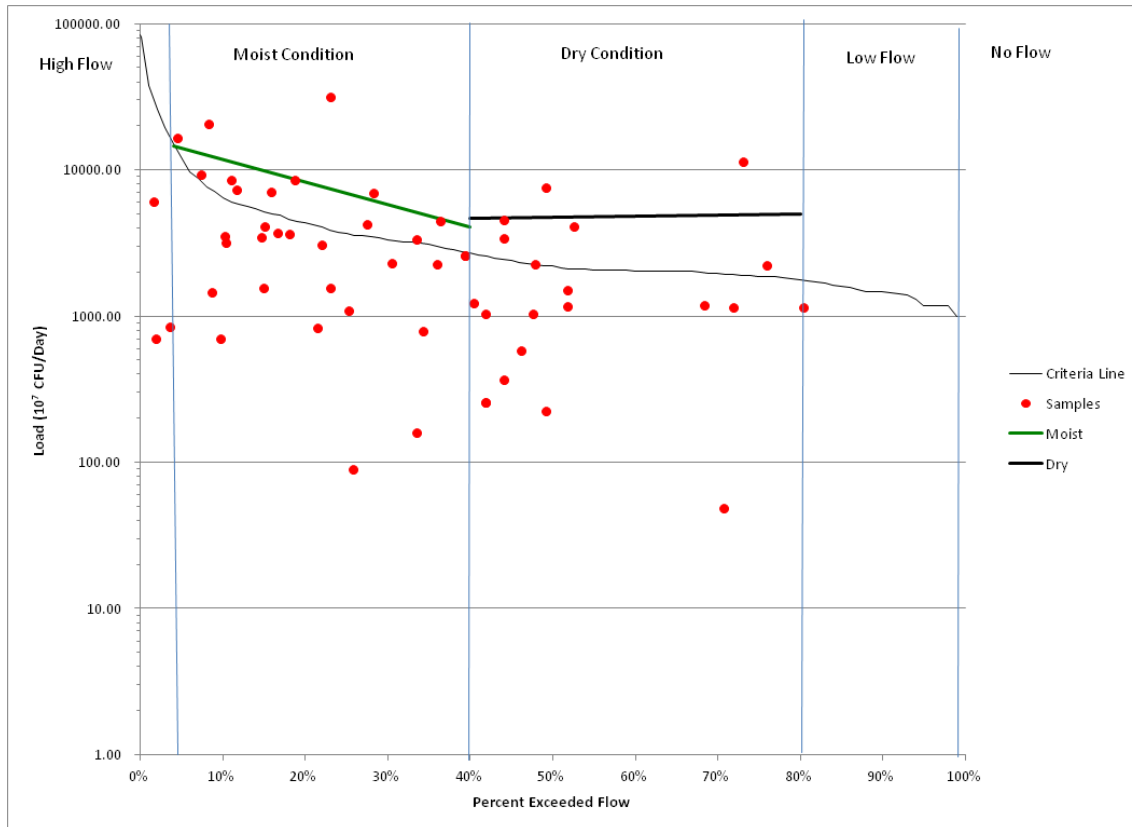


Figure 2. Fecal Coliform Bacteria Load Duration Curve for the South Branch Turtle River Monitoring Station 385368. The curve reflects flows collected from 2006-2007.

Table 4. Fecal Coliform Bacteria TMDL (10^7 CFU/day) for the South Branch Turtle River Waterbody ND-09020307-024-S_00 as represented by Site 385368.

	Flow Regime			
	High Flow	Moist Conditions	Dry Conditions	Low Flow
Existing Load		7,682	4,822	
TMDL	26,147 ¹	4,092	2,044	1,457 ¹
WLA	No Reduction Needed	0	0	No Reduction Needed
LA		3,682.8	1839.6	
MOS		409.2	204.4	

¹TMDL load is provided as a guideline for watershed management and BMP implementation

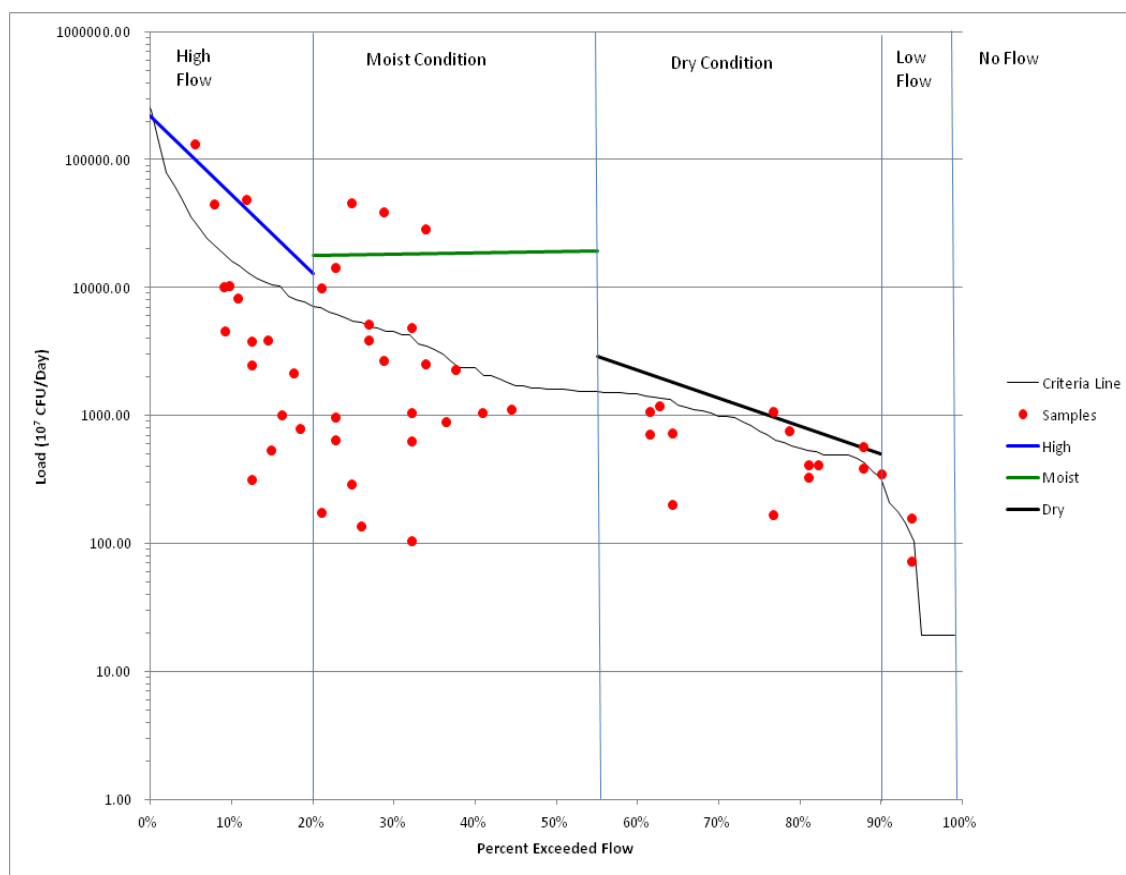


Figure 3. Fecal Coliform Bacteria Load Duration Curve for the North Branch Turtle River Monitoring Station 385369. The curve reflects flows collected from 2006-2007.

Table 5. Fecal Coliform Bacteria TMDL (10^7 CFU/day) for the North Branch Turtle River Waterbody ND-09020307-031-S_00 as represented by Site 385369.

	Flow Regime			
	High Flow	Moist Conditions	Dry Conditions	Low Flow
Existing Load	52,990	18,578	1,198	
TMDL	16,206	2,680	926	105 ¹
WLA	0	0	0	No Reduction Needed
LA	14585.4	2,412	833.4	
MOS	1,620.6	268	92.6	

¹TMDL load is provided as a guideline for watershed management and BMP implementation.

The runoff characteristics of the north and south branch Turtle River indicate that the source of the bacterial impairment is characteristic of septic system failure, livestock grazing and watering in the riparian area and intensive upland grazing. Septic system failure might contribute to the fecal coliform and E. coli bacteria in the waterbody. Failures can occur for several reasons, although the most common reason is improper maintenance (e.g., age, inadequate pumping). Other reasons for failure include improper installation, location, and choice of system. Due to the close proximity of manure to the stream or by direct deposition in the stream, riparian grazing impacts water quality at high flow or under moist and dry conditions. Also intensive

grazing of livestock in the uplands has a high potential to impact water quality at high flows and under moist conditions impact at moderate flows. Exclusion of livestock from the riparian area, grazing management of the uplands and septic system repair are essential in improving the E.coli and fecal coliform bacteria and restoring the recreational beneficial use of the north and south branch Turtle River.

Nutrients Results

Table 6 shows the water quality results for nutrients that were collected during the 2006-2007 watershed and water quality assessment on the Turtle River. Monitoring sites 385368 and 385369 are represented in the table below since they are within the focus area of the Phase 3 implementation project. The table identifies the average, minimum and maximum concentration values of the samples collected during the assessment time period.

Table 6. Water Quality Sampling Sites 385368 and 385369 Nutrient Concentration Average, Minimum and Maximum Values.

385368	Ammonia	Nitrate + Nitrite	Total Kjeldahl Nitrogen	Total Nitrogen	Total Phosphorus	Total Suspended Solids
Average	0.050	0.228	0.394	0.623	0.114	12
Minimum	0.01	0.007	0	0.219	0.02	5
Maximum	1.36	3.12	1.81	4.31	0.837	76
385369	Ammonia	Nitrate + Nitrite	Total Kjeldahl Nitrogen	Total Nitrogen	Total Phosphorus	Total Suspended Solids
Average	0.031	0.206	0.515	0.724	0.122	10
Minimum	0.01	0.007	0.127	0.274	0.004	5
Maximum	0.128	2.21	1.17	3.15	0.608	162

These parameters will be monitored during the Phase 3 implementation project sampling workplan as a secondary monitoring goal to provide additional data to characterize the focus area watersheds in greater detail.

2.2 The target audience for this project will include; landowners, which have the ability to modify land use practices; agencies and organizations, which make land management decisions; and residents of the county, which are impacted by resource issues.

3.0 Project Goals and Objectives

3.1 Restore the recreational uses of the North and South Branches of the Turtle River to fully supporting status. Secondly, educate the residents of Grand Forks County on the relationship between healthy soils and water quality through educational outreach and demonstration of BMP's. See Table 7 for milestone table.

3.2 Objectives and Tasks

Objective 1:

Manage the implementation of BMPs and coordinate outreach events to supplement education related to listed BMPs.

Task 1

Employ a full-time Watershed Coordinator and provide administrative oversight and support to ensure the project is completed as planned.

Product: One full-time Watershed Coordinator to oversee the project.

Cost: \$244,504.00 (Salary/Fringe for 4.5 years)

Objective 2:

Achieve fully supporting status for recreational uses of the North and South Branch of the Turtle River. Reduce E. coli bacteria concentrations to 126 CFU/100 ml with less than 10% of samples exceeding 409 CFU/100 ml.

Task 2

Implement 2,500 acres of cover crop seeded on farmland to maintain diversity, cycle nutrients, provide soil protection, and provide added forage for livestock operations.

Product: 2,500 acres of cover crops

Cost: \$50,000.00 (4.5 year span at \$20/acre)

Task 3

Implement three prescribed grazing plans for a total of 700 acres along with 30,000 feet of fencing, 1,320 feet of pipeline, and 3 watering tanks to have a complete systems approach. Implement 100 acres of access control/use exclusion (livestock only).

Product: 700 acres of prescribed grazing, 30,000 feet of fencing, 1,320 feet of pipeline, 3 watering tanks, and 100 acres of access control/use exclusion.

Cost: \$3,500.00 for prescribed grazing, \$34,500.00 for fencing, \$3,960.00 for pipelines, \$6,810.00 for watering tanks, and \$2,000.00 for access control/use exclusion. Total cost over 4.5 years is \$50,770.00

Task 4

Implement 6 septic system replacements

Product: 6 new septic systems

Cost: \$36,000 (4.5 year span)

Objective 3:

Increase producer and landowner understanding and awareness of water quality issues in the area and sustainable land management alternatives for addressing those water quality issues and other resource concerns.

Task 5

Host annual winter soil health workshops. The workshops will provide a holistic approach to our agricultural practices that tie in soil health, water quality and quantity, biology, vegetation, and more. Speakers will include producers and experts in their fields of study.

Product: 4 annual workshops promoting sustainable agricultural practices.

Cost: \$57,800.00 (Speakers' fees, speakers' travel expenses, room rental, educational materials, and advertising. Table 8)

Task 6

Host 5 annual summer tours that showcase implemented BMPs and the information learned during the winter workshop. Local producers will be asked to show how they are improving their resources through implementation of BMPs.

Product: 5 annual summer tours

Cost: \$16,250.00 (Speakers' fees, speakers' travel expenses, educational materials, advertising, and bus rentals. Table 9)

Task 7

The District, along with the support of UND, will continue to monitor a demonstration plot, which sits adjacent to the Turtle River, to showcase cover crop options and a no-till operation. The plot is divided into four smaller plots that will each contain a different cover crop mix. We will collect soil samples in the spring, summer, and fall to gain information about nutrients, biological activity, and chemistry. Electrical conductivity and soil temperatures will also be recorded throughout the same seasons as previously stated. Grazing by cattle may be incorporated into this demonstration site depending on the crop rotations.

Product: Soil biological, physical, and chemical data in a real-world scenario that demonstrates the benefits of no-till and cover crops for our agricultural practices and our natural resources. Additionally, knowledge of crop rotations and cover crop systems that can work in our area.

Cost: \$9,878.00 (Cover-crop seed, fencing, and watering facilities. Table 10)

Task 8

The Coordinator will continue to be involved with local schools, library, and organizations such as the FFA and 4-H program to promote water quality and conservation activities.

Product: Roughly 1000 participants for youth involvement and youth education about sustainable agriculture practices and protecting our natural resources.

Cost: \$1000.00 (Educational materials and travel expenses)

4.0 Coordination Plan

- 4.1 The lead project sponsor is the Grand Forks County Soil Conservation District (SCD). The SCD is responsible for the day-to-day oversight of the project objectives and tasks and will provide assistance and information to land owners for the enhancement of natural resources. Cooperating agencies include: Natural Resources Conservation Service (NRCS), North Dakota Department of Health, North Dakota Forest Service, North Dakota Game & Fish, Farm Service Agency, North Dakota State University Extension Service, and the University of North Dakota.
1. Grand Forks County Soil Conservation District (SCD)- The SCD is the lead project sponsor. Project administration, landowner contacts, producer contracts, and water quality education will be the responsibility of the SCD.
 2. Natural Resources Conservation Service (NRCS)- The NRCS will provide day-to-day assistance in conservation planning, plan writing, contract writing, technical assistance, and O&M guidance. NRCS will conduct quality review and compliance checks on BMP's designed by NRCS. Environmental Quality Incentive Program (EQIP) funds will also be used as available and appropriate. Technical assistance will be provided for outreach and educational events.
 3. North Dakota Department of Health (NDDH)- The NDDH will oversee 319 funding and ensure proper management and expenditures of funding. NDDH staff will also provide technical training and guidance through the project activities. NDDH will assist NRCS and SCD personnel in review of O & M requirements for Section 319 funded BMP's.
 4. North Dakota Game & Fish- Will be asked to provide technical assistance as needed. Save Our Lakes funding will be requested when appropriate.
 5. Farm Service Agency (FSA)- Programs available through FSA will be pursued for cost share assistance. (i.e.-Conservation Reserve Program (CRP))
 6. North Dakota State University Extension Service (NDSU-Extension)-Research, outreach, and technical assistance will be provided for all stakeholders.
 7. University of North Dakota (UND)-Research, outreach, technical assistance, and a continued partnership in a demonstration plot will be provided for all stakeholders.
- 4.2 The SCD Board of Supervisors, who are local landowners themselves, have continued to strongly support water quality projects. The SCD has been involved in the Turtle River Watershed Assessment, Larimore Dam Reservoir Assessment, and English Coulee Watershed Assessment projects. The SCD Board wants to continue to make progress in the area of water quality through this implementation proposal.

Local land owners throughout the watershed have expressed a desire to make improvements to their land that would improve water quality, as well as numerous people interested in the results from the Turtle River Watershed and Larimore Dam

Reservoir Assessments. A current interest in septic system renovations, cover crops, and livestock grazing improvement is also being expressed throughout the watershed.

- 4.3 The project will utilize NRCS Environmental Quality Incentive Program, Save Our Lakes cost share programs, and FSA cost share programs to help maximize the projects accomplished in the watershed without completely relying on 319 funding.

5.0 Evaluation and Monitoring Plan

North Dakota Department of Health staff will develop a quality assurance project plan for the project after the final project implementation plan is approved.

6.0 Budget

See attached budget in Appendix B.

7.0 Public Involvement

- 7.1 As with any conservation program, public involvement is an essential component to the program's success. The Grand Forks County Soil Conservation District (SCD) mails newsletters on a regular basis to landowners throughout the project area. These newsletters regularly have information regarding Watershed Project activities and water quality educational information. In addition, there will be opportunities to discuss water quality programs and activities at events that the SCD regularly attends, such as the International Crop Expo, held in Grand Forks on a yearly basis. Annual Soil Health workshops and tours are currently being planned where staff will have the opportunity to present and discuss water quality issues as well. The SCD also has a 319 Eco-Ed program that is attended by approximately 700-800 youth from across the county. Part of this program addresses water quality issues. The SCD has a website, www.gfscd.org, where there are links and postings with updates and educational materials concerning our 319 Watershed Projects. The SCD Facebook page will continue adding new video links and news items relating to conservation and water quality. The SCD Board of Supervisors and staff will also have opportunities to work and meet with local landowners and discuss our programs through one-on-one communication.

Appendix A

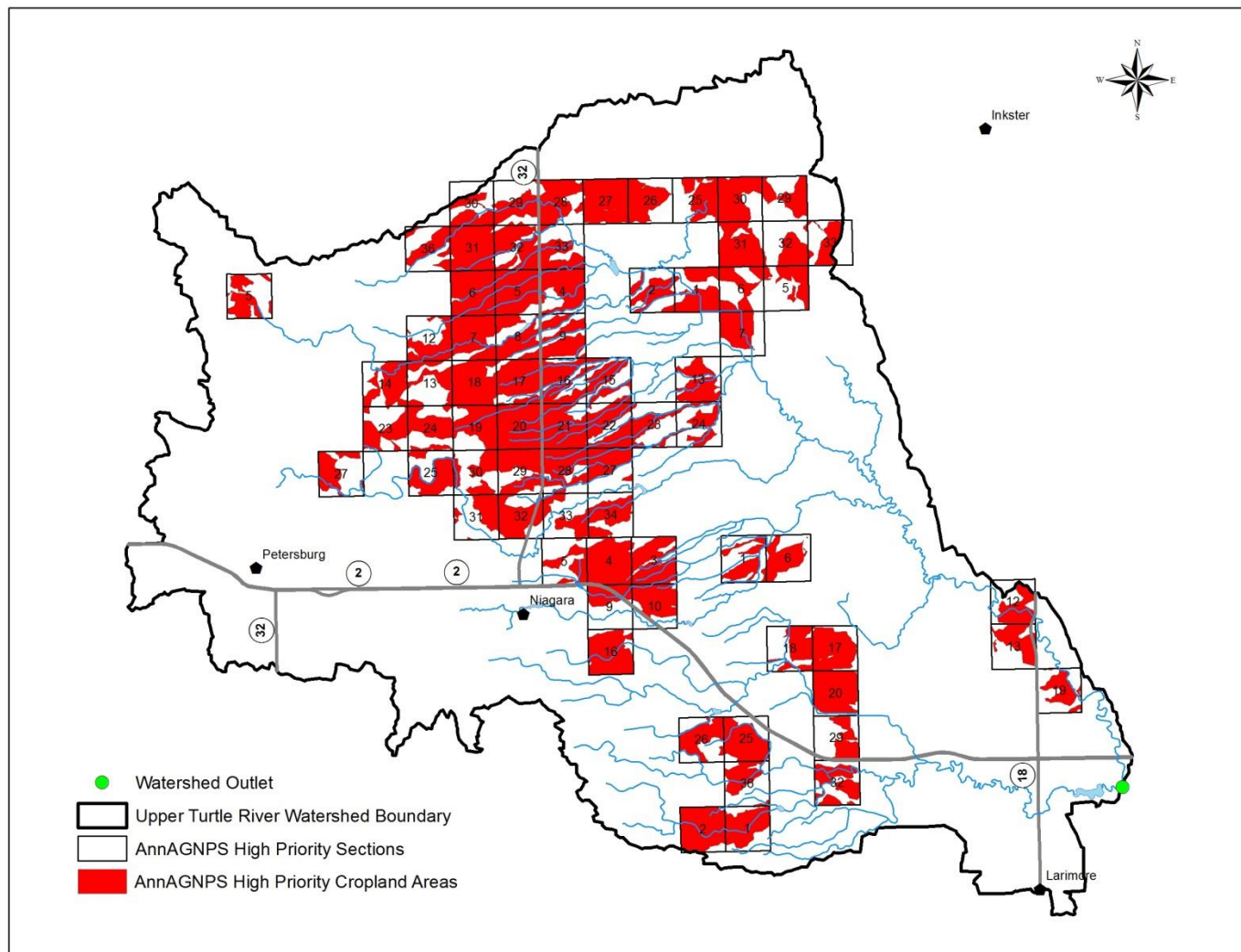


Figure 4. High Priority Cropland in the North and South Branch of the Turtle River Watershed.

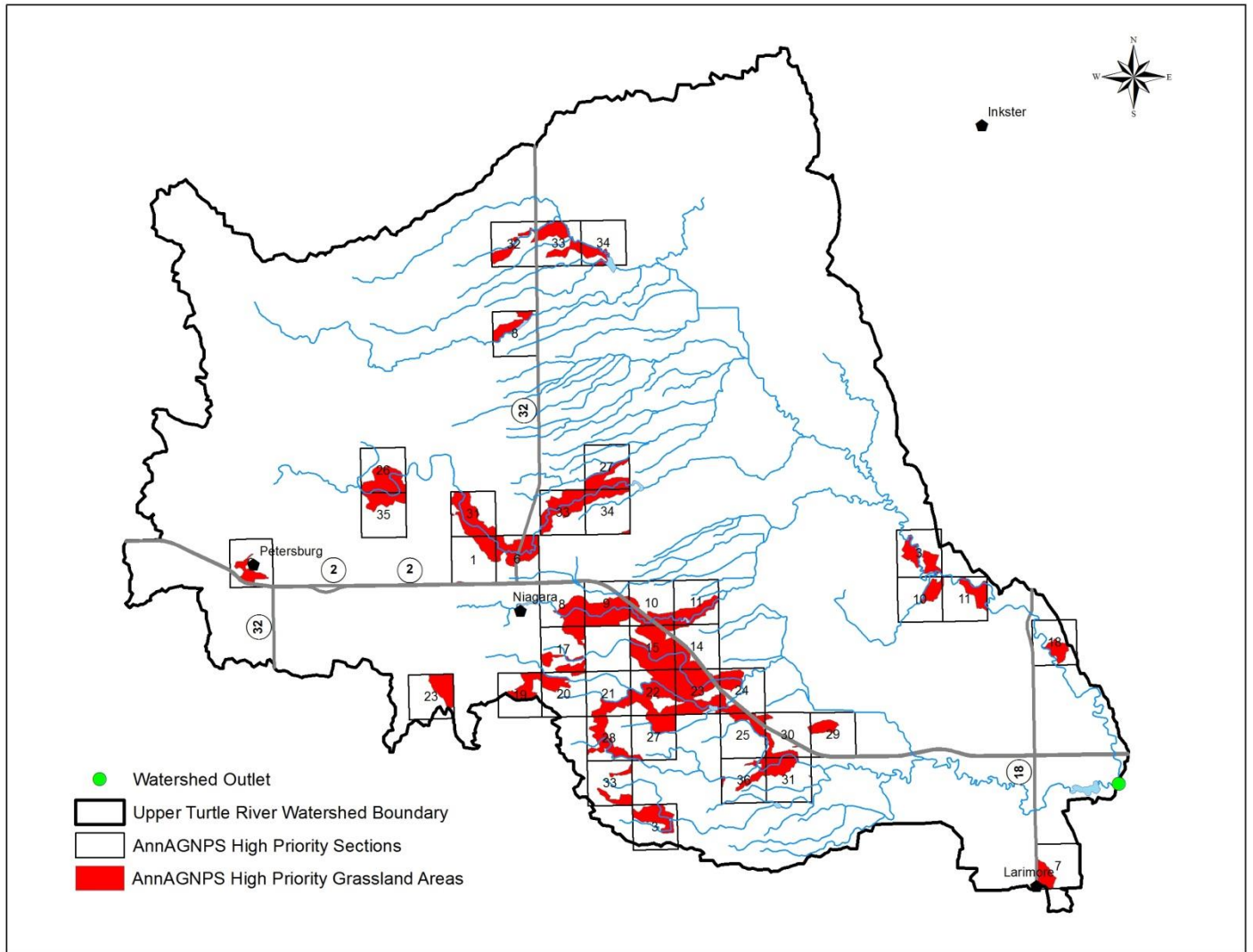


Figure 5. High Priority Grassland in the North and South Branch of the Turtle River Watershed.

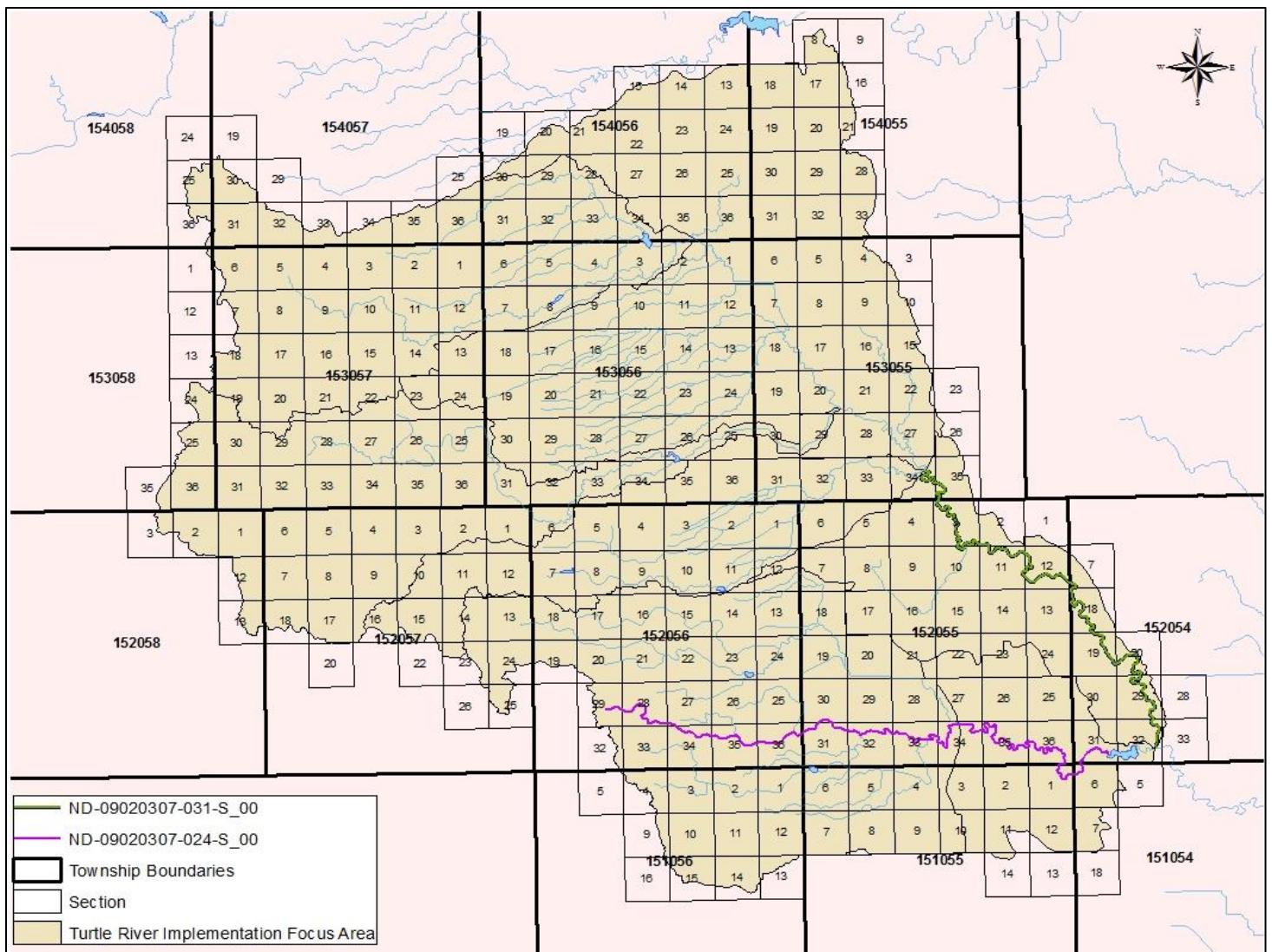


Figure 6. Townships and Boundaries of the North and South Branch Reaches of the Turtle River

Table 7. Upper Reaches of the Turtle River North and South Branch Watersheds Project									
Milestone Table									
				Year 1	Year 2	Year 3	Year 4	Year 5	
	Task/Responsible Organization	Output	Quantity						
Objective 1	Grand Forks County SCD-Lead Sponsor								
Task 1	Employ Full-Time Watershed Coordinator		1	X	X	X	X	X	
Objective 2	Watershed Coordinator, NRCS, Local Landowners								
Task 2	Cover Crop BMP	Reduced nutrients and increased grazing away from river	2500 acres of cover crop use	250 ac	500 ac	500 ac	600 ac	650 ac	
Task 3	Livestock BMP	Prescribed Grazing	700 ac	100 ac	175 ac	125 ac	175 ac	175 ac	
		Fencing	30,000 ft	4,000 ft	7,500 ft	6,000 ft	6,250 ft	6,250 ft	
		Pipeline	1,320 ft	—	330 ft	330 ft	330 ft	330 ft	
		Watering Tanks	3	—	1	—	1	1	
		Use Exclusion/Access	100 ac	—	50 ac	—	50 ac	—	
Task 4	Septic System Replacement	Reduction in E. coli	6	1	2	1	2	—	
Objective 3	I/E SCD and NRCS								
Task 5		Annual Winter Soil Health Workshop	4	—	1	1	1	1	
Task 6		Annual Summer Tours	5	1	1	1	1	1	
Task 7		Demonstration Site/local soil data	5 years of no-till, crop rotation demo site	This will be ongoing throughout the project. Planning, sampling, and implementing will be done throughout the years of the project.					
Task 8		Youth Outreach	1000 youth participants	This will be ongoing throughout the project. The Watershed Coordinator will participate in water festivals, Eco-Ed camps, library education days, and assist with 4-H and FFA programs.					

The Grand Forks County SCD will be the lead sponsor of the project.

NRCS will provide technical assistance for BMPs and educational activities.

Landowners will provide a 40% match to implemented BMPs on their land.

Other potential sponsors include NDSU Extension, UND, and the ND Game and Fish.

The ND State Health Department will provide oversight of the project.

Appendix B

Budget for Upper Reaches of the Turtle River-North and South Branch Watersheds

Part 1: FUNDING SOURCES	2015	2016	2017	2018	2019	TOTAL
EPA SECTION 319 FUNDS						
1) FY2015 Funds (FA)	\$34,326.00	\$63,384.60	\$65,633.40	\$62,652.60	\$24,003.40	\$250,000.00
Subtotals	\$34,326.00	\$63,384.60	\$65,633.40	\$62,652.60	\$24,003.40	\$250,000.00
OTHER FEDERAL FUNDS	\$2500.00	\$2500.00	\$2500.00	\$2500.00	\$2500.00	\$12,500.00
STATE/LOCAL MATCH						
1) Landowner match (FA)	\$10,400.00	\$12,900.00	\$10,500.00	\$10,400.00	\$10,508.00	\$54,708.00
2) Local SCD (TA&FA)	\$12,484.00	\$29,356.40	\$33,290.40	\$30,492.40	\$68,560.80	\$174,184.00
Subtotals	\$22,884.00	\$42,256.40	\$43,790.40	\$40,892.40	\$79,068.80	\$228,892.00
TOTAL BUDGET	\$59,710.00	\$108,141.00	\$111,923.80	\$106,045.00	\$105,572.20	\$491,392.00

Upper Reaches of the Turtle River-North and South Branch Watersheds Budget

Part 2 - Funding

OBJECTIVE 1: Watershed Coordinator to administer project.								
Section 319/Non-federal Budget	2015 (6 months)	2016	2017	2018	2019	TOTAL	Cash/In-Kind	319
PERSONNEL/SUPPORT						COSTS	Match	Funds*
1) Salary/Fringe	\$25,600.00	\$52,626.00	\$54,026.00	\$55,426.00	\$56,826.00	\$244,504.00	\$116,801.20	\$127,702.80
2) Office Rent/Utilities								
3) Travel	\$500.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$4,500.00	\$1,800.00	\$2,700.00
4) Equipment/Supplies	\$500.00	\$750.00	\$750.00	\$750.00	\$750.00	\$3,500.00	\$1,400.00	\$2,100.00
5) Training	\$500.00		\$500.00		\$500.00	\$1,500.00	\$500.00	\$1,000.00
6) Telephone	\$100.00	\$180.00	\$200.00	\$220.00	\$240.00	\$940.00	\$376.00	\$564.00
Subtotals	\$27,200.00	\$54,556.00	\$56,476.00	\$57,396.00	\$59,316.00	\$254,944.00	\$120,877.20	\$134,066.80
Other Federal Funds-Technical Assistance	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$2,500.00	\$12,500.00		
OBJECTIVE 2: Implementation of BMP's								
<i>Task 2: Cover Crop Seed</i>	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$10,000.00	\$50,000.00	\$20,000.00	\$30,000.00
<i>Task 3: Livestock Grazing improvement /Access control/Use</i>	\$10,000.00	\$10,250.00	\$10,250.00	\$10,000.00	\$10,270.00	\$50,770.00	\$20,308.00	\$30,462.00
<i>Task 4: Septics</i>	\$6,000.00	\$12,000.00	\$6,000.00	\$6,000.00	\$6,000.00	\$36,000.00	\$14,400.00	\$21,600.00
Subtotals	\$26,000.00	\$32,250.00	\$26,250.00	\$26,000.00	\$26,270.00	\$136,770.00	\$54,708.00	\$82,062.00
OBJECTIVE 3: Education and outreach								
<i>Task 6: Workshops, informational meetings</i>	\$0.00	\$14,450.00	\$14,450.00	\$14,450.00	\$14,450.00	\$57,800.00	\$34,780.00	\$23,020.00
<i>Task 7: Summer field tours</i>	\$3,250.00	\$3,250.00	\$3,250.00	\$3,250.00	\$3,250.00	\$16,250.00	\$9,750.00	\$6,500.00
<i>Task 8: Demonstration site</i>	\$410.00	\$410.00	\$8,238.00	\$410.00	\$410.00	\$9,878.00	\$5,926.80	\$3,951.20
<i>Task 9: Youth education</i>	\$100.00	\$225.00	\$225.00	\$225.00	\$225.00	\$1,000.00	\$600.00	\$400.00
Subtotals	\$3,760.00	\$18,335.00	\$26,163.00	\$18,335.00	\$18,335.00	\$84,928.00	\$51,056.80	\$33,871.20
ADMINISTRATIVE								
Secretarial	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
SCD/Coordinator Meetings	\$250.00	\$500.00	\$500.00	\$500.00	\$500.00	\$2,250.00	\$2,250.00	\$0.00
Subtotals	\$250.00	\$500.00	\$500.00	\$500.00	\$500.00	\$2,250.00	\$2,250.00	\$0.00
TOTAL 319/NON-FEDERAL BUDGET	\$57,210.00	\$105,641.00	\$109,389.00	\$102,231.00	\$104,421.00	\$491,392.00	\$228,892.00	\$250,000.00

*Maximum funding for 319 is \$250,000.00. Cash/In-kind match will exceed the 40% match to cover exceeding costs.

Priority BMP TABLE
Task 2 Cover Crop
340-Cover Crop seed
Task 3 Livestock Grazing Improvement
614- Trough/Tank
642- Well
516- Pipelines
528A- Prescribed Grazing
382- Fencing
472-Access Control/Use Exclusion (Livestock Only)
Task 4 Septic Systems Renovations
019- Septic System Renovation
*All systems will be installed according to NDDOH guidelines for BMP cost share *Other eligible BMP under the NPS program may be used as needed

Table 8. Budget Table for Annual Soil Health Workshops

	2016	2017	2018	2019	Totals
Speaker Fees	\$2000.00	\$2000.00	\$2000.00	\$2000.00	\$8,000.00
Speaker Travel Expenses	\$2000.00	\$2000.00	\$2000.00	\$2000.00	\$8,000.00
Meals*	\$4500.00	\$4500.00	\$4500.00	\$4500.00	\$18,000.00
Facility Rental/Equipment	\$1750.00	\$1750.00	\$1750.00	\$1750.00	\$7000.00
Advertising	\$1200.00	\$1200.00	\$1200.00	\$1200.00	\$4,800.00
Printing	\$3000.00	\$3000.00	\$3000.00	\$3000.00	\$12,000.00
Total	\$14,450.00	\$14,450.00	\$14,450.00	\$14,450.00	\$57,800.00
*319 funds will NOT be used for meal expenses.					

Table 9. Budget Table for Annual Summer Tours

	2015	2016	2017	2018	2019	Totals
Speaker Fees	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$2,500.00
Speaker Travel Expenses	\$750.00	\$750.00	\$750.00	\$750.00	\$750.00	\$3,750.00
Meals*	\$750.00	\$750.00	\$750.00	\$750.00	\$750.00	\$3,750.00
Advertising	\$500.00	\$500.00	\$500.00	\$500.00	\$500.00	\$2,500.00
Bus Rental	\$750.00	\$750.00	\$750.00	\$750.00	\$750.00	\$3,750.00
Total	\$3,250.00	\$3,250.00	\$3,250.00	\$3,250.00	\$3,250.00	\$16,250.00
*319 funds will NOT be used for meal expenses.						

Table 10. Budget Table for Demonstration Site

	2015	2016	2017	2018	2019	Totals
Cover Crop Seed	\$350.00	\$350.00	\$350.00	\$350.00	\$350.00	\$1,750.00
Fencing			\$3,828.00			\$3,828.00
Watering System			\$4000.00			\$4000.00
Soil Testing	\$60.00	\$60.00	\$60.00	\$60.00	\$60.00	\$300.00
Total	\$410.00	\$410.00	\$8,238.00	\$410.00	\$410.00	\$9,878.00