

1.0 PROJECT SUMMARY SHEET

PROJECT TITLE AND NAME:

Antelope Creek Watershed and the Riparian Corridor of the
Wild Rice River Implementation Project Phase III

NAME AND ADDRESS OF LEAD PROJECT SPONSORS/SUBGRANTEES:

Richland County Soil Conservation District
1687 By Pass Road
Wahpeton, ND 58075

CONTACT PERSON: Jennifer Klostreich **TITLE:** Coordinator

PHONE 701-642-5997 ex 3

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STATE: North Dakota **WATERSHED:** Antelope Creek /Wild Rice River Riparian Corridor

HYDROLOGIC UNIT CODE: 09020105 **HIGH PRIORITY WATERSHED:** yes

PROJECT TYPES

☐ STAFFING & SUPPORT
☒ WATERSHED
☐ I & E

WATERBODY TYPES

☐ GROUNDWATER
☒ LAKES/RESERVOIR
☒ RIVERS
☒ STREAMS
☐ WETLANDS

NPS CATEGORY

☒ AGRICULTURE
☐ URBAN RUNOFF

EXTRACTION

☐ STORAGE/LAND DISPOSAL
☐ HYDRO MODIFICATION
☐ OTHER

PROJECT AREA: **Richland County, North Dakota**

PROJECT TITLE AND NAME:

Antelope Creek Watershed and the riparian corridor of the
Wild Rice River Implementation Project Phase III

SUMMARIZATION OF MAJOR GOALS:

GOAL FOR THE PROJECT: The primary goal of the project is to restore the recreational uses of the impaired reaches of Antelope Creek and the Wild Rice River to fully supporting status. As a secondary goal, the project will also protect and enhance the aquatic life use of Antelope Creek and the Wild Rice River through targeted implementation of BMP within or immediately adjacent to the riparian corridor.

PROJECT DESCRIPTION:

The Antelope Creek Watershed and the riparian corridor of the Wild Rice River Implementation Project will implement comprehensive conservation planning, BMP implementation, monitoring and assessment, and information and education project on the highest priority ranked subwatershed in terms of non-point (NPS) contribution to the Antelope Creek and Wild Rice River.

The main objectives are:

- A. **OBJECTIVE:** Hire staff to provide one-on-one conservation planning assistance to producers.
- B. **OBJECTIVE:** Reduce the E. coli bacteria concentrations at established monitoring sites to an annual geometric mean concentrations of less than 126 CFU/100 mL and less than 10% of the samples exceeding 409 CFU/100 mL.
- C. **OBJECTIVE:** Improve the vegetative condition of the riparian corridor as well as the buffering capabilities of adjacent cropland along 6 miles of the Antelope Creek and the Wild Rice River.
- D. **OBJECTIVE:** Increase the public understanding of the impacts of NPS pollution and potential solutions to NPS problems.

319 Fund Requested \$ 503,000

Match \$ 658,934

Other Federal Funds \$ 1,975,000

Total Project Cost \$ 3,136,934

ANTELOPE CREEK WATERSHED AND THE RIPARIAN CORRIDOR OF THE WILD RICE RIVER IMPLEMENTATION PROJECT PHASE III

2.0 STATEMENT OF NEED

The Richland County Soil Conservation District and local county leadership has long recognized the natural, economic, and recreational value of the many water bodies in the county. High priorities are maintenance of these water bodies and improved management of soils; along with the proper disposal of animal and human waste.

The Richland County Soil Conservation District (RCSCD) has been able to assist Richland County residents in the Phase I & II with water quality improvement practices. Staff has been able to assist residents with Septic System Renovations, Engineering Services, Well Decommissionings and Waste Management Systems. Please refer to appendix 6 for a list of all accomplishments in Phase I and II, including de-listing of the Wild Rice River (ND-09020105-001-S_00) in the 2014 Integrated Report. The RCSCD will assist producer/landowners with water quality improvement projects in local waterways which include Antelope Creek and its tributaries, Wild Rice River and its tributaries, Bois De Sioux River and the Red River. The staff will focus on practices which fall within one mile of the waterbodies. The Wild Rice River and Antelope Creek are both listed in the 2012 List of Section 303(d) TMDL Waters. See appendix 7 for a 303 (d) TMDL Waters for the Red River Basin in North Dakota list in Richland County.

Two TMDL's have been developed one for the Antelope Creek and one for the Wild Rice River in Sargent and Richland Counties have been developed to address the recreational use impairments. Based on these TMDLs, fecal coliform bacteria have been identified as the pollutant impairing the recreational uses of the listed reaches. The state of North Dakota has eliminated the fecal coliform bacteria standard and is only using the E.coli standard for bacteria. This standards change is recommended by the US EPA as E. coli is believed to be a better indicator of recreational use risk (i.e., incidence of gastrointestinal disease). Major sources of the E. coli bacteria are animal feeding operations (AFOs) and failed privately owned septic systems. For Phase III, restoration of the recreational uses is the main priority and the RCSCD will address this priority by focusing its efforts on AFOs and failed septic systems within one mile of the Antelope Creek and its tributaries, Wild Rice River and its tributaries, Bois De Sioux River and the Red River in Richland County.

A full copy of the Antelope Creek and Wild Rice River TMDL are posted on the North Dakota Department of Health web site at:
http://www.ndhealth.gov/WQ/SW/Z2_TMDL/default.htm.

A secondary concern is the aquatic life use impairments. The impairments listed in the 2012 List of Section 303(d) TMDL Waters for the Red River Basin in North Dakota lists Dissolved Oxygen, Sedimentation and Siltation as impairments to both the Wild Rice

River and Antelope Creek. The likely sources of these pollutants are determined to be cropland erosion and runoff, wetland drainage, and poor grazing management along waterways. The RCSCD would like to focus on installing practices that would improve water quality within one mile of water bodies in Richland County.

A water quality survey was conducted in the winter of 2010 of homeowners within one mile of the Wild Rice River (WRR) and the North and South branches of the Antelope Creek. The WRR survey was sent to 191 homeowners with 93 completing the survey. The Antelope Creek survey was sent to 168 homeowners with 73 completing the survey. The survey had a 46% completion rate which the RCSCD was very encouraged. We realized water quality is important to residence and there is continued support for the project. Our survey shows that people believe it is our responsibility to protect water quality for future generations. They also believe that the water quality is about the same or more polluted that it was 25 years ago. Most survey respondents thought that agriculture activities such as use of herbicides, pesticides and not controlling erosion is a problem. The overall consensus is that water quality is everyone's responsibility. The entire survey is attached for your review. (See Appendix 3)

The comment section is word for word off of surveys returned by homeowners. (See Appendix 3)

Antelope Creek

The Antelope Creek watershed is a 122,923 acre watershed located in Richland County in southeastern North Dakota. Antelope Creek is a tributary of the Wild Rice River and lies within the Level IV Lake Agassiz Plains Ecoregion (48).

The Lake Agassiz Plain ecoregion (48a) is comprised of thick beds of glacial drift overlain by silt and clay lacustrine deposits from glacial Lake Agassiz. The topography of this ecoregion is extremely flat, with sparse lakes and pothole wetlands. Tall grass prairie was the dominant habitat prior to European settlement and has now been replaced with intensive agriculture. Agricultural production in the southern region consists of corn, soybeans, wheat and sugar beets. The Sand Deltas and Beach Ridges (48b) ecoregion disrupts the flat topography of the Red River Valley. The beach ridges are parallel lines of sand and gravel that were formed by wave action of the contrasting shoreline levels of Lake Agassiz. The deltas consist of lenses of fine coarse sand and are blown into dunes (USGS, 2006)

The dominant soil associations in the Antelope Creek subwatersheds are the Fargo, Overly-Gardena, Hecla-Hamar-Arveson, Embden-Glyndon-Tiffany, and Galchutt-Fargo-Aberdeen. The Fargo association consists of mostly to nearly level topography, except for steeper elevations along streams and drainage ways, with poorly drained, fine textured soils formed in clayey lacustrine sediments. The Overly-Gardena association consists of nearly level, moderately well drained; medium textured and moderately fine textured soils formed in silty lacustrine sediments. The Hecla-Hamar-Arveson association nearly

level to undulating, moderately well drained to very poorly drained, coarse-textured to medium-textured soils formed in sandy and loamy lacustrine sediments. The Embden-Glyndon-Tiffany association is described as nearly level, to moderately well drained to poorly drained, moderately coarse textured and medium textured soils formed in loamy and silty lacustrine sediments; some are shallow over lime. The Galchutt-Fargo-Aberdeen association again is similar in topographical characteristics as the aforementioned associations, the soils of this associations consist of somewhat poorly drained and poorly drained, with medium to moderately fine textured soils formed in silty and clayey lacustrine sediment, some soils are shallow over a sodic claypan subsoil (NRCS, 1975).

The dominant land uses in the Antelope Creek watershed is row crop agriculture. According to the 2006 National Agricultural Statistical Service (NASS) land survey data, approximately 86 percent of the land is active cropland, 5 percent in mid-density urban development, 9 percent is either wetlands, water, woods, barren, pasture/rangeland or in the conservation reserve program (CRP). The majority of the crops grown consist of soybeans, corn, spring wheat, alfalfa, sugar beets, sunflowers and dry beans. Animal feeding operations and “hobby farms” are also present in the Antelope Creek watershed, but their number and locations are unknown.

Wild Rice River

The Wild Rice River watershed is a 1.4 million acre watershed located in Cass, Dickey, Ransom, Richland and Sargent Counties in southeastern North Dakota and Marshall and Roberts Counties in northeastern South Dakota. There are 925,184 acres located in Richland County.

The Tewaukon Dad Ice Moraine (46e) ecoregion is a continuation of the Prairie Coteau extending below the Prairie Coteau Escarpment. A large density of semi permanent wetlands provides feeding and nesting habitat for many species of waterfowl, with the remaining upland areas under cultivation. The Drift Plains (46i) ecoregion was formed by the retreating Wisconsin glacier that left a thick mantle of glacial till. The landscape consists of temporary and seasonal wetlands. Due to the productive soil of this ecoregion almost all of the area is under cultivation. The Glacial Lake Agassiz Plain ecoregion (48a) is comprised of thick beds of glacial drift overlain by silt and clay lacustrine deposits from glacial Lake Agassiz. The topography of this ecoregion is extremely flat, with sparse lakes and pothole wetlands. Tall grass prairie was the dominant habitat prior to European settlement and has now been replaced with intensive agriculture. Agricultural production in the southern region consist of corn, soybeans, wheat and sugar beets. The Sand Deltas and Beach Ridges (48b) ecoregion disrupts the flat topography of the Red River Valley. The beach ridges are parallel lines of sand and gravel that were formed by wave action of the contrasting shoreline levels of Lake Agassiz. The deltas consist of lenses of fine to coarse sand and are blown into dunes (USGS, 2006).

The dominant land use in the Wild Rice River watershed is row crop agriculture. According to the 2006 National Agricultural Statistical Services (NASS) land survey data, approximately 59 percent of the land is cropland, 16 percent is grassland, and 11 percent is in wetlands, the remaining 14 percent is either developed space, water, woods, barren, pasture, or in the conservation reserve program (CRP). The majority of the crops grown consist of corn soybeans, spring wheat, alfalfa, winter wheat, sunflowers and dry beans. Unpermitted animal feeding operations and “hobby farms” are also present in the Wild Rice River watershed, but their number and location are unknown.

TMDL Listings

Antelope Creek

A TMDL has been developed for a 40.73 mile segment (ND-09020105-005-S_00) of Antelope Creek, in Richland County, from its headwaters downstream to its confluence with the Wild Rice River as fully supporting, but threatened for recreational uses. The impairment is due to fecal coliform bacteria. The state of North Dakota has eliminated the fecal coliform bacteria standard and is only using the E.coli standard for bacteria. The North Dakota water quality standard for E. coli bacteria is a geometric mean concentration of 126 CFU/100 mL during the recreation season from May 1 to September 30. In addition, no more than ten percent of samples collected for E. coli bacteria should exceed 409 CFU/100 mL

The TMDL listed segment on the Antelope Creek is experiencing E. coli bacteria pollution from non-point sources in the watershed. Various sources include animal feeding operations (AFOs) and “hobby farms” with fewer than 100 animals in proximity to Antelope Creek, wildlife, and failing septic systems.

Livestock management BMPs are designed to promote healthy water quality and riparian areas through management of livestock and associated grazing land. Fecal matter from livestock, erosion from poorly managed grazing, land and riparian areas can be a significant source of E. coli bacteria loading to surface water. These specific BMPs are known to reduce nonpoint source pollution from livestock:

- Livestock exclusion from riparian areas
- Water well and tank development
- Prescribed grazing
- Waste management system

Wild Rice River

A TMDL has been developed for a 47.5 mile segment (ND-09020105-003-S_00) of the Wild Rice River from its confluence with a tributary about 3.6 miles northeast of Great Bend, ND downstream to its confluence with the Colfax watershed.

A 38.6 mile segment (ND-09020105-001-S_00) of the Wild Rice River from its confluence with the Colfax watershed downstream to its confluence with the Red River as fully supporting, but threatened for recreational uses due to fecal coliform bacteria. The state of North Dakota has eliminated the fecal coliform bacteria standard and is only using the E.coli standard for bacteria. The North Dakota water quality standard for E. coli bacteria is a geometric mean concentration of 126 CFU/100 mL during the recreation season from May 1 to September 30. In addition, no more than ten percent of samples collected for E. coli bacteria should exceed 409 CFU/100 mL.

WATERBODY IMPROVED

The listed segment of concern is a 38.6 mile portion of the Wild Rice River from its confluence with the Colfax watershed, downstream to its confluence with the Red River (ND-09020105-001-S_00).

The segment of Wild Rice River was first listed listed in North Dakota's 1998 303(d) TMDL list as fully supporting but threatened, for recreation due to fecal coliform bacteria.

With the implementation of watershed/water quality improvement project, best management practices were installed to improve livestock manure management and restore failed septic systems. Subsequently, the listed segment of the Wild Rice River has seen a decrease in E. coli bacteria counts and an improvement in water quality.

This is supported by the water quality data that show improved E. coli bacteria results that will allow the NDDoH to de-list the Wild Rice River (ND-09020105-001-S_00) in the 2014 Integrated Report.

The TMDL listed segments on the Wild Rice River are experiencing E. coli bacteria pollution from non-point sources in the watershed. Various sources include animal feeding operations (AFOs) and "hobby farms" with fewer than 100 animals in proximity to Antelope Creek, wildlife, and failing septic systems.

Livestock management BMPs are designed to promote healthy water quality and riparian areas through management of livestock and associated grazing land. Fecal matter from livestock, erosion from poorly managed grazing, land and riparian areas can be a significant source of fecal coliform bacteria loading to surface water. These specific BMPs are known to reduce nonpoint source pollution from livestock:

- Livestock exclusion from riparian areas
- Water well and tank development
- Prescribed grazing
- Waste management system

A full copy of the Antelope Creek and Wild Rice River TMDL are posted on the North Dakota Department of Health web site at:

http://www.ndhealth.gov/WQ/SW/Z2_TMDL/default.htm.

Stream Visual Assessment Conclusion: Riparian assessment concluded that out of 47 sampling sites, 60% were in poor condition and 40% were in fair condition. These assessments do point out a continued need for proper grazing use and pasture management. It also points out native plant communities provide superior protection in the riparian zone as opposed to tame or introduced plants. Land use management, which enhances native plant communities through proper utilization and season of use, will significantly improve the watersheds riparian health. On the ground technical assistance from a watershed conservationist is needed to assist land users in implementing resource management systems on their land. This assistance could be provided through an established watershed workgroup using a voluntary approach.

The riparian assessment also indicated primary sources of the NPS pollutants in sub watersheds are generally human influences such as excessive tillage, over fertilization, livestock water, human wastes, and construction are often the main contributors to the degradation of water quality and should be targeted for improvement. Some the largest sources of nonpoint pollution included low residue croplands. Private onsite sewage systems and livestock feeding areas are also a source for increased levels of ammonia, nitrate=nitrite, TON, and fecal coliform bacteria. But perhaps the single most overlooked factor affecting water quality is riparian area management. Riparian areas not only provide a buffer between cropland and the stream, they are critical to providing necessary stream habitat for aquatic organisms.

The Richland Soil Conservation District has the complete Stream Visual Assessment report for reference.

Red River Basin Decision Information Network/Water Quality Decision Support System

The Richland Soil Conservation District is coordinating with the Wild Rice Soil Conservation District and The International Water Institute to develop a Water Quality Decision Support System (WQDSS) for the Wild Rice River Basin. The District plans to use the tool to set priority areas that have a higher potential for sedimentation or erosion along the Wild Rice River. See attached maps as an example of what the tool can do to help identify areas of concern. See Appendix 6.

The Red River Basin Decision Information Network (RRBDIN) was launched after the 1997 Red River of the North Flood. RRBDIN is based on the recommendations made by the International Joint Commission's Red River Basin Task Force which recognized the need to promote a more open and continuous source for information sharing in the Red River Basin. The goal of the RRBDIN is to provide residents, resource professionals, and local, state and federal officials relevant information through an innovative suite of interactive and publically available web-based decision support tools.

The Water Quality Decision Support System (WQDSS) is one of a suite of decision support tools available on the RRBDIN. The WQDSS utilizes advanced water quality data products derived from high resolution topographic data collected using Light Detecting and Ranging (LiDAR) Data to better understand the condition of a watershed, assess pollutant sources, prioritize subwatersheds relative to best management practices (BMP), and develop BMP implementation plans for agricultural watersheds. The WQDSS provides land and water managers with online tools to prioritize, target, and measure conservation practices on the landscape to achieve water quality objectives identified in local and state plans and ensure decisions to expend public funds are strategic, defensible, and transparent.

3.0 PROJECT GOALS

3.1 **GOALS FOR THE PROJECT:** The primary goal of the project is to restore the recreational uses of the impaired reaches of Antelope Creek and the Wild Rice River to fully supporting status. As a secondary goal, the project will also protect and enhance the aquatic life use of Antelope Creek and the Wild Rice River through targeted implementation of BMP within or immediately adjacent to the riparian corridor.

A. **OBJECTIVE:** Hire staff to provide one-on-one conservation planning assistance to producers.

TASK 1: Employ a Watershed Coordinator and Administrative Assistant to assist producers/landowners with installation of BMP's in project area.

Output: 1 Watershed Coordinator and Administrative Assistant.

Cost: \$263,450

B. **OBJECTIVE:** Reduce the E. coli bacteria concentrations at established monitoring sites to an annual geometric mean concentration of 126 CFU/100 mL during the recreation season from May 1 to September 30. In addition, no more than ten percent of samples collected for E. coli bacteria should exceed 409 CFU/100 mL for all TMDLs developed for Richland County.

TASK 2: Provide financial and technical assistance to producers to plan and install BMP's that will improve management on livestock feeding areas.

Output: Management improved on 1 livestock feeding areas and 2 partial Manure Management Systems; See attached BMP Budget Table for specific BMP costs and quantities.

Cost: \$90,000

TASK 3: Conduct follow up contacts to assist with conservation plan updates and monitor O & M of Section 319 cost shared practices. NRCS personnel will conduct quality review and compliance checks of BMPs that are designed by NRCS personnel. Local NRCS personnel will provide approved BMP standards and specifications from the NRCS technical guide.

Output: Database of BMPs applied

Cost: "Costs are included in the Task 1 cost."

TASK 4: Utilize the Wild Rice River Watershed Water Quality Decision Support System to further define the high priority areas in the watershed.

Output: Map showing the locations in priority areas

Cost: "Costs are included in the Task 1 cost."

TASK 5: Work with homeowners to identify septic systems that would be eligible for cost share under the guidelines for NPS pollution control best management practices.

Output: Assist 125 homeowners in identifying the potential to pollute our water bodies and assist them in moving forward with project to deal with septic waste in an appropriate manner.

Cost: “Costs are included in the Task 1 cost.”

TASK 6: Coordinate the repair and/or replacement of 29 septic systems and assist homeowner to get required permit (On-site sewage disposal permit) thru the Richland County Health Department. These on-site sewage systems need to be located within one mile of the major waterways in Richland County. These waterways include: Antelope Creek and its tributaries, Wild Rice River and its tributaries, Bois de Sioux River and Red River.

Output: Assist in repair/replacement of 29 private septic systems that are a primary source of pollutant.

Cost: \$261,000

C. OBJECTIVE: Improve the vegetative condition of the riparian corridor as well as the buffering capabilities of adjacent cropland along 6 miles of the Antelope Creek and the Wild Rice River.

TASK 7: Provide financial and technical assistance to producers/landowners to stabilize degraded riparian areas and establish annual (ie. Cover Crops) or perennial vegetative buffers on acres immediately adjacent to the creek or river.

Output: 2 miles of restored riparian areas; 1 miles of buffer along the creek/river and 1900 acres of Cover Crop. See attached BMP Budget Table for estimated BMP costs and quantities.

Cost: \$106,333

D. OBJECTIVE: Increase the public understanding of the impacts of NPS pollution and potential solutions to NPS problems.

TASK 8: Organize and conduct scheduled I/E events focusing on NPS pollution control within agricultural areas and coordinate them with ongoing state/federally sponsored I/E programs.

Output: The RCSCD would like to sponsor 1 meetings/workshops with local cattle producers to discuss opportunities available through the partial manure management systems, annual cover crop/strip till demonstration, and continue to assist NDSU Extension with producer meetings pertaining to salinity and cover crops.

Cost: \$3,750

TASK 9: Prepare newsletter articles and/or direct mailings to local land users, general public, and media to promote the project and disseminate information on water quality and NPS pollution control. Information will be updated in a timely manner on the Richland Soil Conservation District website. www.richlnadsd.com

Output: Minimum of (10) newsletters, news releases and direct mailings.

Cost: \$3,500

TASK 10: Complete annual and final project reports to update the GRTS. These will be provided NDDH, EPA, and all sponsors and interested individuals.

Output: Annual and 1 final report

Cost: "Costs are included in the Task 1 cost."

TASK 11: Continue partnering with Wild Rice SCD to operate the CCSP demonstration farm to increase producer awareness of feasible cropland management options that will reduce erosion, improve soil health; minimize nutrient inputs; diversify crop rotations and protect water quality in the Wild Rice watershed.

Output: Annual tours; Information of success/failures of various cropping/tillage systems. Technical support for staff and producers.

Cost: \$25,000

3.2 See Milestone Table.

3.3 Permits: All necessary permits will be acquired. These may include CWA Section 404 permits. North Dakota State Historic Preservation Officer will be consulted as needed, regarding requirements relating to the protection of cultural resources. Project sponsors will work with NDDH to determine if National Pollution Elimination System permits are needed for the proposed livestock systems. The Richland County District Health Unit will issue an On-site sewage disposal permit for each privately owned septic system replaced in Richland County. This permit states installers will comply with all applicable county and township ordinances and the state law.

3.4 Richland County Soil Conservation District (RCSCD), and the Richland County Water Resource Board (RCWRB) are sponsoring this water quality project with RCSCD as the lead sponsor. The RCSCD has sponsored two other 319 projects. The RCSCD's annual and long range plans help to prioritize and guide the field service both staff. The RCSCD has legal authorization to employ personnel and receive and expend funds. They have a track record for personnel management and addressing conservation issues for the constituency. The RCWRB is responsible for the management of water resources in Richland County. They will provide financial support for the project as well as assist the RCSCD in overseeing the project's progress. Other supporters include the Richland County Commission.

4.0 COORDINATION PLAN

4.1 This project is sponsored by the Richland County Soil Conservation District (RCSCD). The project partners will be: Richland County Water Resource Boards, Richland County Commissioners, Natural Resources Conservation Service, and ND County Extension Service.

1. Richland County Soil Conservation District (RCSCD) – The lead project sponsor is the RCSCD. The ND State Health Department will hold a Contract with the district. Land use assessment, BMP implementation (demonstration sites), project administration, computer entry, landowner contacts, water sampling, and water quality education will be the responsibility of the district.
2. USDA Natural Resources Conservation Service (NRCS) – The NRCS will provide day to day assistance in conservation planning, plan writing, contract writing, and technical assistance for construction and installation of planned BMPs. NRCS personnel will conduct quality review and compliance checks of BMPs that are designed by NRCS personnel. Local NRCS personnel will provide approved BMP standards and specifications from the NRCS technical guide. Standards and Specifications for approved BMPs will be provided by local NRCS personnel from the NRCS Technical Guide. Environment Quality Incentive Program funds will also be available in limited amounts. (NRCS will

provide assistance by facilitating local involvement and participating in educational outreach programs during the project period. An annual review will be conducted with ASTC (FO), DC, and the SCD to reconfirm and acknowledge NRCS's ability to commit to the project). Letter of support submitted.

3. North Dakota Department of Health (NDDH) – The NDDH will oversee 319 funding as well as provide training for proper water quality sample collection, preservation, and transportation to ensure reliable data is obtained. The NDDH will provide the sponsor oversight to ensure proper management and expenditures of Section 319 funds. They will assist NRCS and the Richland SCD personnel in review of O & M requirements for Section 319 funded BMP's.
4. The Richland County Health Department is responsible for issuing permits for installation of on-site septic systems. In June 2010 The Richland County Commission adopted an ordinance providing rules and regulations pertaining to the installation of residential on-site sewage systems. In reference to section VI of the Rules and Regulations governing the installation and use of on-site sewage disposal systems for Richland County, North Dakota. **“No person, firm, or corporation shall install, alter, repair, or extend any individual on-site sewage system in the county without first obtaining a permit from the designated officer.”** Letter of support submitted.
5. North Dakota Cooperative Extension Service (EXT) – To complement the project's information and education activities, local and state Extension personnel will contribute in-kind assistance. This will entail workshops and field tours. The specific role of EXT will be dependent on the type of information/education activity being implemented and availability of staff and materials.
6. Richland County Commission – The Richland County Commission will advisory input as well as promote the project. Letter of support submitted.
7. Richland County Water Resource Board (WRB) – Richland Water Resource Board will be involved in the project by acting as advisors. Richland WRB will contribute Technical assistance for the project and also promote the project in Richland County. Letter of support submitted
8. Outdoor Heritage Fund (OHF) – Additional funds have been leveraged from the OHF to install water quality improvements and streambank stabilization projects. \$105,000 have been secured for projects in Richland County.
9. North Dakota Game & Fish Department (NDG&F) - Technical assistance will be provided to the project.

10. Sargent County Wild Rice River Watershed project-The Sponsor will provide a minimum of \$175,000 Technical and “in-kind support” to the project. The Wild Rice SCD is the sponsor of the CCSP farm and is responsible for the administration and coordination of the project. The purpose of the CCSP farm is to educate producers and the general public on BMP practices to improve water quality and sustain the natural resource base. The sponsors of the Antelope Creek and Wild Rice Corridor 319 Project will work cooperatively with the CCSP farm to educate producers in both project areas on applicable BMP alternatives.
 11. Farm Services Agency (FSA) – Programs available through FSA will be pursued for cost share assistance.
 12. US Fish and Wildlife (USF&W) – Programs and technical assistance available through USF&W will be pursued for project assistance.
 13. International Water Institute (IWI) - Developed Water Quality Decision Support System (WQDSS) to help assist with prioritizing water quality improvement projects. IWI staff has assisted with training the watershed coordinator.
- 4.2 Letters of support are on file at the Richland County Soil Conservation District office. A list of those submitting letters of support can be found in Appendix 4.

5.0 EVALUATION AND MONITORING PLAN

The Quality Assurance Project Plan (QAPP) dated April 2013 will be followed for Phase III. If any revisions are needed for Phase III they will be written by the ND Department of Health.

6.0 BUDGET

- 6.1 See Appendix 1 for Budget Table Part 1 & 2.

7.0 PUBLIC INVOLVEMENT

- 7.1 The community will be informed of project updates and cost share opportunities in our semiannual newsletter and the Richland Soil Conservation District website. www.richlnadscd.com

Appendix 1

Budget Table Part 1

Budget Table Part 2

Best Management Practices (BMP's)

ANTELOPE CREEK WATERSHED AND THE RIPARIAN CORRIDOR OF THE WILD RICE RIVER IMPLEMENTATION PROJECT BUDGET TABLE FOR PHASE III						
PART 1: FUNDING SOURCES	2015	2016	2017	2018	2019	TOTAL
EPA SECTION 319 FUNDS						
1) FY15 319 Funds (FA)	\$ 100,600	\$ 100,600	\$ 100,600	\$ 100,600	\$ 100,600	\$ 503,000
Subtotals	\$ 100,600	\$ 100,600	\$ 100,600	\$ 100,600	\$ 100,600	\$ 503,000
OTHER FEDERAL FUNDS						
1) NRCS (TA)	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 25,000
2) NRCS EQIP (FA)	\$ 341,000	\$ 341,000	\$ 341,000	\$ 341,000	\$ 341,000	\$ 1,705,000
3) FSA (FSA-CRP)	\$ 38,000	\$ 38,000	\$ 38,000	\$ 38,000	\$ 38,000	\$ 190,000
4) State NDDH (200 samples/year: TSS, E. coli, Nutrient)	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 50,000
5) United States Fish and Wildlife (TA)	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 5,000
Subtotals	\$ 395,000	\$ 395,000	\$ 395,000	\$ 395,000	\$ 395,000	\$ 1,975,000
STATE/LOCAL MATCH						
1) Local SCD (FA)	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 2,500	\$ 12,500
2) Outdoor Heritage Fund Grant (OHF) (FA)	\$ 26,250	\$ 26,250	\$ 26,250	\$ 26,250	\$ -	\$ 105,000
3) Local SCD (TA)	\$ 14,100	\$ 14,100	\$ 14,100	\$ 14,100	\$ 14,100	\$ 70,500
4) Cooperative Extension (TA)	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 1,500	\$ 7,500
5) Richland County Commissioners (TA)	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 4,500	\$ 22,500
6) Richland County Water Resource Board (TA)	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 75,000
7) Sargent County EPA-319 (TA-"in-kind support")	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 35,000	\$ 175,000
8) Richland County Participating Producers (FA)	\$ 38,186	\$ 38,187	\$ 38,187	\$ 38,187	\$ 38,187	\$ 190,934
Subtotals	\$ 137,036	\$ 137,037	\$ 137,037	\$ 137,037	\$ 110,787	\$ 658,934
TOTAL BUDGET	\$ 632,636	\$ 632,637	\$ 632,637	\$ 632,637	\$ 606,387	\$ 3,136,934

FA = Financial Assistance
TA = Technical Assistance
FSA = Farm Services Agency
NDDH = North Dakota Department of Health Dept.
SCD = Soil Conservation District
NRCS = Natural Resources Conservation Service

ANTELOPE CREEK WATERSHED AND THE RIPARIAN CORRIDOR OF THE WILD RICE RIVER IMPLEMENTATION PROJECT									
BUDGET TABLE FOR PHASE III									
PART 2: Section 319 / Non-Federal Budget Funds		2015	2016	2017	2018	2019	TOTAL	FUNDING	
								Cash/InKind Match	319 Cost Share
OBJECTIVE A: Employee staff									
1) Salary/Fringe - Watershed Coordinator (2015 1040 hrs; full-time : 2080 hrs/ year)		\$ 26,500	\$ 51,000	\$ 52,800	\$ 54,600	\$ 56,400	\$ 241,300	\$ 96,520	\$ 144,780
2) Salary/Fringe - Admin. Assistant (part-time : 240 hrs/year)		\$ 2,600	\$ 4,625	\$ 4,800	\$ 4,975	\$ 5,150	\$ 22,150	\$ 8,860	\$ 13,290
3) Travel - Mileage		\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 8,500	\$ 42,500	\$ 17,000	\$ 25,500
4) Equipment/Supplies (\$30/mo.)		\$ 360	\$ 360	\$ 360	\$ 360	\$ 360	\$ 1,800	\$ 720	\$ 1,080
5) Training (4 training sessions/yr.)		\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 2,500	\$ 1,000	\$ 1,500
1) Equipment costs (ie.meters,gauges,etc.)		\$ 500	\$ 500	\$ 500	\$ 500	\$ 500	\$ 2,500	\$ 1,000	\$ 1,500
2) Sample Transportation (coolers, postage, tape, etc.)		\$ 800	\$ 800	\$ 800	\$ 800	\$ 800	\$ 4,000	\$ 1,600	\$ 2,400
3) Land Use Inventory (Computer Hardware & Software)		\$ 4,000	\$ 500	\$ 500	\$ 500	\$ 500	\$ 6,000	\$ 2,400	\$ 3,600
6) Telephone/Postage (12/mo @ \$100/mo.)		\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 1,200	\$ 6,000	\$ 2,400	\$ 3,600
Subtotals		\$ 44,960	\$ 67,985	\$ 69,960	\$ 71,935	\$ 73,910	\$ 328,750	\$ 131,500	\$ 197,250
OBJECTIVES B: Reduce E. coli concentrations									
1) Livestock manure management		\$ 22,000	\$ 22,000	\$ 22,000	\$ 22,000	\$ 22,000	\$ 110,000	\$ 44,000	\$ 66,000
2) Septic System Replacement		\$ 52,200	\$ 52,200	\$ 52,200	\$ 52,200	\$ 52,200	\$ 261,000	\$ 104,400	\$ 156,600
Subtotals		\$ 74,200	\$ 74,200	\$ 74,200	\$ 74,200	\$ 74,200	\$ 371,000	\$ 148,400	\$ 222,600

ANTELOPE CREEK WATERSHED AND THE RIPARIAN CORRIDOR OF THE WILD RICE RIVER IMPLEMENTATION PROJECT
PART 3: Selected Best Management Practices (BMPs)

Land Use Code	NRCS Code	Practice	No.	Acres	Linear Feet (LF)	Rate	TOTAL	FUNDING		
								Cost-share Rate	Total Costs	319 Cost Share
4	313	Ag Waste System	1			\$ 54,000.00	\$ 54,000	60%	\$ 21,600	\$ 32,400
4		Partial Manure Management Systems	2			\$ 18,000.00	\$ 36,000	60%	\$ 14,400	\$ 21,600
1	340	Cover Crop (seed cost only)		1,900		\$ 20.00	\$ 38,000	60%	\$ 15,200	\$ 22,800
2, 3, 4	382	Fencing			1,506	\$ 1.35	\$ 2,033	60%	\$ 813	\$ 1,220
1	393	Filter Strip		100		\$ 125.00	\$ 12,500	60%	\$ 5,000	\$ 7,500
1	410	Grade Stabilization Structure	3			\$ 2,000.00	\$ 6,000	60%	\$ 2,400	\$ 3,600
1	412	Grassed Waterway		0	1,000	\$ 25.00	\$ 25,000	60%	\$ 10,000	\$ 15,000
1	590	Nutrient Management		400		\$ 27.00	\$ 10,800	60%	\$ 4,320	\$ 6,480
3	550	Range Planting (seeding)		180		\$ 40.00	\$ 7,200	60%	\$ 2,880	\$ 4,320
4		Septic System Renovation	29			\$ 9,000.00	\$ 261,000	60%	\$ 104,400	\$ 156,600
4	584	Stream Channel Stabilization			600	\$ 10.00	\$ 6,000	60%	\$ 2,400	\$ 3,600
4	580	Streambank & Shoreline Protection			600	\$ 10.00	\$ 6,000	60%	\$ 2,400	\$ 3,600
2, 3	614	Trough & Tank	2			\$ 1,000.00	\$ 2,000	60%	\$ 800	\$ 1,200
1,4	351	Well Decommissioning	12			\$ 900.00	\$ 10,800	60%	\$ 4,320	\$ 6,480
		SUBTOTALS	49	2,580	3,706		\$ 477,333		\$ 190,933	\$ 286,400

Land Use Codes: 1 = Cropland 2 = Pasture Hayland 3 = Rangeland 4 = Farmstead/Misc

Livestock \$ 110,000 \$ 66,000
 Septic \$ 261,000 \$ 156,600
 Buffer \$ 106,333 \$ 63,800
 \$ 477,333 \$ 286,400

Appendix 2

Milestone Table

MILESTONE TABLE FOR ANTELOPE CREEK
WATERSHED AND THE RIPARIAN CORRIDOR OF THE
WILD RICE RIVER IMPLEMENTATION PROJECT
PHASE III

GOALS FOR THE PROJECT:

The primary goal of the project is to restore the recreational uses of the impaired reaches of Antelope Creek and the Wild Rice River to fully supporting status. As a secondary goal, the project will also protect and enhance the aquatic life use of Antelope Creek and the Wild Rice River through targeted implementation of BMP's within or immediately adjacent to the riparian corridor.

The following partners provide assistance on the tasks under each objective listed on this table:

- Group 1 - Natural Resources Conservation Service - Provide technical assistance for developing and carrying out the project.
- Group 2 - Richland Co. Soil Conservation District - Assist in providing guidance documents, training, and local program management.
- Group 3 - Richland Co. Water Resource Boards - Assist in providing guidance on water resource issues within the county and to promote.
- Group 4 - Richland Co. Commissioners - Assist in coordinating and promoting the project within the county.
- Group 5 - North Dakota State Health Department - Section 319 program management including oversight of 319 planning and expenditures.
- Group 6 - North Dakota Game & Fish - Provide technical assistance for developing and carrying out the project.

TASK/RESPONSIBLE ORGANIZATIONS	QTY	2015	2016	2017	2018	2019
OUTPUT						

Objective A: Hire staff to provide one-on-one conservation planning assistance to producers.

1
Watershed
Coordinator
&Admin Assistant

Group 4 - Richland Co. Commissioners
Group 5 - North Dakota State Health Department
Group 6 - North Dakota Game & Fish

MILESTONE TABLE

OBJECTIVE A

MILESTONE TABLE FOR ANTELOPE CREEK WATERSHED AND THE RIPARIAN CORRIDOR OF THE WILD RICE RIVER IMPLEMENTATION PROJECT									
TASK/RESPONSIBLE ORGANIZATIONS		OUTPUT	QTY	2015	2016	2017	2018	2019	
Objective B: Reduce the <i>E. coli</i> bacteria concentrations at established monitoring sites to an annual geometric mean concentrations of less than 126 CFU/100 mL and less than 10% of the samples exceeding 409 CFU/100 mL.									
Task 2 - Provide financial and technical assistance to producers to plan and install BMP's that will improve management on livestock feeding areas. Group # 1, 2, 5	1 Ag Waste Sytem 2 Partial Manure Management system	On-going							
Task 3 - Conduct follow up contacts to assist with conservation plan updates and monitor O & M of Section 319 cost shared practices. NRCS personnel will conduct quality review and compliance checks of BMPs that are designed by NRCS personnel. Local NRCS personnel will provide approved BMP standards and specifications from the NRCS technical guide. Group # 1, 2	Database of BMPs applied	On-going							
Task 4 - Utilize the Wild Rice River Watershed Water Quality Decision Support System to further define the high priority areas in the watershed. Group # 2,5	Map of Priority areas	On-going							
Task 5 - Work with homeowners to identify septic systems that would be eligible for cost share under the guidelines for NPS pollution control best management practices. Group # 2, 5	Conduct one on one meeting with homeowners to establish if they qualify	On-going							
Task 6 - Coordinate the repair and/or replacement of 29 septic systems and assist homeowner to get required permit (On-site sewage disposal permit) thru the Richland County Health Department. These on-site sewage systems need to be located within one mile of the major waterways in Richland County. These waterways include: Antelope Creek and its tributaries, Wild Rice River and its tributaries, Bois de Sioux River and Red River. Group # 2, 5	Upgrade 29 Septic Systems	29							
Group 1 - Natural Resources Conservation Service		Group 4 - Richland Co. Commissioners							
Group 2 - Richland Co. Soil Conservation District		Group 5 - North Dakota State Health Department							
Group 3 - Richland Co. Water Resource Boards		Group 6 - North Dakota Game & Fish							

IMPLEMENTATION PROJECT
PHASE III

MILESTONE TABLE

OBJECTIVE B

MILESTONE TABLE FOR ANTELOPE CREEK WATERSHED AND THE RIPARIAN CORRIDOR OF THE WILD RICE RIVER IMPLEMENTATION PROJECT								
TASK/RESPONSIBLE ORGANIZATIONS	OUTPUT	QTY	2015	2016	2017	2018	2019	
Objective C: <i>Improve the vegetative condition of the riparian corridor as well as the buffering capabilities of adjacent cropland along 6 miles of the Antelope Creek and the Wild Rice River.</i>								
Task 7 - Provide financial and technical assistance to producers/landowners to stabilize degraded riparian areas and establish annual (ie. Cover Crops) or perennial vegetative buffers on acres immediately adjacent to the creek or river. Group # 1, 2, 5	1900 acres of cover crop - 600 feet of streambank and shoreline protection - 1000 feet of grassed waterway	On-going						
Group 1 - Natural Resources Conservation Service								
Group 2 - Richland Co. Soil Conservation District								
Group 3 - Richland Co. Water Resource Boards								
Group 4 - Richland Co. Commissioners								
Group 5 - North Dakota State Health Department								
Group 6 - North Dakota Game & Fish								

IMPLEMENTATION PROJECT
PHASE III

MILESTONE TABLE

OBJECTIVE C

MILESTONE TABLE FOR ANTELOPE CREEK WATERSHED AND THE RIPARIAN CORRIDOR OF THE WILD RICE RIVER IMPLEMENTATION PROJECT								
TASK/RESPONSIBLE ORGANIZATIONS	OUTPUT	QTY	2015	2016	2017	2018	2019	
Objective D: Increase the public understanding of the impacts of NPS pollution and potential solutions to NPS problems.								
Task 8 - Organize and conduct scheduled I/E events focusing on NPS pollution control within agricultural areas and coordinate them with ongoing state/federally sponsored I/E programs. Group # 1, 2, 3, 4, 6	1 meetings with cattle producers, cover crop tour and NDSU Extension salinity meetings	15 meetings						
Task 9 - Prepare newsletter articles and/or direct mailings to local land users, general public, and media to promote the project and disseminate information on water quality and NPS pollution control. Group # 1, 2	2 newsletters per year. Articles in local media when needed	10						
Task 10 - Complete annual and final project reports to update the GRTS. These will be provided NDDH, EPA and all sponsors and interested individuals. Group # 2	Annual progress reported each year and final report	5						
Task 11 - Continue partnering with Wild Rice SCD to operate the CCSP demonstration farm to increase producer awareness of feasible cropland management options that will reduce erosion, improve soil health; minimize nutrient inputs; diversify crop rotations and protect water quality in Wild Rice watershed. Group # 2	Assist with annual field day, have 2 Richland County residents serve as board members on CCSP board	On-going						
Group 1 - Natural Resources Conservation Service	Group 4 - Richland Co. Commissioners							
Group 2 - Richland Co. Soil Conservation District	Group 5 - North Dakota State Health Department							
Group 3 - Richland Co. Water Resource Boards	Group 6 - North Dakota Game & Fish							

IMPLEMENTATION PROJECT
PHASE III

MILESTONE TABLE

OBJECTIVE D

Appendix 3

Antelope Creek Survey Results
Wild Rice River Survey Results

2010 Antelope Creek Watershed Survey

Hello, my name is Jennifer Klostreich and I am sending this survey out on behalf of the Richland County Soil Conservation District. We are conducting a brief survey on the Antelope Creek Watershed. This survey will be used to compile information to renew a grant that was obtained by Richland County in 2006. By you filling out this survey the district will be able to serve you better in the future. This survey should only take a few minutes to complete and we would appreciate your input. ***Please reply by April 1, 2010.***

This survey is targeted for people living in Antelope Creek Watershed. A watershed is defined as an area of land that drains to a common waterway, in this case the Antelope Creek.

1. To what extent does the public have an obligation to protect water quality for future generations?

a. Quite a bit	55	76%
b. Somewhat	15	20%
c. Only a little	1	1%
d. Not at all	0	0%
e. Don't know	1	1%

2. To what extent is the quality of your water affected by people who live upstream from you?

a. Quite a bit	24	32%
b. Somewhat	35	47%
c. Only a little	6	8%
d. Not at all	2	2%
e. Don't know	7	9%

3. In your opinion, how polluted is the Antelope Creek and its tributaries?

a. Very polluted	2	2%
b. Somewhat polluted	26	35%
c. Not very polluted	30	40%
d. Not at all polluted	5	6%
e. Don't know	11	14%

4. Would you say that the Antelope Creek Watershed is more polluted; less polluted or about the same as it was 25 years ago?

a. More	16	21%
b. Less	17	23%
c. About the same	23	31%
d. Don't know	17	23%

5. How concerned are you about whether the Antelope Creek Watershed is polluted?

a. Very concerned	12	16%
b. Somewhat concerned	38	52%
c. Not very concerned	16	22%
d. Not at all concerned	4	5%
e. Don't know	2	2%

6. Water quality in the Antelope Creek Watershed is most influenced by which of the following?
(Choose only one)

a. Farming practices adjacent to the creek	38	52%
b. Water levels in wet or dry years	26	35%
c. Runoff from animal waste	4	5%
d. Runoff from city streets and storm sewers	4	5%
e. Other (Please Specify)_____	1	1%

7. What is the greatest threat to water quality in the Antelope Creek Watershed?
(Choose only one)

a. Agricultural activities	55	68%
b. Urban Residential activities	4	5%
c. Industrial/Commercial activities	1	1%
d. Don't know	8	10%
e. Other (Please specify)	4	5%

Comment: flooding in the springs, runoff – a lot is paper and pop cans, wood(finished), Styrofoam cups, wild animal waste.

7a. If your answer is **a. Agricultural activities**, which of the following represents the greatest threat within this category? (Choose only one)

a. erosion	27	41%
b. fertilizers	9	13%
c. pesticides/herbicides	20	30%
d. animal feeding operations	6	9%
e. don't know	3	4%
f. other (please specify) _____		

7b. If your answer is **b. Urban activities**, which of the following represents the greatest threat within this category? (Choose only one)

a. lawn chemicals	3	20%
b. construction sites	1	1%
c. runoff from street and parking lots	6	40%
d. don't know	5	33%
e. other (please specify)		

7c. If your answer is **c. Industrial/Commercial activities**, which of the following represents the greatest threat within this category? (Choose only one)

a. chemical/fuel storage tanks	1	1%
b. industrial wastes	3	30%
c. municipal wastes	2	20%
d. don't know	4	40%
e. other (please specify)_____		

8. Who do you think should be most responsible for MAKING DECISIONS about cleaning up the Antelope Creek Watershed?

a. Local residents	32	23%
b. Local government	23	16%
c. State government	10	7%
d. Federal government	0	0%
e. Someone else (Please specify)_____	1	1%
f. Don't now	8	5%

9. To what extent would you be willing to adopt conservation practices if you knew that it would help improve water quality in the Antelope Creek Watershed?

a. Very willing	15	21%
b. Somewhat willing	30	42%
c. Neutral	21	29%
d. Not at all	3	4%
e. Don't know	2	2%

10. Who do you contact first for technical advice regarding implementing conservation practices on your land? (Choose only one)

a. Private firms (such as co-ops or seed dealers)	9	15%
b. Local soil conservation district	25	41%
c. Government sources	0	0%
d. Friends and neighbors	10	16%
e. Someone else (Please specify)_____	1	1%
f. Don't know	15	25%

Comments: Clean up the ditches – trash garbage along County Road 10, cars and trucks throw all there trash out the vehicle window.

11. How helpful is the technical advice that you received (from Q 10) about conservation practices?

a. Very helpful	10	18%
b. Somewhat helpful	28	51%
c. Not very helpful	1	1%
d. Not at all helpful	1	1%
e. Don't know	14	25%

12. Are you aware of the Antelope Creek Watershed Project and its efforts to deal with water quality problems in the Antelope Creek Watershed?

a. Yes	17	24%
b. No	51	72%
c. Don't know	2	2%

13. In your opinion, how can the Antelope Creek Watershed Project be more successful to assist landowners/producers/residents to improve water quality in the Antelope Creek Watershed?

a. Provide more technical assistance	6	8%
b. Provide more funding for cost share and incentive payments	13	17%
c. Provide more information to the public	41	55%
d. Don't know	9	12%
e. Other (Please specify) _____	5	6%

Comments:

Quit dredging and destroying beaver dams.

Learn to understand drain tile.

Provide information to us living in the area.

Larger culverts to get the watershed to shed water.

Provide technical assistance & cost share.

14. In your opinion, what is the best way to communicate efforts to protect water quality in the Antelope Creek Watershed?

a. Public meetings	19	25%
b. Informational workshops	5	6%
c. Newsletters/mailings	49	64%
d. Newspaper articles	2	2%
e. Television or radio ads	1	1%

15. Do you currently own or operate a farm in which you make or share in farming decisions?

1. Yes	43	61%
2. NO – OR NOT CURRENTLY AN ACTIVE FARMER	27	38%

16. Please describe where you live.

a. Farm	52	72%
b. Rural Non-Farm	20	27%
c. Small Town		

17. How many years have you lived in the area?	0-20	10	13%
	21-40	18	25%
	41-60	25	34%
	61-80	15	20%
	81-100	4	5%
	100+	0	0%

18. How many years have your parents or grandparents lived in the area?	0-20	11	16%
	21-40	1	1%
	41-60	2	3%
	61-80	15	22%
	81-100	19	28%
	100+	18	27%

Thank you for taking the time to complete this questionnaire. It is our intent to make this process as user-friendly as possible. With this in mind, we would welcome any comments and/or recommendations you might have. Please provide comments in the space below if you would like to comment:

NO - 61	84%
YES - 11 gave comment on the survey	15%

If you are interested in getting more information on conservation practices that could improve water quality in Richland County please contact the Richland Soil Conservation District at 701-642-5997 ex 3 or fill out your return address information below and the office will contact you in the near future.

NO - 60	83%
YES – 12 gave name on survey	16%

Comments: (These are actual statements that were taken word for word off of surveys that were returned.)

- Seems like all the Antelope Creek has turned into is a drainage ditch.
- Runoff to fast into it.
- Drain tile is the best conservation item for stopping soil erosion and dirty surface water runoff. Drain tile water is so clean, it actually cleaner than most 3rd world countries water supply. We must all put drain tile in the ground to slow down the water runoff. This is by far the best flood mitigation method available for the Red River Valley. Everyone must see the drain tile DVD if you're all serious in solving the problem.
- Plan for water leaving area to be like what you would want coming into your area.
- There are some sections of the creek that people throw garbage into. Car batteries ect.
- I've lived here 4 years (need watershed to work better so-we-don't get overland flooding again!!! If that's a concern, nobody has said anything or asked until now. We live here; it's our choices that impact us. Usually advice is talk to soil conservation.
- Most people in my area trying to protect the Antelope Creek but the overland and creek flooding has been a real problem.
- I perceive people blaming Ag, what agriculture does to the river can't really be seen except for the dirt, when you walk it- its garbage-paper, cans, bottles, boards, some animal waste, trees fallen.
- I believe there is less chemical pollution that there was years ago, but there are more sand and silt pollution because of so many abnormally wet years.
- Make the farmers leave the ditches alone and reseed them to grass. It is really simple make the fines stiff enough so that they will leave them in grass.
- We are currently planning on updating our septic system this summer.
- The concern we have is the flooding gets worse every year I don't think the farmers should be able to ditch their fields as much as they do.
- Should stop all excess run off from other counties, like from the Wyndmere, Barney. The 46 years that I lived by the creek, I have never see the banks getting washed out, then they have the last 8-10 year I lived here. If you got money, that's what gets your water off the land to farm, but don't look at the long run of what it's doing to creek banks and other dirt from fields getting washed off.

2010 Wild Rice Corridor Watershed Survey

Hello, my name is Jennifer Klostreich and I am sending this survey out on behalf of the Richland County Soil Conservation District. We are conducting a brief survey on the Wild Rice Corridor Watershed. This survey will be used to compile information to renew a grant that was obtained by Richland County in 2006. By you filling out this survey the district will be able to serve you better in the future. This survey should only take a few minutes to complete and we would appreciate your input. ***Please reply by April 1, 2010.***

This survey is targeted for people living in Wild Rice Watershed. A watershed is defined as an area of land that drains to a common waterway, in this case the Wild Rice River.

8. To what extent does the public have an obligation to protect water quality for future generations?

a. Quite a bit	74	79%
b. Somewhat	14	15%
c. Only a little	2	2%
d. Not at all	0	0%
e. Don't know	3	3%

9. To what extent is the quality of your water affected by people who live upstream from you?

a. Quite a bit	48	53%
b. Somewhat	32	35%
c. Only a little	5	5%
d. Not at all	1	1%
e. Don't know	4	4%

10. In your opinion, how polluted is the Wild Rice River and its tributaries?

a. Very polluted	17	18%
b. Somewhat polluted	39	42%
c. Not very polluted	26	28%
d. Not at all polluted	3	3%
e. Don't know	7	7%

11. Would you say that the Wild Rice River Watershed is more polluted; less polluted or about the same as it was 25 years ago?

a. More	40	43%
b. Less	9	9%
c. About the same	27	29%
d. Don't know	15	16%

12. How concerned are you about whether the Wild Rice River Watershed is polluted?

a. Very concerned	34	34%
b. Somewhat concerned	48	52%
c. Not very concerned	7	7%
d. Not at all concerned	3	3%
e. Don't know		

13. Water quality in the Wild Rice River Watershed is most influenced by which of the following?
(Choose only one)

- | | | |
|--|----|-----|
| a. Farming practices adjacent to the creek | 41 | 45% |
| b. Water levels in wet or dry years | 29 | 32% |
| c. Runoff from animal waste | 11 | 12% |
| d. Runoff from city streets and storm sewers | 9 | 10% |
| e. Other (Please Specify) | | |
| -Dead Cows in River | | |
| -Erosion to much water river can't handle it. The river has eroded more in the last 10 year than it's existence. | | |
| -People coming out from town and dumping there crap in the river. | | |
| -Drains coming from miles away | | |
| -drainage leading into the river from farmland | | |
| -Silt | | |
| -Water from South Dakota | | |

14. What is the greatest threat to water quality in the Wild Rice River Watershed?
(Choose only one)

- | | | |
|-------------------------------------|----|-----|
| a. Agricultural activities | 58 | 61% |
| b. Urban Residential activities | 5 | 5% |
| c. Industrial/Commercial activities | 9 | 9% |
| d. Don't know | 18 | 18% |
| e. Other (Please specify) | 5 | 5% |

Comments:

- Flooding(silt)
- Silt, chemicals, and fertilizers
- excess drainage
- overland flooding
- flooding & erosion

7a. If your answer is **a. Agricultural activities**, which of the following represents the greatest threat within this category? (Choose only one)

- | | | |
|------------------------------|----|-----|
| a. Erosion | 27 | 37% |
| b. Fertilizers | 11 | 15% |
| c. pesticides/herbicides | 24 | 33% |
| d. animal feeding operations | 6 | 8% |
| e. don't know | 3 | 4% |
| f. other (please specify) | 1 | 1% |

- To much drainage. I know of 2 cattle operations that in the spring the River runs right through their cattle yard and washes away all the animal waste.
- ditching and drain wetland

7b. If your answer is **b. Urban activities**, which of the following represents the greatest threat within this category? (Choose only one)

- | | | |
|-----------------------|---|-----|
| a. lawn chemicals | 4 | 44% |
| b. construction sites | 0 | 0% |

c. runoff from street and parking lots	2	22%
d. don't know	2	22%
e. other (please specify)	1	11%
-Farm chemical and ditching		

7c. If your answer is **c. Industrial/Commercial activities**, which of the following represents the greatest threat within this category? **(Choose only one)**

a. chemical/fuel storage tanks	1	8%
b. industrial wastes	9	69%
c. municipal wastes	2	15%
d. don't know	1	8%
e. other (please specify)		

8. Who do you think should be most responsible for MAKING DECISIONS about cleaning up the Wild Rice Watershed?

a. Local residents	22	21%
b. Local government	38	37%
c. State government	22	21%
d. Federal government	6	6%
e. Someone else (Please specify)	3	3%
f. Don't know	13	13%

Comment – (b, c, d) - All are responsible for letting the water flow get out of hand.

-Everyone working together

9. To what extent would you be willing to adopt conservation practices if you knew that it would help improve water quality in the Wild Rice River Watershed?

a. Very willing	36	40%
b. Somewhat willing	38	42%
c. Neutral	15	17%
d. Not at all	0	0%
e. Don't know	1	1%

10. Who do you contact first for technical advice regarding implementing conservation practices on your land? **(Choose only one)**

f. Private firms (such as co-ops or seed dealers)	3	3%
g. Local soil conservation district	59	64%
h. Government sources	5	5%
i. Friends and neighbors	10	11%
j. Someone else (Please specify)	2	2%
k. Don't know	13	14%

Comment -Research on own from books and magazines

11. How helpful is the technical advice that you received (from Q 10) about conservation practices?		
a. Very helpful	25	28%
b. Somewhat helpful	41	46%
c. Not very helpful	6	7%
d. Not at all helpful	0	0%
e. Don't know	18	20%

12. Are you aware of the Wild Rice River Watershed Project and its efforts to deal with water quality problems in the Wild Rice River Watershed?		
a. Yes	28	31%
b. No	54	60%
c. Don't know	8	9%

13. In your opinion, how can the Wild Rice Watershed River Project be more successful to assist landowners/producers/residents to improve water quality in the Wild Rice River?		
a. Provide more technical assistance	5	5%
b. Provide more funding for cost share and incentive payments	31	31%
c. Provide more information to the public	52	53%
d. Don't know	9	9%
e. Other (Please specify)	2	2%

Comment - Stop farmers from trenching

-Someone with some common sense when it comes to draining into the Wild Rice River all the water that ends up in the river it can't handle no more.

- Enforce drainage laws and permits enforce regulations that ends up in the Wild Rice River.

14. In your opinion, what is the best way to communicate efforts to protect water quality in the Wild Rice River Watershed?		
a. Public meetings	22	17%
b. Informational workshops	36	28%
c. Newsletters/mailings	58	45%
d. Newspaper articles	6	5%
e. Television or radio ads	8	6%

Comment: -stop draining into the river

15. Do you currently own or operate a farm in which you make or share in farming decisions?		
1. Yes	44	48%
2. NO – OR NOT CURRENTLY AN ACTIVE FARMER	47	52%

16. Please describe where you live.		
a. Farm	51	57%
b. Rural Non-Farm	36	40%
c. Small Town	2	2%

17. How many years have you lived in the area?	0-20	28	31%
	21-40	19	21%
	41-60	31	34%
	61-80	10	11%
	81-100	3	3%
	100+		

18. How many years have your parents or grandparents lived in the area?	0-20	10	14%
	21-40	1	1%
	41-60	3	4%
	61-80	11	46%
	81-100	18	26%
	100+	27	39%

Thank you for taking the time to complete this questionnaire. It is our intent to make this process as user-friendly as possible. With this in mind, we would welcome any comments and/or recommendations you might have. Please provide comments in the space below if you would like to comment:

NO - 71 77%
YES - 20 22%

If you are interested in getting more information on conservation practices that could improve water quality in Richland County please contact the Richland Soil Conservation District at 701-642-5997 ex 3 or fill out your return address information below and the office will contact you in the near future.

NO – 72 79%
YES – 19 21%

Comments: (These are actual statements that were taken word for word off of surveys that were returned.)

- River needs to be cleaned out. Trees and also where banks have fallen down. Example West of Mantador low water River is trickling instead of draining empty.
- Also need to contact on clean a ditch on the Ted Mertes Farm in Section 7 Belford. Project was done in the 1980's and with high water haven't been able to keep it mowed so it is starting to erode on edges.
- Our big concern on the farm is the erosion caused by flood water racing through our west grassy ravine and the river bank that takes more land every flood year. We have to have someone look at the problem. But who?
- Decisions must be local and beneficial to as many as possible without putting undue restrictions on the people. Keep the Fed out of it.
- We need to slow down the runoff from spring flood and also heavy rains in the area. We need some controls such as a dam on the Wild Rice River system.
- Somebody please stop land trenching. Not so much water quality, but sick of floods from land run off.
- People feeding and watering their cattle out of Wild Rice River.
- The river has too much water being drained into it. It needs to be slowed up with dams controlled drainage "Inforced" There is way too much erosion going on because of too much water, slow that up and the rest will take care of its self.
- Tell the people from the cities to dump their washers and dryers and other crap in their own dump not our rivers (**yes, there is stuff like this in the river**)
- Would like to see an impact report on the proposed dam in Danton Township
- Check on Dale Johnson Moving place, garbage dump on River Bank.
- I would like to see more control over farmers ditching and draining every pot hole and more living now fences.
- Filtering run off would help most, along with updating sewers - septic systems.
- I/we don't feel the pollution is as big of a concern as is the amount of water that is drained into the WR River. Filtering and controlling water flow is a major concern all year long.
- Some control should be put on existing drains.
- I would like to see drainage water slowed down. It runs off too fast causing erosion and washouts.
- The definition of polluted is open to interpretation. It is a very broad term!
- Our biggest concern currently is the overland flooding that has happened way too often lately.
- No Dam.
- Who's responsible for letting all the drainage? Because of all the drainage that's been done over last 25 years.

Appendix 4

Letters of Support

- **USDA Natural Resources Conservation Service**
- **Fargo Cass Public Health**
- **Richland County Administration (Commission)**
- **Southeast Water Users**
- **Richland County Water Resource District**



United States Department of Agriculture

Natural Resources
Conservation Service

Wahpeton Field Office
1687 Bypass Road
Wahpeton, ND 58075

Phone: 701-642-5997
Fax: 855-813-7554

September 29, 2014

Jennifer Klostreich
Watershed Coordinator
Richland County Soil Conservation District
1687 Bypass Road
Wahpeton, ND 58075

Dear Ms. Klostreich,

Your application for Phase III of the Antelope Creek Wild Rice River Corridor Project is within the scope of our NRCS mission; to help private agriculture landowners put conservation practices on the ground through a voluntary approach.

Your goals for water quality improvements and soil reduction efforts through BMP's such as Well Decommissioning, Streambank Restoration, Filter Strips, Grade Stabilization Structures, Cover Crops, and replacement of existing Septic Systems will conserve the natural resources in Richland County and beyond.

The Wahpeton NRCS Field Office is in full support of your application for Phase III of the Antelope Creek Wild Rice River Corridor Project. This project will continue the partnership that we have to assist the producers in Richland County, will continue the continuity that we have developed to provide financial resources to these producers, and will allow both of our agencies to expand the reach and depth of conservation.

A handwritten signature in blue ink, reading "Val Hartman", is positioned above the typed name.

Val Hartman
Acting District Conservationist

CC: Brent Gustafson, ASTC (FO) Jamestown Area Office



FARGO CASS PUBLIC HEALTH
401 Third Avenue North
Fargo, ND 58102
Phone 701-241-1360
Fax 701-241-8559
www.cityoffargo.com/health

September 15th, 2014

To Whom It May Concern:

RE: Jennifer Klostreich
Watershed Coordinator
1687 Bypass Road
Wahpeton, ND 58075

I have worked in the same field with Jennifer Klostreich for the last eight years. She has reached out to the citizens of Richland County by bringing forth her knowledge of on- site septic systems. With the grant that she works under Richland County has benefited by replacing failing septic systems that drained into rivers, streams and or into ditches which creates a potential public health risk.

Jennifer also participated in the writing of the ordinance providing rules and regulation governing the installation and use of on-site sewage disposal systems.

Sincerely,

Donna Huseby, R.S.
Environmental Health Practitioner
Fargo Cass Public Health
701-241-8103

The mission of Fargo Cass Public Health is to assure a healthy community for all people through on-going assesment, education, advocacy, intervention, prevention, and collaboration.



RICHLAND COUNTY ADMINISTRATION

418 2ND AVE N
WAHPETON ND 58075
701-642-7700
Fax: 701-642-7701

September 22, 2014

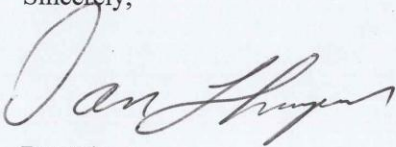
Jennifer Klostreich
Watershed Coordinator
Richland County Soil Conservation District
1687 Bypass Road
Wahpeton ND 58075

Dear Ms. Klostreich,

On behalf of the Richland County Commission, I would like to express the Board's support for Phase III of the EPA 319 grant in Richland County. The Board has supported the Richland County Soil Conservation District with the previous two grants.

The Board appreciates any help that is available with water quality efforts in Richland County, whether it is education of our residents or installing best management practices for water quality through the local EPA 319 project.

Sincerely,

A handwritten signature in dark ink, appearing to read "Dan Thompson", with a stylized flourish at the end.

Dan Thompson
Chairman, Richland County Commission



SOUTHEAST WATER USERS

PO Box 10

MANTADOR, ND 58058

PHONE (701) 242-7432 • TOLL FREE (800) 400-8888

FAX (701) 242-7807 • EMAIL: sewu@rrt.net

September 10, 2014

Watershed Coordinator
Richland Soil Conservation District
1687 Bypass Road
Wahpeton ND 58075

Dear Soil Conservation District:

Southeast Water Users District (SEWUD) is in total support of the 319 project that has been operating in Richland County over the past 8 years. SEWUD stands behind any project or measures that are used to improve water quality, conserve water or, most importantly, protect our aquifers for our future generations.

SEWUD is an avid participant in the Wellhead Protection Program. We acknowledge the importance of quality and the elite management practices to those who protect our water resources. SEWUD's mission statement says it all; "It is the mission of Southeast Water Users District to provide all of our member/owners the highest quality of water and service at the most affordable price possible. For now and for well into the future."

Thank you for your time.

Sincerely

Steve Hansen
General Manager

SH/df

Equal Opportunity Employer

***RICHLAND COUNTY
WATER RESOURCE DISTRICT***

MANAGERS:

*Don Moffet, Chr. (Barney)
Robert Rostad, Vice Chr. (Colfax)
Arv Burvee (Fairmount)
James Haugen (McLeod)
Gary Friskop (Wahpeton)*

SECRETARY /TREASURER:

*Monica Zentgraf
(701)642-7773 (Phone)
(701)642-6332 (Fax)
mzentgraf@co.richland.nd.us (E-mail)*

September 15, 2014

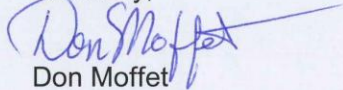
Jennifer Klostreich
Watershed Coordinator
Richland County Soil Conservation District
1687 Bypass Road
Wahpeton, ND 58075

Dear Ms. Klostreich,

On behalf of the Richland County Water Resource Board, I would like to express the Board's support for Phase III of the EPA 319 Grant in Richland County. The Board has supported the Richland County Soil Conservation District with the previous two grants.

The Board appreciates any help that is available with water quality efforts in Richland County, whether it is education of our residents or installing best management practices for water quality through the local EPA 319 project.

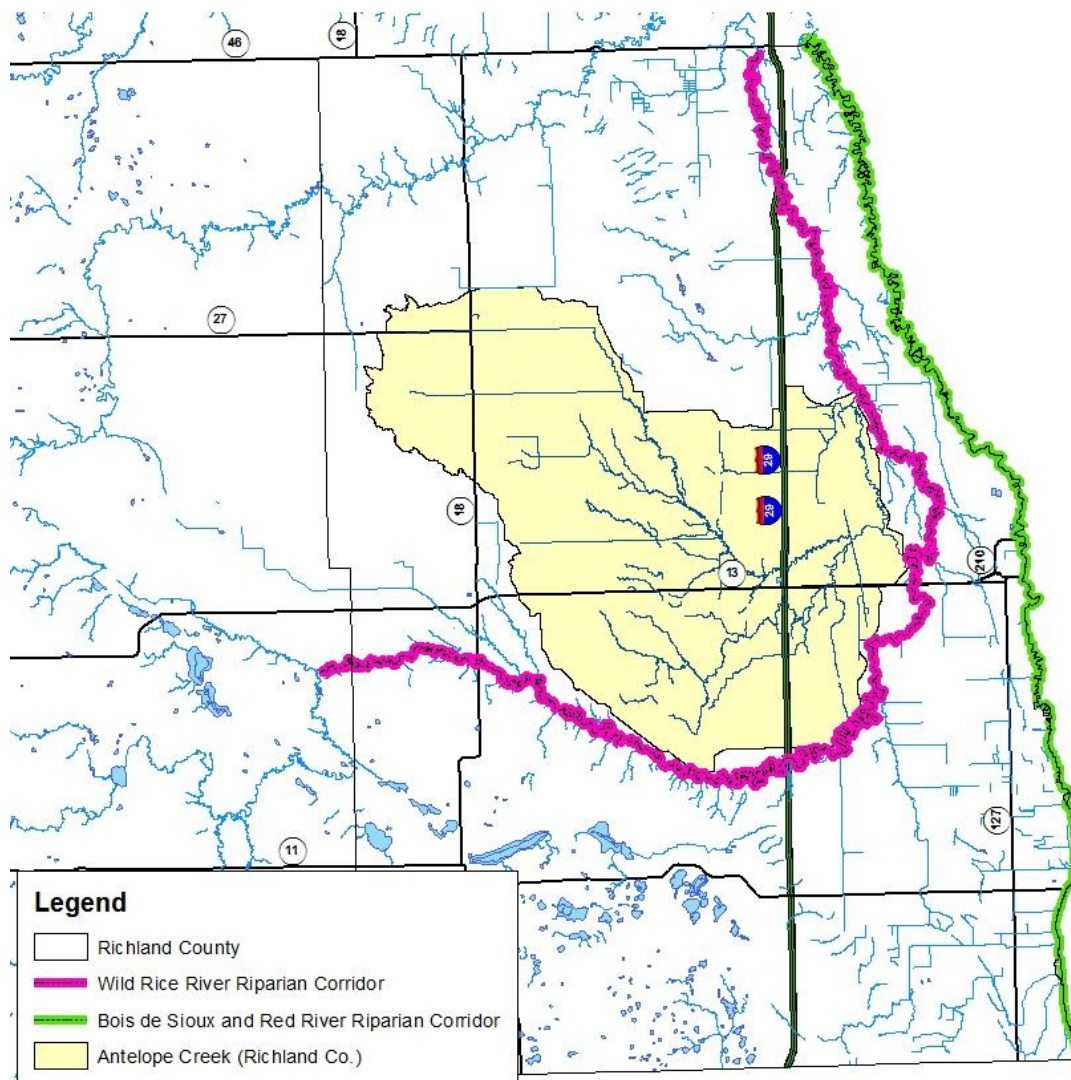
Sincerely,



Don Moffet
Chairman

Appendix 5

Project Map



Appendix 6

Phase I & II Accomplishments

De-listing Wild Rice River (ND-09020105-001-S_00)

**Red River Basin Decision Information Network
Maps**

Phase I Accomplishments

- 1- Engineering Services – Preconstruction
- 95- Septic System Renovation
- 1- Waste Management System (Phase I & II)
- 11- Well Decommissionings

Phase II Accomplishments (as of 8/31/2014)

- Cover Crop – 868 acres
- Perimeter Fencing – 12690 linear feet
- Pipeline (Partial Manure Mgt System) – 301 Feet
- 1- Partial Manure Management System
- 41- Septic System Renovation
- 20 – Well Decommissioning



Section 319

NONPOINT SOURCE PROGRAM SUCCESS STORY

North Dakota

Recreational Use Attained Through Best Management Practice Implementation and Targeted Technical Assistance

Waterbody Improved

Runoff from agricultural lands and septic systems led to high bacteria levels in North Dakota's Wild Rice River. As a result, North Dakota added the Wild Rice River to its 1998 Clean Water Act (CWA) section 303(d) list of impaired waters for having its recreation designated use threatened due to fecal coliform bacteria. Best management practices were installed to improve livestock manure management and restore failed septic systems in the watershed. Subsequent samples showed reduced bacteria levels in the listed segment of the Wild Rice River and the segment was taken off the CWA section 303(d) list in 2014.

Problem

The Wild Rice River drains 1.43 million acres in Dickey, Sargent, Ransom, Richland, and Cass counties in southeastern North Dakota, and Marshall and Roberts counties in northeastern South Dakota. It is a sub-watershed of the larger Upper Red River Watershed (hydrologic unit code [HUC] 09020105). The listed segment of concern is a 38.6-mile portion of the Wild Rice River from its confluence with the Colfax watershed, downstream to its confluence with the Red River (segment ND-09020105-001-S_00).

Watershed assessments by the Richland County Soil Conservation District (SCD) and Cass County SCD determined that pasture and rangeland, degraded riparian areas, livestock concentration areas and hobby farms in close proximity to the river could be negatively affecting water quality in the Wild Rice River. The watershed coordinator also cited improperly functioning individual septic systems as a major contributor to water quality problems.

North Dakota's water quality standards for fecal coliform bacteria require geometric means during any consecutive 30-day period in the swimming season (May 1 to September 30) to be less than 200 colony-forming units per 100 milliliters of water (cfu/100 mL), with no more than 10 percent of those monthly samples higher than 400 cfu/100mL. A sample collected by North Dakota in June 1993 at the STORET 380031 sampling station had a fecal coliform bacteria count of

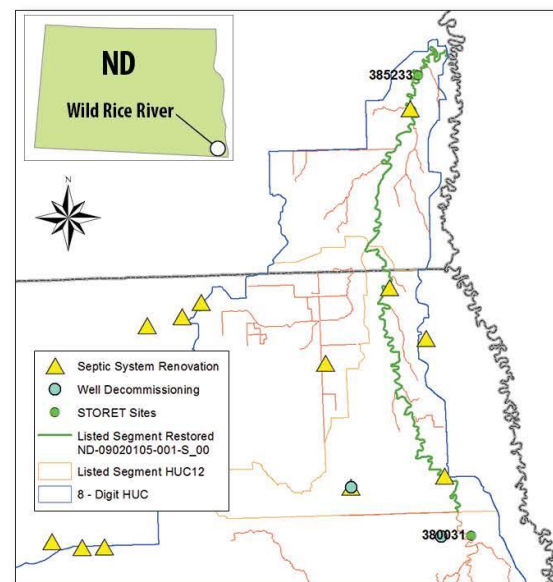


Figure 1. North Dakota's Wild Rice River is in southeastern North Dakota. Partners installed numerous best management practices, including agricultural projects that are not indicated on map.

700 cfu/100mL. Therefore, in 1998 the Wild Rice River was listed as having its recreational designated use threatened due to fecal coliform bacteria. Subsequent sampling during the watershed assessment (2002–2005) supported that listing (Figure 2).

Project Highlights

In 2006 the Richland County SCD developed a watershed project implementation plan to restore the recreational uses of the Wild Rice River. As a secondary goal, the project would also protect and enhance the aquatic life use of Antelope Creek and the Wild Rice River. As a part of this plan, through partnerships with local landowners and homeowners, seven septic system renovations and one well decommissioning have been completed within the 12-digit HUCs associated with the listed segment. Restoration practices completed from 2007 to present within the entire Wild Rice River watershed included 136 septic systems renovated, 31 wells decommissioned, 868 acres of cover crop planted, 12,690 feet of perimeter fencing installed, one watering facilitated constructed and one partial livestock waste management system installed.

Results

In 2009 North Dakota's bacteria standard changed to *Escherichia coli*. The new standard requires that geometric means during any consecutive 30-day period during the swimming season are less than 126 cfu/100 mL, and that no more than 10 percent of the samples exceed 409 cfu/100 mL. Based on the most recent data, these standards were met (see Figure 2). These results allowed the North Dakota Department of Health (NDDoH) to de-list the Wild Rice River (segment ND-09020105-001-S_00) in the 2014 Integrated Report for bacterial impairment.

Partners and Funding

In 2002 the Richland County SCD, along with NDDoH, initiated a project to assess water quality and land use conditions within the Wild Rice River watershed. The Richland County SCD also led the development of the 2006 Wild Rice River watershed project implementation plan. The SCD hired staff to assist producers and homeowners in the watershed with the development of contracts and delivery of

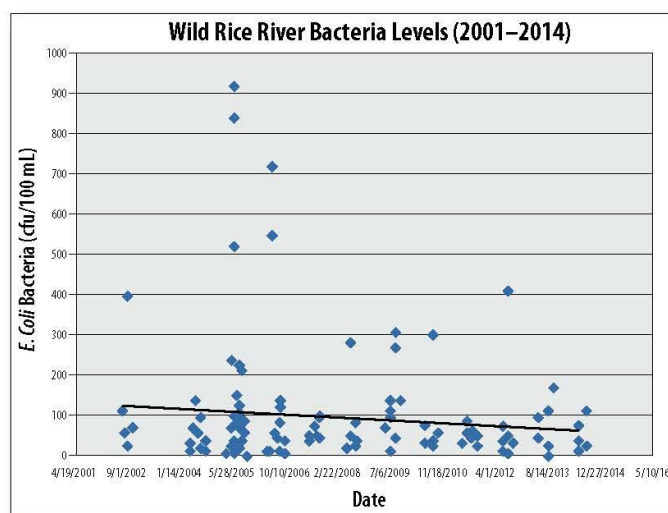


Figure 2. Post-restoration water quality data at STORET sampling site 385233 indicate that the Wild Rice River meets bacteria water quality standards. The line indicates declining bacteria levels over time. Dots represent individual sampling events.

technical assistance for the implementation of best management practices. In addition, project staff works closely with partners at the federal, state and local levels to achieve the goals of the watershed implementation project.

The U.S. Environmental Protection Agency granted \$45,486 in CWA section 319 funding that was matched by \$30,324 in local funds (cash and in-kind services) from local individuals to cost-share renovations within the 12-digit HUCs of the listed segment. The NDDoH provided oversight for project management; developed the quality assurance project plan and conducted training for proper water quality sample collection. NDDoH also assisted with development and implementation of information and education activities. Public involvement has been encouraged and maintained through various workshops, newsletters and presentations provided to community groups.



U.S. Environmental Protection Agency
Office of Water
Washington, DC

EPA 841-F-15-001B
January 2015

For additional information contact:

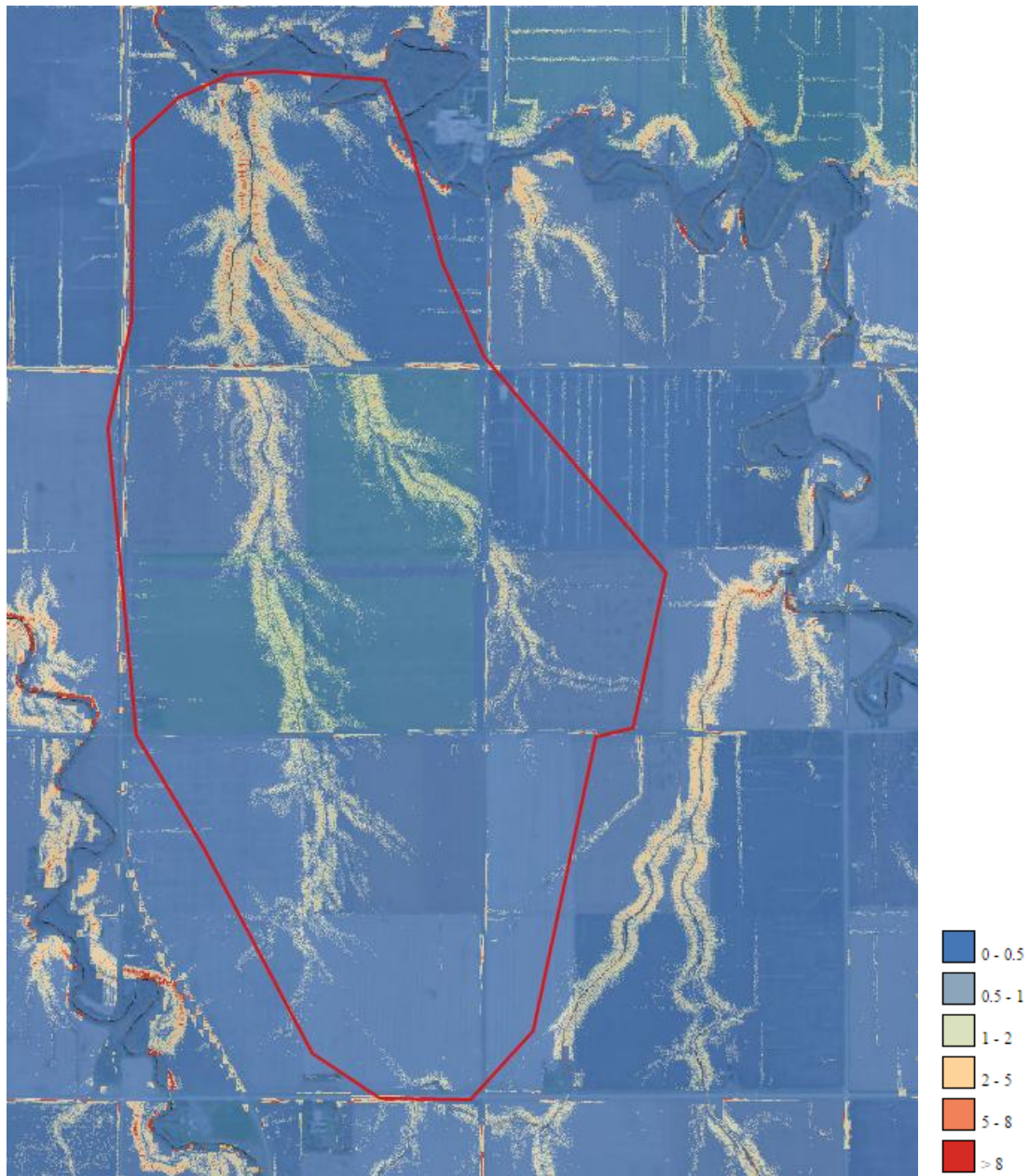
Jennifer Klostreich, Richland Soil Conservation District
jen.klostreich@nd.nacdn.net

Greg Sandness, North Dakota Department of Health
701-328-5232 • gsandnes@nd.gov

Eric Steinhaus, North Dakota Watershed Coordinator, Region 8
303-312-6837 • steinhaus.eric@epa.gov

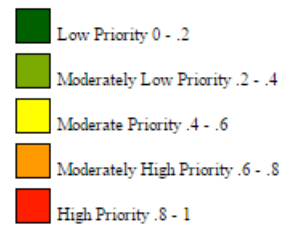
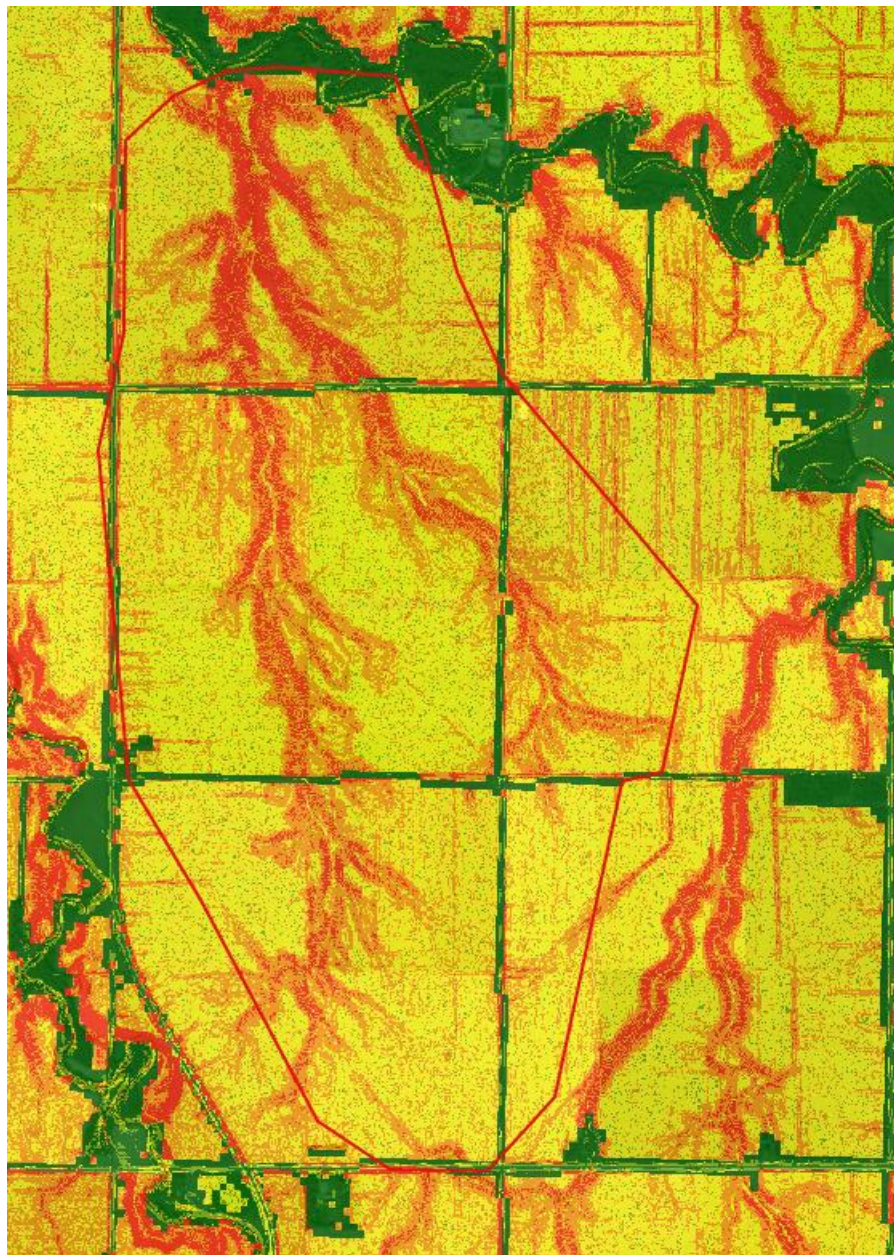
Sediment yield loading to catchment outlet in tons/acre/year

Wild Rice River, Richland County



Sediment load ranking to catchment outlet

Wild Rice River, Richland County



Appendix 7

303(d) TMDL List

Table VI-2 (con't). 2012 List of Section 303(d) TMDL Waters for the Red River Basin in North Dakota.

Assessment Unit ID	AU Description	AU Size	Designated Use	Use Support	Impairment	TMDL Priority	5A
ND-09020104-004-S_00	Red River of the North, from the 12th Ave N bridge in Fargo, ND downstream to its confluence with the Sheyenne River.	21.1 Miles	Fish Consumption Recreation	Not Supporting Fully Supporting, but Threatened	Methylmercury Escherichia coli	Low High	No No
ND-09020104-005-S_00	Red River of the North from its confluence with the Sheyenne River, downstream to its confluence with the Buffalo River.	10.45 Miles	Recreation Fish Consumption	Fully Supporting, but Threatened Not Supporting	Fecal Coliform Methylmercury	High Low	No No
ND-09020105-001-S_00	Wild Rice River from its confluence with the Cofax Watershed, downstream to its confluence with the Red River of the North. Located in NE Richland and SE Cass	38.6 Miles	Fish and Other Aquatic Biota	Not Supporting	Combination Benthic/Fishes Bioassessments Sedimentation/Siltation Oxygen, Dissolved	Low Low Low	Yes Yes No
ND-09020105-002-L_00	Mooreton Pond	36.8 Acres	Fish and Other Aquatic Biota	Not Supporting	Total Dissolved Solids	Low	No
ND-09020105-003-S_00	Wild Rice River from its confluence with a tributary about 3.6 miles NE of Great Bend, ND downstream to its confluence with the Cofax Watershed. Located in Eastern Richland County.	47.5 Miles	Fish and Other Aquatic Biota	Not Supporting	Combination Benthic/Fishes Bioassessments Sedimentation/Siltation Oxygen, Dissolved	Low Low Low	Yes Yes No
ND-09020105-005-S_00	Antelope Creek, in Richland County, from its headwaters downstream to its confluence with the Wild Rice River.	40.73 Miles	Fish and Other Aquatic Biota	Not Supporting	Temperature, water Sedimentation/Siltation Benthic-Macroinvertebrate Bioassessments	Low Low Low	Yes Yes Yes