South Dakota Nonpoint Source Section 319 Project Proposal – FY2022

1.0 Project Proposal Summary Sheet

A Project Proposal Summary page will precede each proposal. The format to be followed has been provided in **(Attachment 1).**

Proposal Narrative

2.0 Statement of Need

2.1 Demonstrated Water Quality Need:

Describe the **water quality need** that the proposed project will address. What is the problem that needs to be fixed? Include the following information:

- Is the water listed as impaired or threatened in the state's current 2020 Integrated Report for Surface Water Quality
- Define the type of water quality problem (chemical, biological, and physical/habitat).
- Specify the source(s) of the pollutant or cause of the environmental degradation.
- If chemical, bacterial, or sediment constituents are involved, provide loading and concentration information.
- If problems are related to physical/habitat decline, document the cause of the degradation.
- Include information on the timing of the pollutant problem (e.g., storm-event related, low flow, or continuous).
- Explain how this project is consistent with water quality priorities specified in the **South Dakota NPS Program Management Plan** and/or in a local watershed plan.
- Describe status of TMDL(s) and/or Watershed-Based Plan, if applicable. Watershed BMP implementation projects must incorporate all of EPA's **Nine Key Elements for Watershed-Based Planning** (for more information see the section 319 guidance webpage).
- If the application is a Planning and Assessment project, demonstrate that adequate monitoring on the waterbody is lacking. If monitoring has already been done, why is additional monitoring necessary? What will be done with the data collected besides generating a report?
- If the application is an Information and Education project, demonstrate the need for a public information and education program in the community. Be sure to indicate who your targeted audience is.

2.2 Waterbody Information:

Please include the following information:

- Waterbody name
- Describe waterbody as a stream, lake, or reservoir.
- Provide other descriptive information that might be useful regarding the water resource to judge the value of the project. Examples are:
    - flow regime;
    - geomorphic stream classification;
    - physical condition of the stream;
    - lake size,
- Describe aquatic habitat health.

There should be at least one paragraph describing baseline information with an assessment as to accuracy, precision, and value of existing data.

2.3 Project Map:

Provide maps (especially Geographic Information System (GIS) maps) showing the location and size of the waterbody and watershed and/or aquifer. Information incorporated on the map should include land uses, land ownership, project location, and important water resources (including major wetlands). Also, provide information on locations of present, past and future sampling sites, sources of problems or critical areas and other pertinent information such as wells, natural springs, and point sources.

2.4 General Watershed Information:

Provide general information on the watershed such as:

- topography
- elevation
- land ownership
- land use
- precipitation (with seasonal distribution)
- other climatic information
- soils
- geology
- erosion rates
- aquifer vulnerability
- wellhead protection area
- vegetation conditions
- man-made features

3.0 Project Description

3.1 Project Outcomes (Final Products):

In this section, describe the final products of the project.

- Provide a narrative description of the final products (Outcomes) of the project. The Outcomes should be the environmental goals of the project—what are the water quality improvements that you expect to see when the project is complete? The narrative description should describe what will be achieved (Outcomes) and how it will be achieved (Targets). The Outcomes should be specific and should have measurable endpoints. An example of a narrative Outcome description could be:

  Reduce bacteria and nutrient loading within the Wet Creek watershed a minimum of 5% in the short term, and 25% in long term through comprehensive grazing management planning. It is estimated that the 25% reduction in bacteria and nutrient loading will result in Wet Creek meeting water quality criteria for fully supporting contract recreation and cold water fisheries designated uses. This outcome will be achieved by completing the following targeted actions within the Wet Creek watershed: complete grazing management plans on 25,000 acres (Target); and, as the first phase of implementation, locate cooperators and implement the management plans on 5% of the area (Target). Achievement of these Targets will set in place a comprehensive riparian grazing plan for the Wet Creek watershed. Achievement of the first phase of implementation will reduce E-coli and nutrient input to the creek by 5%. Ultimate, long-term Targets include the implementation of riparian grazing management plans on a minimum of 30% of the area. Achievement of such a long-term Target will improve water quality in Wet Creek to meet State water quality criteria and result in full support of all designated uses.

- How will the products contribute to the Nonpoint Source Program achieving its programmatic goals? In other words, what will the Nonpoint Source Program receive as a result of expending the requested funds?

3.2 Outcomes, Targets, and Tasks:

In this section you will list each Outcome described above along with its associated Targets and Tasks. Targets specify in more detail what is to be accomplished to help meet the Outcome and Tasks describe the specific activities that will be performed to accomplish each Target. Each Target should have at least one associated Task to be performed to accomplish the Target. Tasks are specific activities that have milestones, outputs, responsible parties, and costs. The following is an example of the Outcome, Targets, and accompanying Tasks in the prescribed format.

- Outcome: Through the development and implementation of riparian grazing plans, reduce E. coli and nutrient (total nitrogen and total phosphorus) loading in Wet Creek by 5% in the short-term (3 years), and ultimately reduce E. coli and nutrient loading in Wet Creek by 25% so that State water quality criteria for contact recreation and cold water fishery designated uses are fully supported (10 -12 years).

    - Target 1: Efficient Project Administration.

Task #1: Administration		
Task Description:	The Sponsor will Administer project, submit reimbursement requests, keep all records, file all reports, and obtain any necessary permits.	
Task Outputs:	Timely reimbursement, complete progress reports with each reimbursement request, complete semi-annual and annual reports.	
Cost:	Federal (319) Funds:	$1,000
	Non-Federal Match:	$3,000
	Other Federal Funds:	$0
	Total Task Cost:	$4,000

    - Target 2: Complete grazing management plans on 25,000 acres of rangeland, irrigated pasture, and wet meadow pasture adjacent to Wet Creek.

Task #2: Grazing Management Inventories		
Task Description:	The NRCS and district staff will complete the rangeland and pasture condition inventories on 25,000 acres of the watershed. Inventories to be completed in 4 months.	
Task Outputs:	Resource inventory descriptions -Inventories on aerial photo base maps.	
Cost:	Federal (319) Funds:	$10,000
	Non-Federal Match:	$10,000
	Other Federal Funds:	$25,000
	Total Task Cost:	$45,000

Task #3: Grazing Management Planning	
Task Description:	District and participating landowners will complete rangeland and pasture management plans for 25,000 acres of land. Management plans will include BMPs such as fencing, streambank shaping, plantings, water development, riparian area pastures, planned grazing systems, and proper grazing use. Management plans will be completed in 6 months.
Task Outputs:	Approved grazing management plans on 25,000 acres.

Cost:	Federal (319) Funds:	$0
	Non-Federal Match:	$20,000
	Other Federal Funds:	$0
	Total Task Cost:	$20,000

- Target 3: Increase awareness, knowledge, and buy-in of Wet Creek landowners on riparian area management and water quality through an effective information and education program. Publish results in information fact sheet for statewide distribution. Include volunteer monitoring in project monitoring report.

Task #4: Field Tours		
Task Description:	Conduct a minimum of two, half-day field tours of riparian management demonstration sites; each tour having a minimum of 15 attendees (citizens from the watershed) and a presence by county extension, NRCS, State DANR, and Game, Fish, and Parks.	
Task Outputs:	Minimum of 30 attendees on tours resulting in increased awareness and citizen buy-in to support outputs for other project tasks. One information fact sheet, 500 copies for distribution.	
Cost:	Federal (319) Funds:	$600
	Non-Federal Match:	$800
	Other Federal Funds:	$0
	Total Task Cost:	$1,400

Task #5: Volunteer Monitoring		
Task Description:	Coordinate with County Extension Office to establish a Wet Creek Citizen's 4-H Youth and Adult Sponsor Volunteer Monitoring Group. Group will have a minimum of 8 volunteers at each monitoring effort. One volunteer monitoring day during the spring and fall of each year for the next 3 years.	
Task Outputs:	Six volunteer monitoring events with a minimum of 48 volunteers. Volunteer monitoring data collected six times at two locations. Volunteer monitoring summary in the project monitoring report.	
Cost:	Federal (319) Funds:	$2,000
	Non-Federal Match:	$3,000
	Other Federal Funds:	$0
	Total Task Cost:	$5,000

- Target 4: Implement rangeland and pasture management plans on 5% (1,250 acres) in the Wet Creek watershed as the first phase.

    - Include applicable tasks, outputs and costs in same format as shown for Targets 1, 2 and 3. Number tasks in a continuous

sequence. For example, the previous Target (No. 3) ended with Task 5. The first task identified under Target 4 should be listed as Task 6 and followed sequentially, i.e. Task 7.

- Target 5: Obtain Credible Data (physical, chemical, and biological data) at 4 water quality monitoring sites on Wet Creek for the months of May through October during the term of the project to document water quality improvements as a result of implementing and achieving Target 3.

    - Again, include applicable tasks, products and costs in same format as shown for Targets 1, 2 and 3.

3.3 Milestone Table: **(See Attachment2)**

Using the table format provided, provide a milestone table for the project. The milestone table lists each Task, outputs for each task, quantities of each Task (QTY), and responsible party/parties for each Task. Interim milestones need to be sufficiently frequent so that problems can be identified and corrected expeditiously.

3.4 Project Management and Tracking:

Provide a narrative defining how the project will be managed and tracked, and how technical operations such as sampling will be completed. The proponent should describe how and why they are qualified to conduct the project. Summaries of past projects and resumes of staff or contractors involved in the project would help demonstrate qualifications. The proponent should list their other, currently active Section 319 projects. If the proponent currently has an ongoing project, they should provide discussion on how resources will be utilized to ensure the timely completion of both projects.

3.5 Permits:

When appropriate, identify the necessary environmental permits (e.g., permits under CWA Section 404, Resource Conservation and Recovery Act, State Engineers Office) required to conduct the project.

4.0 Coordination Plan

4.1 Cooperating Organizations

Identify each cooperating organization and include letters of support. Briefly explain why the lead project sponsor is the appropriate entity to coordinate and/or implement the project. Discuss the roles and responsibilities assumed by the cooperators and/or contractors in the project planning and implementation. Also list the mode of agreement

(e.g., MOU, MOA, contract, or informal agreement) by which cooperating organizations will interact.

4.2 Local Support for the Project

Describe local support for the project. Some examples of local support are: requests for the project from local landowners, conservation district, or county; and, results from town meetings or favorable reactions to the proposed project.

4.3 Duplicate Effort

The State is concerned that use of 319 funds is well coordinated with other pertinent programs. If similar activities are being undertaken in the watershed, they should complement each other and not unnecessarily duplicate or replicate efforts. Provide discussion on other projects in the watershed and verification that this project is not duplicative with those sponsored by other groups.

4.4 Assumption of the Responsibilities of Other Entities

The State is concerned that Section 319 funding not be used to assume other agencies' responsibilities for activities being carried out in the project watershed. Project plans must address this issue.

5.0 Evaluation and Monitoring Plan

5.1 Monitoring Strategy

Describe the monitoring strategy for the watershed, including tasks proposed to evaluate whether the project Outcomes and Targets have been met. Results from the data analysis should be used to evaluate progress, determine if changes in project/monitoring design need to be considered, and assess the overall final project success. All "Watershed" projects should have some type of monitoring effort. If monitoring is to be done under a different funding source than the Section 319 program, that should be discussed and those data should be available to assess the successful delivery of the 319 project products. Discuss the ability, if any, to conduct long-term project monitoring beyond the term of this project.

5.2 Sampling and Analysis Plan

Describe the schedule and method for developing a Sampling and Analysis Plan (SAP) consistent with DENR Standard Operating Procedures (SOP). Monitoring paid for under a Section 319 award can't take place prior to the approval of the SAP. The Sampling and Analysis Plan does not have to be submitted as part of the project proposal but will be required prior to project implementation if the project is selected for funding.

5.3 Quality Assurance Project Plan

Reference an EPA-approved Quality Assurance Program Plan (QAPP) and identify any site specific amendments required for this project that are not covered by the referenced QAPP. The Quality Assurance Project Plan does not have to be submitted as part of the project proposal but will be required prior to project implementation if project is selected for funding.

5.4 Data Collection, Management, and Analysis

Describe who will collect the data and who, how and when the data will be managed, analyzed, and reported. Data management must be such as to allow the data collected as part of these grants to be incorporated into the EPA STORET data base. Data must be provided to DANR in a format to achieve this function.

Data analysis and interpretation are critical components to a monitoring program. Results from the data analysis are used to evaluate progress, determine if changes in project/monitoring design need to be considered, and assess the overall final project success. The proponent needs to identify organization(s) responsible for project evaluation and specify how the resulting information from the data analysis will be shared and utilized for future projects.

5.5 Models:

Describe any model used. Models may be the only way to estimate load reductions as a result of individual water quality improvement projects with limited monitoring data. Models can be an excellent tool in developing the project design (comparing the load reductions from one scenario to that of an alternative, i.e. moving a corral 30 feet from the creek versus moving it 60 feet from the creek) and presenting those designs to the landowner. Finally, models can be an excellent tool in prioritizing different projects for possible funding (i.e. project "A" is predicted to reduce the total nitrogen load by 10 pounds per year while project "B" is predicted to reduce the total nitrogen load by 100 pounds per year).

5.6 Operation and Maintenance

Briefly describe how the project sponsor will work to ensure that Best Management Practices implemented as part of this project will be operated and maintained for proper functioning of those BMPs.

6.0 Information and Education

6.1 Information and Education Activities:

Describe the specific activities which will be performed to ensure technology transfer,

public education and information dissemination on the Outcomes achieved as a result of project implementation. In many instances, an effective I&E program that results in a widespread, positive change in citizen behavior can be a very cost effective mechanism in addressing nonpoint source water quality problems.

7.0 Budget and Budget Justification

Present the project budget in a format similar to the attached budget summary **(Attachment 3),** indicating the amount and source of all federal and non-federal funds that will be used during each year of the project. The budget table is to include personnel support, BMP and other expenses that are expected to be paid with Section 319 and State and local match sources.

8.0 Attachment Contents

- Attachment 1: Project Summary
- Attachment 2: Milestone Table
- Attachment 3: Budget

South Dakota Nonpoint Source Section 319 Project Proposal – FY2022

Attachment 1: Project Summary Sheet

Project Title	

Project Period	

Project Sponsor	
Organization Name	
Primary Contact Name	
Title	
E-mail address	
Mailing Address	
City, State and Zip	
Telephone Number	
Fax Number	

Project Funding
NPS Funds Requested $ + Match (cash/in-kind) $ + Other Federal Funds $ = Total Project Cost $
Local and State Funds Requested: Local Funds State Funds
Other Federal Funds -

Project Type (Select only one)			
Planning/ Assessment	Watershed	Information and Education	Groundwater

Project Location	
Watershed(s)	
303(d) Listed Stream	Yes No Listed Segment + AUID#
HUC(s) (8 digit USGS Hydrologic Unit Codes)	
County(ies)	
Position coordinates of project location in decimal degrees.	Latitude Longitude

South Dakota Nonpoint Source Section 319 Project Proposal – FY2022

NPS Pollution Source categories to be addressed (enter percent for each applicable source)			
	Agriculture		Silviculture
	AFOs		Hydrologic Modification
	Urban Runoff		Construction
	Resource Extraction		Other:

NPS Functional Category (enter percent for each applicable functional category)			
	BMP Implementation		Technical Assistance
	Information and Education		Planning
	Watershed Assessment		Groundwater
	Water Quality Monitoring		Other:

NPS Pollutants to be addressed (Check all that apply)			
	Excess Nitrogen		Pesticides
	Excess Phosphorus		Oil and grease
	Sedimentation		Temperature
	Pathogens/Bacteria		pH
	Metals		Other:
	Low dissolved oxygen		Other:

Summary Statements	
Project Goals	
Project Description	

Attachment 2: Milestone Table

Milestone Table

Project Name:

Date:

Task	Group	Quantity	2012/2013		2013/2014				2014	
			Aug - Oct	Nov - Jan	Feb - Apr	May - Jul	Aug - Oct	Nov - Jan	Feb - Apr	May - Jul
OBJECTIVE 1: BMP Implementation:										
Task 1: Cropland and Grassland BMPs										
Product 1: Cropland BMPs	Groups 1,2,3,4	250 ac.			100		150			
Product 2: Grassland BMPs	Groups 1,2,3,4	250 ac.					125			125
Task 2. Animal Waste Management Systems										
Product 3: Animal Waste Management Systems	Groups 1,2,3,4									
Feasibility Studies		2				1			1	
Nutrient Management Plans		2	1				1			
Animal Waste System Installation		2	1				1			
Objective 2: Informational Outreach										
Task 3: Information Campaign										
Product 4: Web Site Maintenance/Newsletters	Groups 1,3									
- Web site Maintenance		2 years		1				1		
- Newsletter		2			1		1			
Objective 3: Project Monitoring and Reporting										
Task 4: Water Quality Monitoring										
Product 5: 14 samples/testing/evaluation	Groups 1,3	14 samples			4	6			4	
Task 5: Semi-annual, annual, final and monthly reports.										
Product 6: Reports	Groups 1,3									
Semi-annual reports		2			1				1	
Annual report		2	1				1			
Final report		1								1
Monthly reports		24	3	3	3	3	3	3	3	3

Groups

1. Project Coordinator and Project Staff/JRWDD
2. Federal = NRCS/USFWS/LJRC&D
3. State = SDGF&P/SDSU/SDRCF/DENR/SDDOA
4. Local = VBWDD/Producers/Conservation Districts

South Dakota Nonpoint Source Section 319 Project Proposal – FY2022

Attachment 3: Budget

Project Name:

Budget: Segment: Date: October 1, 2012 Through July 31, 2014

ITEM	Year 1 2012-2013	Year 2 2013-2014	Total	319-EPA	USDA EQIP/WHIP/CRP	LOCAL Producers, CDs, etc.	State CWFCF	State CWSRF	JRWDD
Personnel Support									
Project Coordinator/Project Staff (2 FTE)									
Payroll Tax									
Health Insurance includeing Dental & Eye									
Workman's Comp.									
Retirement (6%)									
Supplies/Equipment:									
Office Supplies									
Postage									
Cell Phone Service									
Computer Internet Service/Phone @ $125/month									
Office Space with furniture; 2 locations @ $375/month									
Travel:									
Vehicle: 16,250 miles per yr @ $0.37 per mile									
Lodging/Meals/supplies: 12 per year @ $100 each									
Administration:									
Subtotal: Personnel Support									
Objective 1: Best Management Practice Implementation									
Task 1: Cropland/Grassland BMP Implementation									
Product 1: Cropland BMPs - 250 acres									
Filter strips, waterways, diversions, seeding, wetland restoration									
Product 2: Riparian Grassland Management BMPs - 250 acres									
Land use agreements, water development, streambank stabilization, fence, etc.									
Task 2: Animal Waste Management Systems (AWMS)									
Product 3: Animal Waste Management Systems (AWMS)									
Feasibility Studies: 2 @ $19,000 each									
Nutrient Management Plans: 2 @ $2,500 each									
System Construction: 2 @ $250,000 each									
Subtotal: BMP Implementation									
Objective 2: Informational Outreach									
Task 3: Information Campaign (9000 contacted)									
Product 4: Newsletters & web site maintenance									
Newsletters: 2 @ $400/yr. and Web site maintenance 2 yrs. @ $250/yr.									
Subtotal: Informational Outreach									
Objective 3: Project Monitoring and Reporting									
Task 4 : Water Quality Monitoring/Evaluation									
Product 5: 14 water quality samples/testing/evaluation @ $65 each									
Task 5: Project Reports for EPA, DENR, and Partners.									
Product 6: Semi-annual, annual, final, and monthly reports (24)									
Subtotal: Water Quality Sampling and Project Reports:									
Total Project Cost:									
Match:									
Ineligible Match: Federal and/or Project Allocated									
Match: Project Totals For Match									
Match Percentages:									