NEBRASKA

DEPT. OF ENVIRONMENT AND ENERGY

15-011 October 2021

Guidance for Writing 319 Project Implementation Plans

The Nebraska Department of Environment and Energy's (NDEE) Nonpoint Source Management Program distributes Clean Water Act Section 319 grant funds to government agencies, non-profit organizations and educational institutions for projects that facilitate the implementation of Nebraska's State Nonpoint Source Management Plan. Most section 319 funded projects require an EPA-accepted Water Quality Management Plan (WQMP) to be eligible for funding. EPA requires that these plans must include the 9 elements of a Watershed Based Plan (WBP) for a successful watershed project as defined by EPA. With regards to identification WQMP are references for state plans that will be cited throughout the PIP and the WBP would likely only be referenced in the Introduction/Background portion of the PIP. These 9 required elements are identified in the sections," What *is required in a PIP" and "9-element Index"*.

A project sponsor must develop a detailed Project Implementation Plan (PIP) accepted by NDEE and EPA to secure section 319 project funds. This document provides guidance on how to complete the PIP and the information that is required. When writing a PIP, remember to **BE REALISTIC** and **BE CONCISE**. It is recommended that you communicate regularly with an NDEE 319 section representative during the PIP development process.

What is a Project Implementation Plan (PIP)?

The Project Implementation Plan, or 'PIP', is a description of the work to be done and expected outcomes from a nonpoint source management project funded through the Nebraska Nonpoint Source Management Program. The PIP represents incremental implementation of the EPA 9-element WBP.

Why do we develop a PIP?

All nonpoint source funding awarded through NDEE originates with the Environmental Protection Agency (EPA) through the Clean Water Act Section 319 provisions. As part of the requirements to obligate funding through the program, NDEE is required to submit a PIP for each project to EPA for review. The PIP is reviewed by the NDEE before submission so that clarification and comments can be made to provide the PIP in the most approvable form. EPA has the authority to review and comment on the contents of the PIP before accepting a project. Once the PIP is accepted by EPA, an award agreement will be forwarded to the project sponsor for signature. Work done prior to PIP approval and completion of a signed agreement will be the sole responsibility of the project sponsor and will not be eligible for reimbursement or match credit.

What required in a PIP?

The PIP should be directly related to implementing activities described in an EPA-accepted 9-element WBP that address specific water quality impairments or threats to water quality. If the Section 319 project is part of a larger project that also addresses issues other than Nonpoint Source (NPS) pollution, this should be described in the background section of the PIP, but the remainder of the PIP document should focus only on

the nonpoint source pollution management actions to be implemented. For example, if the larger project includes both water quantity and water quality issues, or both point source and nonpoint source issues, only the nonpoint source management actions and the relevant funding to implement those actions should be detailed in the PIP. A PIP includes the following sections:

1. Cover Page
2. Location Map (Project Area within state boundary)
3. Introduction/Background
4. Pollutants and Pollutant Sources (Element 1)
5. Pollutant and Load Reductions (Element 1)
6. Project Description
    1. Introduction
        a. Methods
        b. Goals, Objectives, Tasks
    2. Proposed Best Management Practices (BMPs) (Element 2)
        a. Description of Practices
        b. Quantity and Cost Table
        c. Load Reduction Table (Element 3)
    3. Information and Education Plan (Element 4)
    4. Schedule (Element 5)
    5. Milestones (Element 6)
    6. Evaluation Criteria (Element 7)
    7. Water Quality Monitoring (Element 8)
    8. Budget & Budget Narrative (Element 9)

The types of information contained within these sections are discussed in further detail in the following template.

1. Cover Page Template

The Cover Page ideally is a single page giving a brief snapshot of the project participants, location and duration of the project, and the funds to be contributed.

PROJECT IMPLEMENTATION PLAN

The project title should include the name of the target waterbody and be centered on the cover page. For example:

Big Lake Water Quality Improvement: Phase 2

Project Sponsor: Sponsor Name

Address

Contact Person

Phone and E-mail.

Project Partners: *Include Partners who will be contributing funding and/or technical, educational, or other assistance. Describe what the partners will be providing. For example*:

Project Sponsor: Administration and implementation of the project, local funding, outreach, and reporting.

Nebraska Department of Environment and Energy: Funding through the CWA Section 319 for collection of baseline nitrate concentration, demonstration project sites and installation of conservation practices.

Project Area: *Include a descriptive name of the project area and list of 12-Digit Hydrologic Units. For example:*

Big Lake watershed. HUC 010203040506, 010203040507

Project Funds: *List the amount of Section 319 funds requested, required nonfederal matching funds and federal funds other than Section 319 funds (e.g., EQIP) if applicable. Nonfederal funds in excess of the required match should be listed as Other Nonfederal Funds. For example:*

Section 319 Funds:	$300,000
Nonfederal Match:	$200,000
Other Federal Funds:	$400,000
Other Nonfederal Funds:	$73,900

Project Duration: List the expected start and end dates for the project period. While there are exceptions, most large projects are expected to be completed in two years and in no more than three years. Small grant projects are expected to be completed in one year. For Example*:*

August 1, 2022 – July 30, 2024

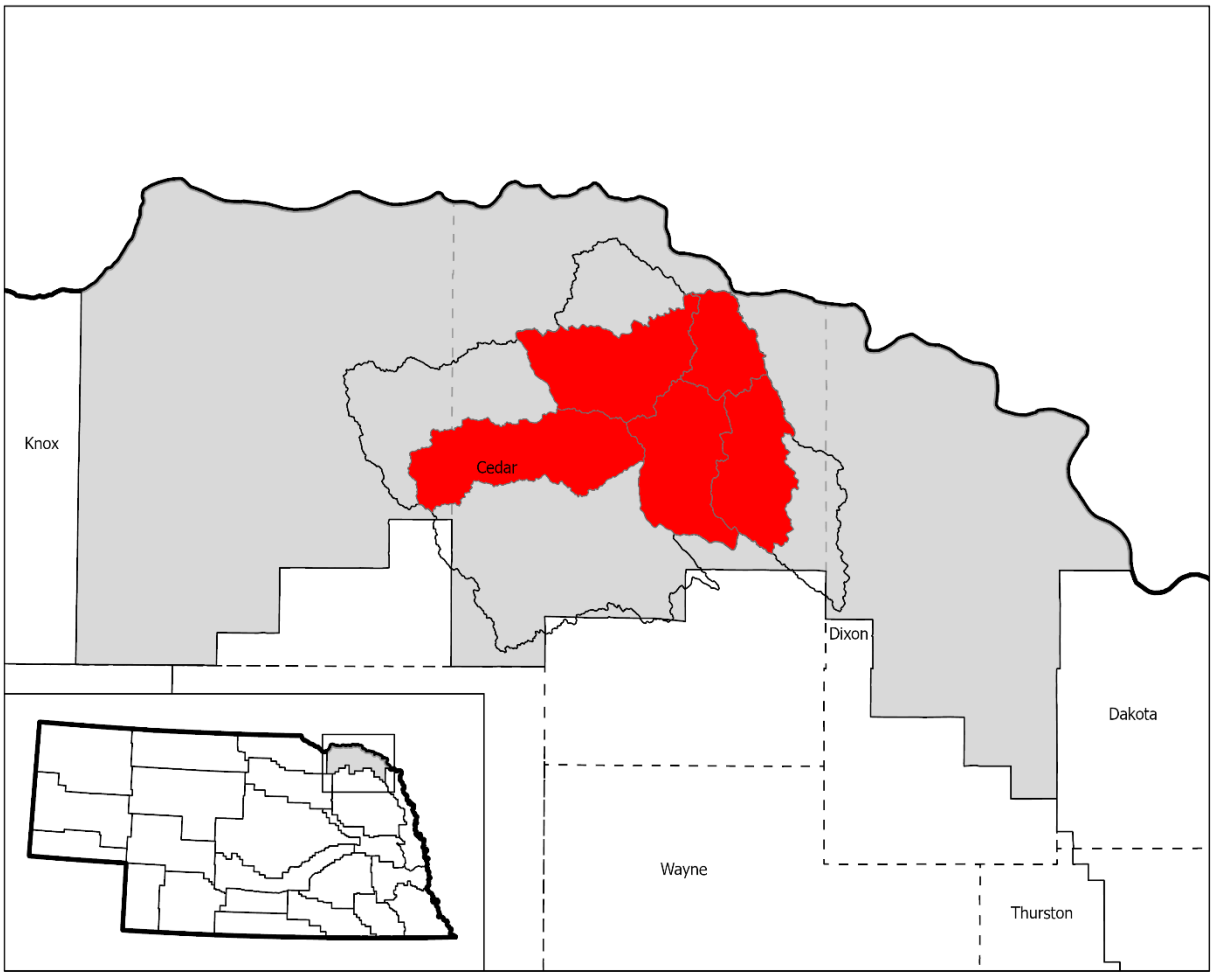
Insert a page break at the end of the cover page.

2. Location Map

The location map should directly follow the cover page. It should be oriented (portrait or landscape) in the manner that best fits the document and illustrates the project area.

It may be presented as a projection, inset or similar format to show where the watershed or work to be done is located within the state. It should be relatively simple, clean, and readable. Features illustrated on the location map generally should be limited to the boundary of the watershed, delineation of the HUC 12 boundaries and highlighting of the priority areas within the watershed.

More detailed maps specific to the pertinent subject matter (e.g., topography, soil type, facility locations, stream systems) may be inserted elsewhere in appropriate sections of the document. It is important that all maps be clean, readable, and understandable. It is better to provide additional maps than to clutter one map with too much information. The image below is an example of how this map should appear.



Insert a page break after the location map page.

3. Introduction/Background

This section provides the necessary background information to put the project in perspective of what actions are needed, what has already been done, and how the project relates to implementing the 9-element WQMP and the state Nebraska NPS Management Plan. Much of this information can be sourced directly from the background section of the WQMP. Examples of information to provide include, but are not necessarily limited to, the following:

- *What do you hope to achieve?*
- *What is the geographical extent (drainage area) of the project?*
- *What is the predominant land use in the watershed?*
- *What water quality impairments will be addressed by this project? (Refer to the most recent Integrated Report.)*
- *What factors are contributing to the water quality problems?*
- *What value or interest does the waterbody/watershed provide to the local community and/or the intended use? (Recreation, flood control, habitat, economy.)*
- *What similar projects have been implemented in the area that relate to this project? (If this project is implementing a subsequent phase of an ongoing project, the status and any accomplishments of the previous project phase(s) should be briefly summarized.)*
- *If this is a communication/demonstration project (i.e. outreach, information and education), identify the target audience(s) and explain why the communication is necessary.*

The following example can be expanded upon.

> The Big Lake watershed lies in northeastern Nebraska and covers an area of 50,000 acres. The predominant land use is row crop agriculture (80%) with interspersed pasture and timber land (15%). A single community constitutes urban land (5%) in the watershed. It is a sub-watershed of the Common River basin.
>
> Big Lake was built as a flood control structure in 1987 and is a popular recreation site for the community for swimming and fishing. It also attracts numerous visitors from outside the community for camping, picnicking, and fishing.
>
> Due to chronically high concentrations of *E. coli* bacteria, a total maximum daily load (TMDL) of 113 cfu/100 L was established for Big Creek in 2012. The community-based Big Lake Water Quality Management Plan was accepted in 2019 to address *E. coli*, nutrient and sediment pollution of Big Lake.
>
> The 2020 Nebraska Integrated Report lists the lower segment of Big Creek (CR1-11210) as well as Big Lake (CR1-L0030) as impaired for recreational use due to *E. coli* bacteria. In addition, Big Lake is impaired for aquatic life use due to high nitrogen and phosphorus concentration and for aesthetic use due to sedimentation.
>
> Big Creek and Big Lake are listed in the State Nonpoint Source Management Plan (2021) as Impaired Streams/Lakes Identified for Restorative Management Actions. This project is the second phase of implementing the Big Lake Water Quality Management Plan (2018). Accomplishments of the phase 1 project included hiring a project coordinator, completing baseline water quality monitoring, promoting the project through local meetings and BMP demonstration sites for nutrient, bacteria, and erosion control.

This project (phase 2) will focus on broader scale implementation of BMPs in the upper portion of the watershed (HUC 010203040506) to reduce nutrient, bacteria, and sediment runoff from agricultural and residential lands. Bacteria discharge from the community wastewater treatment plant has been addressed separately through upgrading and permitting of the plant to disinfect discharge water. *(Note: This should be the extent of addressing the point source discharge from wastewater treatment plant in this PIP.)*

4. Pollutants and Pollutant Sources

This section identifies the pollutants and/or pollution of concern and the source of pollution within the watershed that will be addressed by the project. This section should also address the amount of pollutant loading on an appropriate timescale (i.e. 75 lbs. of nitrogen/year) along with a breakdown of sources per pollutant (45% of nitrate loading coming from row crop agriculture, and 15% coming from pastureland). These elements should agree with the description in the WQMP and the Integrated Report. The loading numbers can also be pulled from the WQMP. This section should directly reference those descriptions and cite the plan they originate from.

Nonpoint source pollutants typical of Nebraska streams and lakes are sediment, nitrogen, phosphorus, Atrazine, E. coli bacteria and low dissolved oxygen. Common sources of pollutants are row crop lands, pasture lands, urban/residential lands, septic systems, animal feeding operations, and natural sources.

The following example can be expanded upon.

Sources of bacteria in the Big Lake watershed include pastured livestock, small animal feeding operations and inadequate septic systems. Nitrogen and phosphorus sources include agricultural runoff, septic discharge, and livestock operations. Sources of sediment include erosion of agricultural lands and stream erosion.

5. Pollutant Load Reduction

This section identifies the current pollutants and loads of concern and quantifies load reductions expected from the implementation of the proposed project. The current loads should be taken from the WQMP. Load reductions expected from the proposed project should summarize the load reduction calculated for the specific BMPs to be implemented by the project. This section can be presented as a narrative. If you need assistance in determining or quantifying the pollutant load reductions, your NDEE project manager can provide assistance.

The following example can be expanded upon.

The NRD has the overall goal of restoring and protecting the recreational, aquatic life and aesthetic uses of Big Creek Lake and removing it from the list of impaired waters due to *E.coli* bacteria, nutrients, and sediment. To achieve this goal, a series of projects will be implemented to reduce the influx of bacteria loading by 47%, total phosphorus by 68%, total nitrogen by 27% and sediment by 68%. Implementation of this project (phase 2) is expected to reduce E. coli loading by * cfu/yr, total nitrogen by * lbs./yr, total phosphorus by * lbs./yr, and sediment by * tons/yr.

(* Insert values for each pollutant from totals in Table 2.)

6. Project Description

This section outlines the purpose of the project and what specific actions and activities are going to be done to rectify the problems identified in the Introduction/Background section. It should have activities that meet the goals and objectives of the WQMP. Include the following information*:*

6.1 Introduction:

- *Include an abridged version of the Project Location*
- *Describe the purpose of the Section 319 project (e.g. "The purpose of this project is to reduce runoff and promote infiltration within Red Run Park").*
- *Describe all activities funded through Section 319 or required match, as they relate to the goals and objectives of the WQMP. These goals and objectives should be listed within this section. The goals and objectives should reflect or align with the relevant goals and objectives from the WQMP.*
- *Projects whose major purpose is communication, or contains any component of communication within its plan, should clearly identify the target audience and the mechanism for evaluating the effectiveness of the activity. Identify the goal(s) and objective(s) of the WQMP which each tasks supports.*
    - ***Example:*** *Task 1 will address Objective 1 of Goal 2 of the WQMP*

6.1.a Methods

- *Describe the anticipated products or results (i.e. outputs) from the accomplishment of each task.*
    - *Tasks listed should be quantifiable within the project.*
    - *Tasks should directly aide in the achievement of the objectives.*
    - *Tasks should be reflected in the schedule and milestones.*
    - *Tasks need to support the goals and objectives.*

6.1.b Goals, Objectives, and Tasks

- *Describe the methods by which the tasks will be accomplished.*
- *Insert detailed maps as necessary to supplement a particular element in the text*
        - *The project sub-watershed within the larger WQMP.*
        - *Map of well-heads within a project area*
        - *Animal Feeding Operations that are within the project area*
        - *Map of special priority areas within the project area*
- *Tasks should be tangible and deliverable. You should be able to directly say "We accomplished this!"*
    - *This would mean establishing quantifiable measurements for those tasks. For example: "In Q2 of the second year we will host 3 seminars in targeted communities." Those 3 seminars would be your units of measure.*
    - *This will correlate within the Milestone Table (6.5).*
        - *Using the above example of 3 seminars, if 2/3 seminars were hosted it would be denoted as 67% on the Milestone table*
        -

The following example can be expanded upon.

> The Big Lake Water Quality Improvement Project (Phase 2) is the second phase in implementing the 2019 Big Lake Water Quality Management Plan (WQMP). Phase 1 focused primarily on generating interest among landowners and operators to participate in implementing best management practice to reduce runoff of *E. coli* bacteria, nitrogen, phosphorus, and sediment

into Big Lake. This was done through one-on-one contacts, producer meeting/workshops, BMP demonstration sites and local media. These efforts generated a list of interested producers to participate in this phase of the project.

Big Lake Creek is impaired for recreation use due to elevated concentration of *E. coli* bacteria. The streambed is incising creating heads cuts and causing the banks to collapse and widen. Big Lake is impaired for recreation use due to *E. coli* bacteria, for aquatic life use due to elevated levels of nitrogen and phosphorus, and for aesthetic use due to accumulated sediment.

The purpose of this project is to implement conservation practices in the watershed that reduce runoff of these contaminants. The priority area for this project is the upper portion of the watershed (HUC- 010203040506). Educational activities and septic system upgrades will be implemented throughout the watershed.

This project supports the 2021 State NPS management plan (Goal 1/Objective 3 and Goal 2/Objective 2) in implementing a watershed project to restore impaired waters and providing targeted education to specific audiences. The following tasks will be accomplished to address the goals and objectives of the Big Lake WQMP. *(Paraphrase the WQMP goals and objectives in the following. They may not be sequential if the project does not address all of the G/Os in the WQMP.)*

Goal 1: (paraphrase – e.g., Implementation)

Objective 2: (paraphrase)

Task 1: Implement 400 acres of No-Till with partner land managers

Task 2: Install 2 Urban BMPs on public lands.

Objective 3: (paraphrase)

Task 1: 4 Semi-Annual Reports

Task 2: 2 Annual Reports

Task 3: 1 Final Report

Goals 3: (paraphrase)

Objective 1: (paraphrase – e.g., Communicate with key audiences)

Task 5: Report activities to the NRD quarterly (8 reports)

Task 6: NRD will report project activities to project partners

Task 7: NRD will submit semi-annual reports to NDEE

Objective 3: (paraphrase – e.g., adult education)

Task 8: Conduct 100 one-on-one contacts with landowners and producers

Task 9: Conduct two BMP workshops

Task 10: Conduct two BMP demonstration field days

Task 11: Conduct two family fun and recognition picnics

Task 12: Publish six articles through local press, newsletter, and social media outlets.

Objective 4: (paraphrase – e.g., Youth education)

Task 8: Develop a volunteer monitoring protocol for schools and youth organizations

Task 9: Conduct 2 training sessions for youth monitoring protocol.

Summary and deliverables

6.2 Proposed Management Practices

This section describes and quantifies the management practices that will be implemented through this project. These should be an increment of the practices described in the WQMP. For each management practice you should:

- *Provide a brief narrative description of the practice and the benefits of the practice.*
- *Quantify the units of each practice to be implemented, the acres of land treated (where relevant) by the practice and the total cost of implementing the practice in table format.*
- *Estimate the load reduction expected for each pollutant addressed by the applied practice in table format. (Values for this table can be derived as a percentage of the total load reduction calculated for the quantity of that practice described in the WQMP. If this PIP implements 10% of the practice described in the WQMP, it can be assumed that the load reduction would be 10% of the reduction described in the WQMP.*

The following example can be expanded upon.

The following proposed management practices were identified in the WQMP as priority practices to address the water quality impairments in the Big Lake watershed.

Terraces/Diversions

Terraces are a controlling practice that consist of an earthen embankment, channel, or a combined ridge and channel built across the slope of the field and are generally used in moderate to steep sloping land. Terraces intercept and store surface runoff, trapping sediments and pollutants. The efficiency and longevity of this practice can be increased by incorporating other practices to retain sediment and reduce runoff above the structure.

A diversion is very similar to a terrace, but its purpose is to direct or divert surface water runoff away from an area, or to collect and direct water to a pond. Filter strips should be installed above the diversion channel to trap sediment and protect the diversion. Similarly, vegetative cover should be maintained in the diversion ridge. Any associated outlets should be kept clear of debris.

Water and Sediment Control Basins

Water and sediment control basins can be used to control and trap pollutants, mainly by storing sediment produced by agricultural activities and by reducing water flow from fields with irregular topography. The efficiency and longevity of this practice can be increased by

incorporating other practices to retain sediment and reduce runoff above the structure. Water and sediment control basins generally are less intrusive to farming operations than terraces.

No Till

No till is the practice of planting a crop directly into the soil without tillage. This practice eliminates disturbance of the soil and leaves the residue of the previous crop on the soil surface preventing dislodging and mobilization of soil particles and attached agrichemicals in runoff water. The practice also reduces soil compaction resulting in greater water infiltration and reduced runoff of water and pollutants.

Cover Crops

Cover crops are an important tool for promoting healthy soils and trapping pollutants. They are designed to naturally absorb excess nutrients after crop harvest and to prevent erosion when the field would otherwise be fallow, therefore improving water quality by reducing nutrient and sediment in runoff water. Cover crops also improve soil porosity and water and nutrient retention, further reducing contaminant loads in runoff water.

Filter/Buffer Strip

Grass filter strips, or vegetated buffers, are planted between fields and surface waters. Vegetated buffers along streams, and vegetated filter strips in uplands, can significantly reduce sediment, organics, nutrients, pesticides, pathogens, and other contaminants in runoff water.

Vegetative Treatment Area

A vegetated treatment area (VTA) is an effective system to prevent nutrient and bacteria runoff from barn lots and small animal feeding operations. It consists of a screening structure to separate solids, a holding basin to store runoff water and a permanently vegetated area on which to apply the stored runoff water. The vegetated area is leveled to uniformly distribute applied wastewater and berms are installed around the VTA to prevent intrusion of clean water onto the area and to prevent discharge of applied wastewater.

Septic System

This practice provides for upgrading inadequate septic systems installed prior to January 1, 2000 to current design standards. Homeowners must apply for participation in the program. If accepted, the homeowner may contract with a certified onsite wastewater system installer to replace the existing system with an on-site wastewater system that meets current design standards. When completed, the homeowner may request reimbursement up to $4,800, but not to exceed 60% of replacement cost. The homeowner must provide proof that the new system has been properly registered with NDEE.

In-stream Grade Control Structure

An in-stream grade control structure is a structural practice installed to stop a head cut from advancing further upstream. The structure provides for sharp localized drop in the elevation of the stream bottom that stabilized the stream bed slope above and below the structure reducing the erosive force of the water flow and reducing further down-cutting of the stream bed. Sediment load generated from the stream channel is reduced.

Table 1. Quantity and Cost of Proposed Practices

Practice	Units	Number of Units	Units Treated	Cost/Unit	Total Cost
Terrace	Ln Ft				
Diversion	Ln Ft				
Water & Sediment Control Basin	Cu Yd				
No Till	Acre				
Cover Crop	Acre				
Nutrient Management	Acre				
Buffer	Acre				
Septic System Upgrade	Each				
Vegetative Treatment Area	Each				
Grade Control Structure	Each				
Total					

Table 2. Estimated Pollutant Load Reductions from Proposed Practices

Practice	**Sediment (tons)**	**Total N (lbs.)**	**Total P (lbs.)**	**E. Coli (CFU/100mL)**
Terrace				
Diversion				
Water and Sediment Control Structure				
No Till				
Cover Crop				
Nutrient Management				
Buffer Strip				
Vegetative Treatment Area				
Grade Control Structure				
Septic System Upgrade				

Total				

6.3 Information and Education

There may be multiple audiences associated with the watershed that have different interests and needs to be served by the project's outreach program. This section should describe and quantify specific products and/or programs targeted to specific audiences. The delivery methods should be described for each activity and be reflected in the tasks, objectives, and goals of the PIP. These products and activities should reflect those described in the WQMP.

The following example can be expanded upon.

> The watershed coordinator will assist individual landowners and producers in the priority sub-watershed (Upper Big Creek, HUC-010203040506) in enrolling in Cost Share Program to implement targeted BMPs. One workshop will be developed and presented for landowners and producers in the priority sub-watershed to better inform them about how the target BMPs work, how to implement them and how to maintain them once installed. The workshop also will educate the participants about the impact of the targeted BMPs on water quality, soil health, sustainability, productivity, and profitability. A post-workshop survey will evaluate the effectiveness of the program and gauge interest of workshop participants in implementing the BMPs addressed in the workshop.
>
> Outreach to landowners and producers in the larger watershed and other stakeholders in the watershed will include 1) a field demonstration tour of BMPs implemented by participating landowners and 2) a family fishing tournament and picnic at the BIG Lake Recreation Area to educate participants on the impairment, actions taken, and behavior changes they can make to keep the water body functioning as intended. Other I & E activities include promoting the project and highlighting project accomplishments through a dedicated web site, local news media, social media, and a portable kiosk for display at local businesses and events. The dedicated website will post new content monthly, at a minimum. Press releases will be submitted to local media at least monthly. The portable kiosk will display XYZ info at 5 local businesses where local producers frequent.
>
> A water monitoring protocol will be developed for use with 9-12 grade students. The protocol will be demonstrated in the science and/or agriculture classrooms at the three high schools in the watershed. The protocol will further be used by students at TEST YOUR WATER night in each of the three communities in the priority area and for monitoring LITTLE STREAM tributary which contributes to BIG Lake Recreation area.
>
> A volunteer monitoring protocol will be developed for use in upper grade schools and other youth organizations. NRD staff will train students to use commercial kits (e.g., Hach Kits) to measure phosphorus and nitrate levels in the stream and lake as well as total suspended solids, temperature, and pH. Students also will be trained to measure *E.coli* concentration using a Colilert system. Students will be encouraged to monitor the stream and lake beach at least monthly from May through September. Student data will be compiled and posted on the project web page. Students will be invited to present their data to the NRD board and other meeting

and events. Educational materials will be provided to help students interpret their data as it relates to watershed conditions.

6.4 Schedule

This section describes an estimated schedule or timeline for implementing tasks previously identified in the PIP. This should be presented in table format. Organizing the timeline in quarterly increments of the calendar year is suggested.

Table 3. Timeline for Implementation of Project Tasks

Task	*2022*		2023				2024	
	Q3	*Q4*	Q1	Q2	Q3	Q4	Q1	Q2
One-on-one contact with producers	*X*	*X*	*X*	*X*	*X*	*X*	*X*	*X*
BMP Demonstration Field Day		*X*				*X*		
BMP Workshop			*X*				*X*	
Volunteer Monitoring Training			*X*				*X*	
Fun Day/Recognition Picnic				*X*				*X*
Publish Project Article		*X*				*X*		
Engineering/Design of Grade Control Structure			*X*	*X*	*X*			
Install Grade Control Structure						*X*		
Advertise for Cost Share Sign Up	*X*				*X*			
Implement Ag. BMPs		*X*	*X*		*X*	*X*	*X*	
Semi-annual Reports			*X*		*X*		*X*	
Final Report								*X*

6.5 Milestones

This section describes **incremental** progress in accomplishing project tasks. These represent benchmarks to gauge that tasks are being accomplished in a timely manner and provide an opportunity to make mid-course adjustments or corrections to the timeline. This should be presented in table format. Organizing the milestones in quarterly increments of the calendar year is suggested.

The following example can be expanded upon.

Table 4. Percent Completion of Project Tasks

Task	*2022*		2023				2024	
	Q3	*Q4*	Q1	Q2	Q3	Q4	Q1	Q2
One-on-one contact with producers	*5*	*25*	*45*	*55*	*65*	*85*	*100*	
BMP Demonstration Field Day		*50*				*100*		
BMP Workshop			*50*				*100*	
Volunteer Monitoring Training			*50*				*100*	
Fun Day/Recognition Picnic				*50*				*100*
Publish Project Articles	*10*	*25*	*45*	*55*	*65*	*85*	*100*	
Engineering/Design of Grade Control Structure			*25*	*75*	*100*			
Install Grade Control Structure						*100*		
Advertise for Cost Share Sign Up	*50*				*100*			
Implement Ag. BMPs		*10*	*20*		*50*	*80*	*100*	
Semi-annual Reports			*30*		*65*		*100*	
Final Report								*100*

*percentages represent how much of that particular task would be completed within that quarter. Example: one-on-one contact with producers would have 5 % of this goal met in Q3 and then 25% completed by the end of Q4.

6.6 Evaluation Criteria

This section describes the criteria that will be used to measure progress in meeting the milestones toward completion of the project tasks. Specific criteria should be described for each unique task. Tasks to which similar criteria apply may be grouped together. Please describe the criteria of how you will measure milestones.

The following example can be expanded upon.

- The project coordinator will report quarterly the name and number of contacts made with landowners and producers to the NRD to be included in semi-annual reports.
- Special events (workshops, field days, trainings, etc.) will be reported as completed and included in the semi-annual reports.
- Pre- and Post-program surveys will be conducted to evaluate if educational goals and behavior changes will be made. Attendance numbers and target audience will be reported.
- The use of publications will be tracked on website use, print numbers, and requests for use.
- The Project Manager will perform an annual performance review of staff, evaluating if they are meeting all the expressed duties that were expressed in the position prior to hiring.
- The project engineer will provide progress reports on design and engineering at 30%, 70% and 100% completion intervals and on structure installation at 25%, 50%, 75% and 100% completion intervals. Progress will be included in the semi-annual report.
- BMP installation will be reported quarterly and included in the semi-annual report.

6.7 Water Quality Monitoring

This section should describe the water quality monitoring, if any, that will be done under this PIP. If no data will be collected, please state, "No monitoring will be conducted through this project". If water quality monitoring will not be conducted through the project, but water quality monitoring will still be used to evaluate the effectiveness of the project, the PIP should indicate the program and entity through which the water quality monitoring will be conducted. If the project does include water quality monitoring, a Quality Assurance Project Plan (QAPP) must be developed and accepted by NDEE prior to data collection. [Note: monitoring conducted solely for educational purposes, such as volunteer monitoring, is exempt from the QAPP requirement.] If you are unsure if a QAPP is required, check with your NDEE Project Manager. The description of monitoring activities should include the following:

- Describe what data will be collected as part of the project.
- Describe the methods that will be used to collect samples.
- Describe how the data will be utilized.
    - Education/Awareness
    - Regulatory decisions
    - BMP evaluation
    - Project evaluation

The following example can be expanded upon.

It is anticipated that there will be regular internal meetings regarding the implementation of this project. The NRD will evaluate on a regular basis the success of implementing the identified BMPs and the outreach approach will be adjusted as necessary. Water quality monitoring will be conducted at 7 sites through a separate project to assess previous project impact and to calibrate predictive models for future targeting. NRD staff will collect samples.

6.8 Budget

The budget should clearly break down each source of funding and describe specifically the use of funds for both Section 319 and non-federal match. **All budget items must be categorized under the following EPA budget categories:**

- **Personnel** (Staff under the direct supervision of the sponsor or contributing partners)
- **Fringe Benefits** (Insurance, etc. associated with employment)
- **Travel** (Mileage related to project implementation and transportation, lodging and sustenance related to travel to meetings and conferences.)
- **Equipment** (Non-consumable items valued individually at $5,000 or more.)
- **Supplies** (Items valued individually a less than $5,000)
- **Contractual** (Services and activities procured through a contract including personnel under supervision of the contractor)
- **Other** (This is for any remaining services or items that do not completely fall under previous categories. If nothing does meet this criteria this section can be omitted)

The following example can be expanded upon.

Table 5: Budget

Item	Section 319	Your NRD*	NET*	Local NGO*	Landowner*	EQIP**	Total
Personnel	**50,000**	**35,000**	**25,000**	**0**	**0**	**0**	**110,000**
Project Coordinator	50,000	25,000	25,000	0	0	0	100,000
Administrative Staff	0	10,000	0	0	0	0	10,000
Travel	**5,000**	**2,500**	**0**	**500**	**0**	**0**	**8,000**
Domestic Travel (Mileage)	4,000	2,000	0	0	0	0	6,000
Meetings and Conference	1,000	500	0	500	0	0	2,000
Equipment	**8,000**	**2,000**	**5,000**	**0**	**0**	**0**	**15,000**
Weather Station	5,000	2,000	3,000	0	0	0	10,000
Stream Table	3,000	0	2,000	0	0	0	5,000
Supplies/Materials	**5,500**	**2,950**	**2,450**	**0**	**0**	**0**	**10,900**
Hach Kits	1,500	450	450	0	0	0	2,400
Signage	2,000	1,000	2,000	0	0	0	5,000
Meeting Space Rental	600	400					1,000
Advertising/Publications	400	600	0	0	0	0	1,000
Misc. Office Supplies/Mailing	1,000	500	0	0	0	0	1,500
Contractual	**231,500**	**50,300**	**85,000**	**15,200**	**48,000**	**400,000**	**824,700**

Engineering Design Services	25,000	5,000	5,000	5,000	0	0	40,000
Construction Services	100,000	20,000	30,000	10,000	2,000	0	162,000
Meeting Facilitation	500	300	0	200	0	0	1,000
BMP Implementation	106,000	25,000	50,000	0	46,000	400,000	627,000
Other	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total	**$300,000**	**$92,750**	**$117,450**	**$15,700**	**$48,000**	**$400,000**	**$973,900**

***Non-Federal Funds**

****Other Federal Funds**

6.9 Budget Narrative

The budget narrative describes how the values in the budget table were calculated or otherwise derived. This should also cite the sources of information that are used to inform cost estimates (i.e. a direct quote from supplier, NRCS BMP field guide, University match standards, etc.). Items estimated by similar criteria may be grouped. This may be presented as a separate section or as a footnote to the budget table.

The following examples may be expanded upon:

- The coordinator cost is based on $24/hr. for 4,160 hours over two years.
- Staff costs are based on 400 hours at $25.hr over two years.
- Domestic travel cost is based on 10,000 miles at $0.6/mi for travel to contact landowners and producers and attend local meetings and outreach events.
- Meeting and conference cost are estimated from prior similar events for attendance to represent the project.
- Weather station and stream table costs are estimated form manufacturer's list price.
- Hach kits = 6 kits x $400 = $2,400.
- Space rental cost is estimated a 2 x $500 for two workshops.
- Educational and informational signage for demo sites and publication costs are estimated from prior similar activities.
- Misc. office supply cost is estimated from prior similar activities.
- Engineering and construction costs and facilitation costs are based on contractor estimates.
- BMP cost implementation costs are based on NRCS Practice Cost Tables.

Nine element Index

Element 1: Identification of causes of impairment and pollutant sources or groups of similar sources that need to be controlled to achieve needed load reductions, and any other goals identified in the watershed plan.

Element 2: A description of the nonpoint source management measures that will need to be implemented to achieve load reductions in element 3, and a description of the critical areas in which those measures will be needed to implement this plan.

Element 3: An estimate of the load reductions expected from management measures.

Element 4: an information and education component used to enhance public understanding of the plan and encourage their early and continued participation in selecting, designing, and implementing the nonpoint source management measures that will be implemented.

Element 5: Schedule for implementing the nonpoint source management measures identified in this plan that is reasonably expeditious.

Element 6: A description of interim measurable milestones for determining whether nonpoint source management measures or other control actions are being implemented.

Element 7: A set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made toward attaining water quality standards.

Element 8: A monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established under Element 3.

Element 9: Estimate of the amounts of technical and financial assistance needed, associated costs, and/or the sources and authorities that will be relied upon to implement this plan.