



North Dakota Department of Health
Division of Water Quality
Surface Water Quality Management Program

North Dakota
Nonpoint Source Pollution Management Program Plan



2015 - 2020

North Dakota Nonpoint Source Pollution Management Program Plan

2015-2020

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I. INTRODUCTION

When the Clean Water Act (CWA) was reauthorized in 1987 with the inclusion of nonpoint source pollution control provisions under Section 319, states were provided the means to more effectively address water quality problems that were due to nonpoint source pollution (NPS pollution). Under Section 319 of the CWA, each state was required to develop a state management plan describing NPS pollution impairments in the state and actions to be taken to address those impairments. The State of North Dakota submitted and received approval from the Environmental Protection Agency (EPA) for its first Nonpoint Source Pollution Management Plan in 1988. The original plan underwent a significant revision in February 1999 followed by several minor revisions between 1999 and 2008. The management plan was also updated in 2010 to formally incorporate all previous revisions. To build on lessons-learned and adjust to changes to the state's overall water quality management framework, the NPS Pollution Management Program Plan has again been updated to provide direction for the NPS Pollution Management Program (NPS Program) during the period of 2015 through 2020.

Many of the revisions in this updated Nonpoint Source Pollution Management Program Plan (Management Plan) are minor, however, several significant revisions were necessary to more effectively reflect the NPS Program's involvement in the ND Department of Health, Surface Water Quality Management Program's transition to a Basin Water Quality Management Framework (NDDoH 2015); adoption of a new TMDL Vision; and development of a statewide nutrient reduction strategy. Each of these pending initiatives will impact how the NPS Program interacts with the other programs managed by the Surface Water Quality Management Program (SWQMP) as well as other water quality programs in ND Department of Health, Division of Water Quality (Department). Since these pending initiatives are still evolving and will likely take more than five years to fully implement, this updated Management Plan is considered a "transitional plan" that will bridge the gap between the development of these new state initiatives and their full implementation in five years. Despite these changes, the NPS Program will continue to be a voluntary, incentive-based program focused on the delivery of financial and technical assistance to address local NPS pollution abatement priorities. In cooperation with program partners, the NPS Program will also remain focused on the promotion and implementation of watershed-based management to more effectively protect or restore beneficial uses threatened and/or impaired by NPS pollution.

Implementation of the Management Plan will be primarily accomplished through a coordinated effort with local, state and federal agencies as well as nongovernmental organizations (NGOs). Through the formation of these partnerships, the necessary financial and technical resources will be available to local sponsors to meet their goals and demonstrate that nonpoint source pollution control/prevention can be accomplished effectively and voluntarily. Ultimately, the success of the NPS Program will be dependent on the ability of the local sponsors and their partners to demonstrate to agricultural producers and the general public that NPS pollution control and water quality improvement practices are compatible with and, in many cases, can enhance sustainable agricultural production.

The Management Plan includes three specific sections that describe the implementation of the NPS Program. The Program Overview section identifies the NPS Program long term vision and

mission and as well as the goals for the Management Plan's 5-year period. The basic components involved in the implementation of the NPS Program are also summarized in the Program Overview section. The "working" end of the Management Plan is described in the five subsections under the Program Delivery section. Each Program Delivery subsection provides the quantified objectives and tasks that will be initiated to achieve the 5-year goals for the Management Plan. The Evaluation section, which is the final section, describes the steps to be taken to document progress at the program and project levels.

II. PROGRAM OVERVIEW

A. Program Mission, Vision and Goals

The North Dakota NPS Program vision is to abate all NPS pollution threats and impairments to the beneficial uses of the waters of the state.

To accomplish the vision, the mission for the NPS Program is to implement a voluntary, incentive-based program that restores and protects the chemical, physical, and biological integrity of waters where the beneficial uses are threatened or impaired due to nonpoint sources of pollution.

Three primary goals have been established under the Management Plan to maintain progress toward the mission and vision over the next 5 years (i.e., 2015-2020).

Goal 1: Coordinate with the Total Maximum Daily Load Program (TMDL Program) and local partners to assess 15 priority watersheds to document the beneficial use conditions as well as the sources and causes of NPS pollutants impairing beneficial uses of the waterbodies within the watersheds. Progress for this goal will be evaluated by tracking the number of waterbodies assessed as well as the number of TMDL or NPS Assessment Reports developed. *[NOTE: The number of 12 digit watersheds to be assessed may increase to 25 if the development of the Basin Water Quality Management Framework proceeds as planned. The first basin assessment activities are expected to run from 2016-2017 in the Red River Basin, followed by watershed assessment activities in a second basin in 2018-2019. These basin assessments may result in the completion of 10 additional watershed assessments.]*

Goal 2: In cooperation with local partners, develop and implement watershed restoration or protection plans for 15 priority sub-watersheds. Success of these projects will be defined by restoration of impaired uses; applied best management practices (BMPs) and progress toward pollutant load reductions described in the approved watershed-based plans. Priority watersheds will include those with impaired waterbodies listed in the 2014 or subsequent Integrated Reports or those identified in approved basin water quality management plans. To allow flexibility in staffing and planning, the watershed projects may address one or more impaired waterbodies and encompass several 12 digit hydrologic units (i.e., sub-watersheds). However, a single sub-watershed will be the preferred project size. For the projects that must include multiple sub-watersheds, the sub-watersheds will be prioritized to establish a long term implementation schedule based on those priorities.

The implementation schedule of most of the watershed projects will also likely exceed 5 years and extend into the time periods for subsequent management plans. *[NOTE: As previously indicated, the number of watershed projects implemented may increase by approximately five if the Basin Water Quality Management Framework and Red River Basin assessment are completed, as scheduled. The timeline for the completion of the assessment work in the second basin will not allow sufficient time for the implementation of additional watershed projects in that basin]*

Goal 3: Through multiple forms of media at the state and local level, increase public awareness and understanding of water quality and beneficial use impairments associated with NPS pollution as well as the sources and causes of NPS pollution in the state. Feasible solutions to the state's NPS pollution issues will also be a major part of NPS Program outreach efforts. The target audience will be the general public, with particular emphasis placed on reaching individuals and organizations involved in the agricultural industry. As the ND Nutrient Reduction Strategy evolves during the Management Plan period, the educational goal of the NPS Program will also be adjusted to ensure coordination and the delivery of a consistent message on nutrient management. Attendance, exit surveys, follow-up contacts, and feedback will be the main measures used to gauge the success of local educational events. A statewide survey, the first and final year of the Management Plan, will be conducted to evaluate general public awareness.

Advancement toward the NPS Program mission and vision will ultimately be measured by progress under the three NPS Program goals as well as progress under the five Program Delivery objectives described in Section III. Some of the measures that will be used to evaluate success include: in-stream or in-lake water quality data; modeled load reductions related to applied BMPs; public survey results; acres of applied BMPs; impaired waterbodies assessed or restored and healthy watersheds protected. Annual and final reports entered in the EPA Grants and Reporting System (GRTS) will be the primary means used to report and document progress to the EPA. The EPA performance measures, WQ-10 and SP-12, will also be used to report on specific projects where a beneficial use has been fully restored or on projects where trends indicate declining pollutant loads or concentrations. Communication with North Dakota residents regarding program progress will also be an important reporting component for the NPS Program. The NPS Program web site, newspaper articles, local newsletters, public meetings, radio, and other forms of media will all be used to "report to the public" on progress toward statewide and local NPS pollution management goals.

B. Program Technical Support

With a diverse set of goals and objectives, successful implementation of the Management Plan requires the involvement of Department personnel with a wide range of water quality and watershed management expertise. To ensure the appropriate technical support is available, state general funds and approximately 20% of the state's annual Section 319 allocation are used to support Department staff involved in the NPS Program. These funds are used to support staff involved with: 1) NPS Program administration and coordination; 2) information and education

(I/E) programs; 3) development of watershed assessment and implementation projects; 4) analysis of samples (e.g., water quality, biological) collected within project areas; 5) maintenance of the Grants Reporting and Tracking System (GRTS) and 6) data management and interpretation. Most of the assistance provided through the NPS Program is directed toward resource managers employed by local organizations such as Soil Conservation Districts (SCDs) and Water Resource Boards (WRBs). This assistance enables the local resource managers to: assess NPS pollution impacts; document water quality trends and/or improvements; expand educational efforts; and ultimately, develop stronger more focused NPS pollution management projects.

While the primary responsibilities of the different staff positions are focused on specific components of the Management Plan, many of the NPS Program's objectives and tasks require involvement from several, if not all, of the staff members. Consequently, most of the work activities for the different personnel positions are interdependent. Specific Department positions involved in the NPS Program are as follows:

- ✓ Water Quality Division Director & Surface Water Quality Management Program Manager
- ✓ NPS Pollution Management Program Coordinator
- ✓ Environmental Scientist (Watershed Planning & I/E Program Coordination)
- ✓ Environmental Scientist (Monitoring and Assessment Assistance)
- ✓ Environmental Scientist (Groundwater Monitoring)
- ✓ Chemist/Microbiologist
- ✓ Staff Support

The staffing and support work plans for Department staff involved in the NPS Program are posted under each grant year in the EPA Grants Reporting and Tracking System.

C. Major NPS Pollutants

Within any watershed, the amount and type of NPS pollution can be extremely variable and dependant on many natural and/or anthropogenic factors. Some of the natural factors that affect NPS pollution delivery rates in the state include precipitation intensity and frequency, vegetation, soil type, and topography. Alteration of the physical landscape through various land management activities such as construction, livestock grazing, cropland tillage, concentrated livestock feeding, stream channelization, and wetland drainage also directly influence the type and amount of NPS pollution delivered to a particular waterbody. Land use activities such as these are manageable and will be the focus of restoration or protection projects supported by the NPS Program. Table 1 lists the potential sources of NPS pollutants in the state that could be affected by mismanagement.

Table 1. Categories and Subcategories of NPS Pollution Sources.

<u>Agriculture</u>	<u>Resource Extraction/Exploration/Development</u>
Non-irrigated crop production	Surface mining
Irrigated crop production	Subsurface mining
Pasture grazing - riparian and upland	Petroleum activities
Pasture grazing - riparian	Abandoned mining (gravel pits)
Pasture grazing - upland	
Concentrated animal feeding operations	<u>Land Disposal (runoff/leachate from areas)</u>
Rangeland - riparian and upland	Sludge
Rangeland – riparian	Wastewater
	Landfills
<u>Construction Runoff</u>	Industrial land treatment
Highway/road/bridge construction	On-site wastewater systems (septic tanks, etc)
<u>Silviculture</u>	<u>Habitat Modification</u>
Harvesting, restoration, residue management	Removal of riparian vegetation
Forest management	Bank or shoreline modification/destabilization
Logging road construction/maintenance	Drainage/filling of wetlands
<u>Other</u>	<u>Hydromodification</u>
Golf Courses	Dredging
Erosion from derelict land	Dam construction
Atmospheric deposition	Upstream impoundment
Waste storage/storage tank leaks	Flow regulation/modification
Spills	
Natural sources	<u>Urban Runoff/Storm Sewers</u>
Internal nutrient cycling	Nonindustrial
Sediment re-suspension	Industrial
Erosion and sedimentation	Surface runoff
	Other urban runoff
	Highway/road/bridge runoff

The NPS pollutant sources listed in Table 1 represent a universal list of potential sources in the state. While these sources are present, most of the sources are localized and will only be targeted on an infrequent basis by restoration projects supported through the NPS Program. During the Management Plan period, the primary NPS pollutant sources to be addressed will generally include agricultural lands; degraded riparian areas; animal feeding operations; and failed on-site wastewater treatment systems. NPS pollutants typically associated with these sources include nitrogen, phosphorus; sediment and E. coli bacteria. However, in the event other less common NPS pollutants are found to be the cause of water quality impairment, projects to address those pollutants will also be eligible for support by the NPS Program.

D. Project Types and Focus

Given the size of the agricultural industry in North Dakota, a majority (i.e., >80%) of the Section 319 funds awarded to the state will be used to evaluate and address NPS pollution associated with agricultural production. These funds will be used to support educational activities; conduct watersheds assessments; and provide financial and technical assistance to landowners implementing best management practices (BMPs) in priority watersheds. In most cases, the

BMPs will address NPS pollution associated with the management of cropland, livestock manure, grazing lands and riparian corridors. Management of tile drain systems is also a relatively new and emerging pollutant source that will be addressed more frequently under this Management Plan. The educational programs will be conducted at both the state and local levels and range in size from simple one day events to multi-year programs that provide “one-on-one” mentoring services. Section 319 funds will also be used to support watershed assessments to document existing water quality/beneficial use conditions and identify the sources and causes of NPS pollutants impairing the beneficial uses. Major non-agricultural NPS pollution sources that may also be addressed in the project areas include failed onsite sewage treatment systems and eligible urban areas.

Over the past 10 years, the NPS Program has used Section 319 funding to support over 120 NPS pollution management projects throughout the state. While the size, target audience, and structure of the projects have varied significantly, they all share the same basic objectives. These common objectives are: 1) increase public awareness of NPS pollution issues and solutions; 2) reduce/prevent the delivery of NPS pollutants to waters of the state; and 3) evaluate benefits of the project. Projects supported by the NPS Program will generally fall under one of four different categories that describe the basic focus of the project. These project categories are: 1) development phase projects; 2) watershed projects; 3) support projects; and 4) information/education projects. A brief description of each project category is as follows:

Development Phase Projects: Development phase projects are the first step in determining NPS pollution management needs and solutions. The watershed scale assessment projects under this category are generally initiated by local groups or organizations in response to an observed water quality problem and/or other information on water quality conditions in a specific waterbody (e.g. lake water quality reports). Information and/or data collected through the development phase watershed assessment projects is typically used to: 1) determine the extent of beneficial use impairments associated with NPS pollution; 2) identify sources and causes of NPS pollution; 3) establish watershed-specific NPS pollutant load reduction targets; 4) identify feasible solutions to achieve NPS pollutant load reduction goals; and 5) develop a Total Maximum Daily Load (TMDL), when applicable. In addition to the watershed assessments, the development phase projects also may include projects focused on the development of watershed assessment tools or the evaluation of new or emerging NPS pollutant sources and causes. The development phase projects are generally one to two years in length.

Watershed Projects: Watershed projects are the most comprehensive and long-term projects implemented through the NPS Program. These projects are designed to address documented NPS pollution impacts identified through previous development/assessment projects or TMDL reports. The primary goal of the watershed projects is to restore or protect waterbodies where the beneficial uses are impaired or threatened due to NPS pollution. This watershed project goal is generally accomplished by: 1) promoting voluntary adoption of specific BMPs; 2) providing financial and technical assistance to implement BMPs; 3) disseminating information on the project and solutions to identified NPS pollution impacts; and 4) evaluating progress toward meeting NPS pollutant

reduction goals. Local sponsors will utilize any available funding including; Section 319 funds, USDA cost-share, North Dakota Outdoor Heritage funds, and local contributions to support their watershed restoration efforts. Funds allocated to a watershed project will typically be used to employ staff, cost-share BMPs, conduct I&E events, and monitor trends in the aquatic community, water quality and/or land use. Watershed projects, which are generally initiated as five year projects, can be extended another five or more years depending on progress; size of the watershed; and extent of beneficial use impairments associated with NPS pollution.

To effectively reduce or eliminate the transport of NPS pollutants to surface and/or ground water resources, various “source control” measures are implemented within the watershed project areas. These source control measures or BMPs are designed to: 1) prevent pollutants from leaving a specific area; 2) reduce/eliminate the introduction of pollutants; 3) protect sensitive areas; and/or 4) prevent interaction between precipitation and pollutants. Specific BMPs supported by the NPS Program and the associated Section 319 cost share policies are described the “North Dakota Nonpoint Source Pollution Management Program Cost Share Guidelines for Nonpoint Source Pollution Control Best Management Practices” (BMP Cost Share Guidelines). The web address for the BMP Cost Share Guidelines is:

http://www.ndhealth.gov/WQ/SW/Z1_NPS/B_Program_Info.htm. Within each watershed project, the type of BMPs implemented will be dependent on the: 1) NPS pollutants being addressed; 2) specific sources and causes of NPS pollution; 3) NPS pollution delivery mechanisms; and 4) feasibility and affordability of the prescribed BMPs.

Support Projects: These are projects that support BMP implementation within other NPS project areas or address a specific NPS pollutant source. Support projects can be statewide in scope or targeted toward specific NPS projects, geographic areas or priority watersheds. Generally, support projects deliver a specific specialized service or provide financial and/or technical assistance to implement a specific type of BMP. Services provided by these projects may include the development of construction designs and/or planning and financial assistance to implement BMPs such as livestock manure management systems; wetland restorations and/or riparian buffers. Most support projects will be 5 or more years in length.

Information/Education Projects: The fourth type of NPS project is the information/education (I/E) project. As the name implies, projects in this category are those that are designed to educate the public on various NPS pollution issues. Educational projects can vary greatly in size, focus and target audience and be delivered statewide or locally. Some projects may only use demonstrations or workshops to reach the target audience while others combine several educational offerings to deliver a NPS pollution management message. The information/education projects can be one to three years in length, with the option to extend the project an additional three years, if adequate progress is demonstrated.

A majority of the NPS Program projects are sponsored and managed by local soil conservation districts (SCDs). Other project sponsors include water resource boards (WRBs), universities,

resource conservation and development councils, NGOs, cities and other state agencies. NPS Program financial assistance provided to the local sponsors is typically used to support activities such as staffing; BMP implementation; biological and water quality sample collection; data interpretation; and public meetings or other I/E events. NPS Program staff also provided technical support to project sponsors for project planning and management; data interpretation, sample analysis; and reporting. Two NPS Program databases are also provided to the project sponsors to manage the Section 319 funds allocated to the project and to track the location, amount, cost and type of BMPs supported with Section 319 funding. Section 319 funding awarded to the projects is provided at a 60% Section 319 and 40% local matching ratio. The local match, which can be cash and/or in kind services, is generally derived from a number of local partners including, SCDs, WRBs, city councils, private foundations, landowners, and agricultural companies.

E. Project Review Process

The North Dakota NPS Pollution Management Task Force (Task Force) serves as the stakeholder advisory board to the NPS Program for the development and implementation of the Management Plan. The main function of this multi-agency board is to provide recommendations on proposed projects to ensure a balanced NPS Program is implemented in North Dakota. Through Task Force meetings, the members are given the opportunity to review all locally sponsored projects seeking Section 319 financial support. Discussions during the annual project reviews also serve as a catalyst for creating more coordination between the organizations represented on the Task Force and the local NPS project sponsors. The Task Force has 32 members representing nongovernmental organizations (NGOs), as well as local, state and federal agencies (Table 2).

The Task Force project review process involves two separate steps. The first step of the process is focused on the review of draft project pre-proposals. During this step, representatives of the sponsoring entities are invited to the Task Force meeting to present their project and answer any questions from the Task Force members. Following the presentations, the Task Force discusses the eligibility, strengths, weaknesses, goals and objectives of each draft pre-proposal. Through the Task Force discussions and the pre-proposal evaluation worksheets (Appendix B), the NPS Program is provided significant input on the appropriateness of the draft projects and actions needed to improve the project plans. The Task Force comments are also shared with the project sponsors to assist them in completing the final project implementation plans (PIP).

The second part of the review process focuses on the evaluation of the “programmatic” benefits of each project. When reviewing the final PIPs, the Task Force considers criteria such as: 1) project location; 2) potential for statewide application; 3) innovativeness; 4) transferability of information; 5) benefits to ongoing projects; and 6) cost effectiveness. Based on these programmatic criteria, each Task Force member is asked to complete a final project proposal evaluation worksheet (Appendix C) to assist the NPS Program in assigning priority rankings to the final PIPs. These priority rankings are only needed if the cumulative funding request for the projects exceeds the anticipated Section 319 allocation for that federal fiscal year (FFY). The NPS Program then uses the Task Force rankings to identify the highest priority projects for Section 319 financial support. To conclude the review process, the priority projects are listed in the FFY Section 319 grant application and the final PIPs are forwarded to EPA for final review

and approval. The approximate schedule for the annual Task Force review process and a more detailed description of the review process and policies are included in Appendix A.

Table 2. Nonpoint Source Pollution Task Force Members

<u>Public/Private Organizations</u>	
Environmental and Energy Research Center	ND Association of RC&D Councils
ND Association of Soil Conservation Districts	ND Farm Bureau
ND Farmers Union	ND Grain Growers Association
ND Grazing Associations	ND Pork Producers
ND Rural Water Systems Association	ND Natural Resources Trust
ND Stockmen's Association	ND Wildlife Federation
Red River Basin Commission	
<u>State Agencies</u>	
ND Department of Agriculture	ND Department of Health
ND Game and Fish Department	ND Geological Survey
ND Parks and Recreation Department	NDSU Agricultural Extension Service
NDSU Ag Extension Service--Soil Conservation Committee	ND State Water Commission
	ND Forest Service
<u>Federal Agencies</u>	
USDA Agricultural Research Service	USDA Farm Services Agency
USDA Natural Resource Conservation Service	USDA Forest Service
USDA Rural Development	USDI Bureau of Land Management
USDI Bureau of Reclamation	USDI Fish & Wildlife Service
USDI Geological Survey	US EPA Region VIII

F. Basin Water Quality Management Framework Summary

In 2014, the SWQMP initiated the development of the Basin Water Quality Management Framework (Basin Framework). The intent of the Basin Framework is two-fold. From a SWQMP perspective, the primary purpose is to improve the delivery and coordination of the programs managed by the SWQMP (i.e., water quality monitoring and assessment, Total Maximum Daily Load, nutrient management and NPS Program). Secondly, and more importantly, the Basin Framework will provide the means to more effectively engage local stakeholders in the development of basin water quality management plans that establish priorities and implementation schedules for watershed assessments; TMDL development; education programs; and watershed restoration or protection activities. A basin stakeholder advisory group (BSAG), composed of local resource management representatives and stakeholders, and a technical advisory group (TAG) will be formed in each major basin in the state to develop and implement the basin water quality management plans and facilitate coordination with the SWQMP and other local, state or federal organizations. The Basin Framework will be organized around the five major river basins in the state (Figure 1) and is scheduled to be initiated in the Red River Basin in 2015. A tentative schedule for the implementation of the Basin Framework through all five river basins is provided in Appendix D.

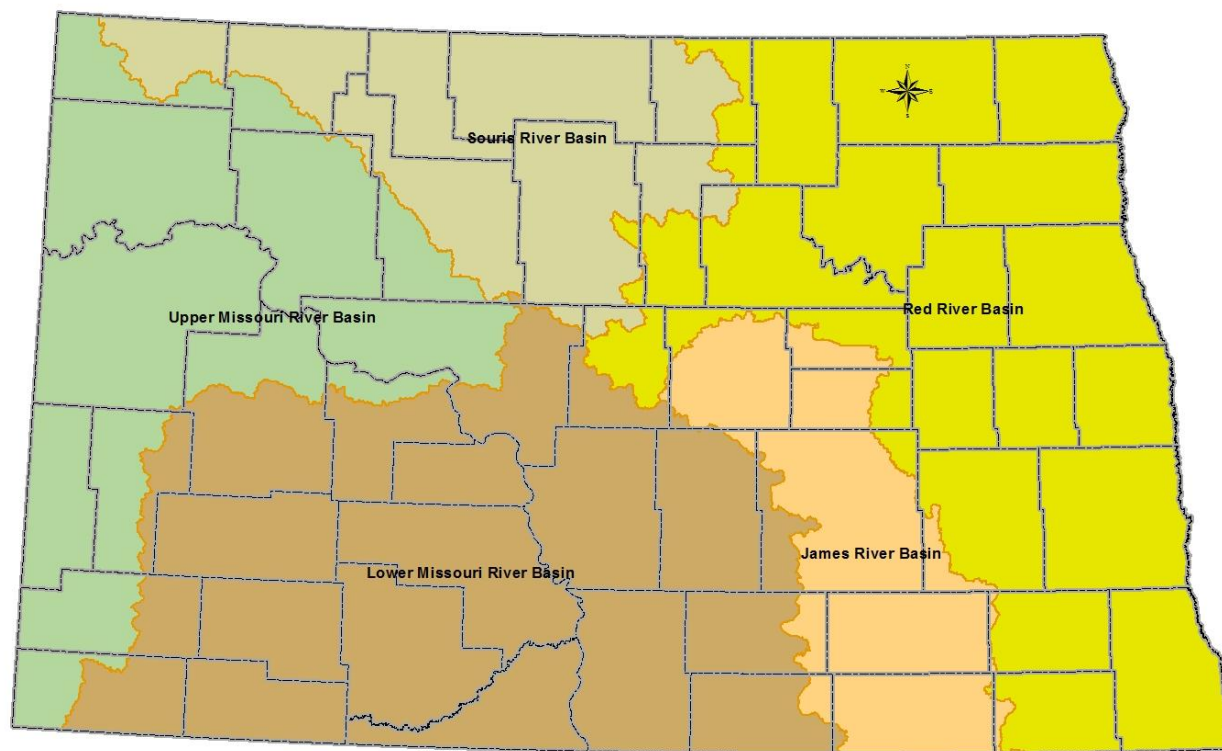


Figure 1. Major River Basins addressed by the Basin Water Quality Management Framework.

As a part of the SWQMP, the NPS Program will be directly involved in the development and implementation of the basin water quality management plans initiated through of the Basin Framework. More specifically, the primary roles of the NPS Program will be associated with the delivery of financial and technical assistance for the planning and implementation of watershed assessments (including TMDLs); educational activities, and watershed restoration or protection projects. Involvement in the implementation of the Basin Framework will ultimately result in more focused delivery of NPS Program resources, maximizing the effectiveness of all aspects of the program. Some of the anticipated benefits for the NPS Program are as follows:

- Closer coordination between local stakeholders; the TMDL Program; monitoring and assessment programs; and state or federal partners to more effectively define water quality and beneficial use management needs at the basin scale as well as within priority watersheds identified in the basin plans.
- Better data, integrated long term per river basin for evaluating beneficial use conditions and identifying watershed restoration and protection priorities.

- A more structured process for setting short and long term goals for the delivery of financial and technical assistance to implement educational projects as well as the watershed assessment, restoration, and protection projects identified in the basin management plans.
- Basin scale adaptive management processes that will lead to more local involvement; improve management and evaluation of scheduled projects; and ensure more efficient use of appropriated funding.
- More diverse and engaged partnerships which will lead to stronger local management; expanded funding opportunities and increased success when soliciting financial support through various sources.
- Increased communication on basin level resource management between local resource managers (e.g., SCDs, WRBs, County Commissions, etc.); NGOs; commodity groups; state and federal agencies; universities; cities; etc. in the basins.
- Consistent educational efforts targeting basin residents that are focused on NPS pollution issues in the basin and the related solutions.
- Increased opportunities to conduct longer term post-project monitoring; maintain consistent data collection schedules; and provide the network to better gauge changes in awareness and adoption of priority BMPs.

As previously indicated the Basin Framework is still under development and will likely take over 15 years to fully implement in all five river basins (Appendix D). As such, this Management Plan will be considered a transitional plan, in that only a small subset of the tasks related to NPS Program involvement with the Basin Framework will occur during the time frame for this Management Plan. It is also expected most of the Basin Framework tasks will not be initiated until year three or four. Consequently the deliverables for the Program Delivery objectives (Section III) will not reflect all the anticipated benefits of a fully implemented Basin Framework. Over the long term, as the Basin Framework advances and basin water quality management plans are developed for each river basin, the Management Plan will also be updated to include priorities set within the different river basins. The first basin water quality management plan in the state is tentatively scheduled to be completed for the Red River basin in 2017, at which time the Management Plan will be reviewed and updated accordingly.

III. PROGRAM DELIVERY

Delivery of the NPS Program will be accomplished through five interrelated objectives addressing: Waterbody Prioritization; Resource Assessment; Project Assistance; Coordination; and Information & Education. Each objective has specific tasks, planned outputs and milestones that describe the major actions to be completed during the Management Plan period. The outputs of these activities will be used to gauge progress toward the specific Management Plan objectives and tasks. A milestone table for estimated annual and 5-year deliverables per task is provided in Appendix E.

A. Waterbody Prioritization

During this Management Plan period, the NPS Program prioritization process will be in a state of transition. With the anticipated implementation of the Basin Framework and TMDL visioning process, the make-up of the local partners and the prioritization process itself will change significantly over the next five years. The most immediate actions that will affect the NPS Program prioritization process include the use of the Recovery Potential Screening Tool (RPST) in the TMDL visioning process and the inclusion of the basin stakeholder advisory groups (BSAGs) in the NPS Program prioritization process. Priorities established with the aid of the RPST are expected to be incorporated into the NPS Program prioritization process in 2016/2017 to establish initial statewide and basin level priorities for watershed assessment, restoration or protection. Conversely, priority setting with the BSAGs will take more time and will likely extend into the time period for the next management plan. Given the extended timelines for some of the changes, the initial prioritization objectives and tasks included in the Management Plan will primarily describe the prioritization process currently in place. However, as the implementation of the RPST, TMDL visioning process, and Basin Framework proceed, the Management Plan prioritization tasks will need to be revised. The first Management Plan interim review and update is scheduled for 2017.

Currently, at the state level, the Integrated Report serves as the main information source for establishing NPS Program priorities. Waterbodies ranked as high priority for TMDL development and those with approved TMDLs are considered the highest priority waterbodies for assessment or restoration under the NPS Program. From a protection stand point, assessed waterbodies with no beneficial use impairments are also recognized by the NPS Program as priority waters. Locally, the Integrated Report is also used for prioritization purposes, but other sources such as TMDLs; public survey results; applied BMP data; and NPS Pollution Assessment Reports, are also used to further define local priorities and set schedules for specific watershed assessment, restoration or protection projects.

During priority setting for assessment projects, the local partners, in cooperation with the NPS Program, can adjust the NPS Program waterbody priorities to more accurately represent local priorities. Initially, the state's high priority waterbodies are reviewed with local partners to provide a starting point for establishing the local assessment priorities. Observed conditions, local interest and resource limitations are some of the additional factors the local partners may consider to determine if there is a need to adjust the NPS Program assessment priorities. The local partners also have the option to add un-assessed waterbodies to their priority list. These un-assessed waterbodies are only added if local interest is high and observed conditions suggest beneficial uses are impaired. The local assessment priorities established through this process may include a single waterbody or several waterbodies scheduled for assessment over multiple years.

For assessed waterbodies or those with a TMDL, local partners establish a priority process for scheduling the implementation of the appropriate corrective or protection measures. Generally, if the number of assessed waterbodies is limited and significant local interest exists, prioritization is a very straight forward process whereby the waterbody restoration or protection projects are simply implemented as the assessments are completed. However, occasionally, some high priority waterbodies may not proceed beyond the assessment phase due to various reasons (e.g.,

limited landowner interest, lack of local support). Under these situations, the watershed for the impaired waterbody is considered a priority area for increased information/education efforts to strengthen support by increasing awareness and understanding of the NPS pollution impacts and solutions to those impacts.

As a third implementation priority, if a common NPS pollutant source is contributing to the impairment of beneficial uses in multiple watersheds, the pollutant source itself can be identified as a high priority and targeted for abatement activities. Animal feeding operations, degraded riparian areas, and tile drainage systems are examples of some high priority sources. In most cases, the local implementation priorities will focus almost exclusively on fully assessed waterbodies and those with an approved TMDL. However, the projects that target education programs toward assessed watersheds with limited support as well as the projects addressing a specific NPS pollutant source are also recognized as secondary priorities for implementation work.

Within the priority watersheds, further prioritization is also accomplished with the Annualized Agriculture Nonpoint Source Pollution model (AnnAGNPS) or the LiDAR-based Decision Support Tool (Support Tool). Both models are used to identify areas and/or sub-watersheds within the priority watersheds that are major sources of nitrogen, phosphorus and/or sediment. These target areas are the focus for BMP implementation within the watershed project areas. The AnnAGNPS model is used throughout the state to map these target areas for all the priority watersheds receiving Section 319 support. Generally, the AnnAGNPS target areas range in number from a few to over one hundred per priority watershed. The LiDAR-based Decision Support Tool, which is a new prioritization process for the state, also provides the means to identify priority sub-watersheds and target areas within the larger priority watersheds. However, the Support Tool also allows the user to easily “zoom-in” to identify critical sites within specific agricultural fields to assist with BMP planning. The Support Tool is still a developing system and as the pending features or applications are completed, the Support Tool will also provide an analysis of downstream load reductions associated with applied BMPs and provide the estimated costs per pound for those reductions. The Support Tool is currently only available for the watersheds of the Wild Rice River and James River in North Dakota.

The final step in the NPS Program prioritization process is accomplished through the ND Nonpoint Source Pollution Task Force (Task Force). Projects seeking Section 319 funding through the annual grant award process are subject to review by the Task Force. During the review process, the Task Force members provide recommendations on each project and submit evaluation worksheets for each project to NPS Program. These recommendations and evaluations help the NPS Program identify the highest priority projects and determine the extent of Task Force support for each project. More detail on the Task Force review process and policies is provided in Appendices A, B and C.

Prioritization Objective: Provide direction for the delivery of financial and technical assistance to assess, restore or protect waterbodies impaired or threatened by NPS pollution

Task 1: Based on the most current Integrated Report, identify NPS Program priority waterbodies in each of the five major river basins in the state.

Products/Milestones

- NPS Program priority waterbodies identified for assessment, restoration or protection. This priority list will be developed in 2015. *[NOTE: These will be interim priorities until the Recovery Potential Screening Tool (RPST) is developed. Starting in 2016, the RPST will be the main tool used to help establish state and basin level priorities for watershed assessment, restoration, and protection.]*

Task 2: Coordinate with the other SQWMP programs (i.e., TMDL, assessment and monitoring) to develop and apply the ND Recovery Potential Screening Tool (RPST) to establish state and basin level priorities.

Products/Milestones

- Functioning ND Recovery Potential Screening Tool. The Tool is scheduled to be completed in 2016
- State level NPS Program priorities established in 2016 at the 8 digit HU scale for watershed assessment, restoration and protection.
- Apply the RPST within the five major river basins to establish 5 priority lists at the 12 digit HU scale for the assessment, restoration and protection. This process will run from 2016 through 2017. The RPST prioritization process will start in the Red River Basin in 2016.

Task 3: Utilize the AnnAGNPS model and, where available, the LiDAR-based Decision Support Tool to assist local partners (e.g., soil conservation districts, water resource boards, basin stakeholder groups, etc.) with the identification and ranking of priority sub-watersheds and locations within the priority watersheds.

Products/Milestones

- AnnAGNPS and Decision Support Tool maps of priority sub-watersheds and locations, with estimated N, P and sediment loads for the priority sites. AnnAGNPS priority area maps for all approved watershed projects and Decision Support Tool maps of priority sub-watersheds and locations in the James and Wild Rice River basins in 2016.
- New Decision Support Tool developed for all or part of the Sheyenne River basin in 2019. *[This output is contingent on the availability of financial support and development of local partnerships]*

Task 4: Using the state and basin level waterbody priority lists as a starting point, coordinate with the applicable soil conservation districts and basin management committees (as they are formed) to further define local priorities and set implementation schedules for waterbody assessment, restoration and/or protection projects.

Products/Milestones

- Local waterbody assessment and restoration priorities established for 5 soil conservation districts and 3 river basins. *[NOTE: The priorities for the river basins will be contingent on the formation of basin management committees]*

Task 5: Determine NPS project funding priorities through the annual NPS Pollution Task Force project review process

Products/Milestones

- Task Force comments and recommendations on draft project proposals and relative priority rankings for the proposed projects. Approximately 7-10 draft project proposals will be reviewed annually in October/November. See Appendix B for the draft project proposal evaluation worksheet.
- Final project implementation plans for 7-10 projects approved for Section 319 financial support. Final project reviews are conducted in January/February. See Appendix C for the final project proposal evaluation worksheet.

B. Resource Assessment

Projects designed to assess and document the extent of beneficial use impairments associated with NPS pollution are a critical component of the NPS Program. Data collected through assessment efforts are used to define state and local NPS pollution management needs as well as provide direction for ongoing and future educational initiatives. As the Basin Framework develops, assessment projects at the basin level and watershed level (e.g., 12 & 10 digit hydrologic units) will also provide basin stakeholder advisory groups the necessary information to establish priorities for watershed restoration or protection, TMDL development, and public outreach. These priorities will be the foundation of their basin management plans.

Assessment of beneficial use and water quality conditions and trends is accomplished through the SWQMP's monitoring programs as well as through local assessment projects targeting small watersheds. At the state level, data (e.g., water quality, biological) collected by the SWQMP and the local watershed projects are compiled and interpreted on a biennial basis to develop the Integrated Reports. These Integrated Reports, not only help in prioritizing watersheds for restoration work, but they also aid in directing local partners to waterbodies that need further assessment to define restoration needs. The data collected through these local assessments are used to develop the TMDLs and/or NPS pollution assessment reports that: 1) document beneficial use impairments; 2) identify specific NPS pollutant causes/sources; and 3) establish goals for landuse improvement and NPS pollution load reduction. This same data is also used to help meet NPS Program assessment and prioritization objectives and update future Integrated Reports. The most current Integrated Report is posted on the Department's web site:

http://www.ndhealth.gov/WQ/SW/A_Publications.htm.

Assessment Objective: Document beneficial use and water quality conditions of priority waterbodies and/or watersheds and identify the sources and causes of beneficial use impairments.

Task 1: Coordinate with local partners to develop Quality Assurance Project Plans (QAPP) for 15 priority waterbodies scheduled for assessment.

Products/Milestones

- Watershed-specific Quality Assurance Project Plans (QAPP) for 15 targeted waterbodies

Task 2: Complete the QAPP monitoring and assessment objectives and tasks for each targeted waterbody and/or watershed to document beneficial use conditions; identify sources and causes of NPS pollutants impairing or threatening the beneficial use(s); determine land management needs; and gauge local support.

Products/Milestones

- 15 priority maps developed with AnnAGNPS or a River Basin Decision Support Tool (where available) for the watersheds of each assessed waterbody.
- Water quality/quantity and macroinvertebrate data collected from approximately 45 sites. Approximately 900 samples will be collected from the sites.
- Summary of planned and applied NRCS BMP per 12 digit hydrologic unit (HU) in the targeted watersheds
- Survey results from 15 assessed watersheds describing watershed resident and landowner/operator awareness of NPS pollution impacts, sources, causes and solutions as well as their degree of interest in future restoration of protection initiatives in the watershed.
- Characterization and rating (e.g., good, fair, poor, etc.) of riparian conditions for 15 assessed watersheds.
- NPS Pollution Assessment reports and TMDLs for the assessed watersheds. 15 assessment reports or TMDLs. *[NOTE: Due to time constraints, the assessment reports and/or TMDLs for assessments initiated the final two years of the Management Plan period will likely be completed outside the time period for the Management Plan.]*

C. Project Assistance

As a voluntary, incentive based program, successful development and implementation of any NPS pollution management project will be dependent on local support and involvement. Local participation during project development provides the opportunity to design project plans with goals and objectives that are focused on local and state water quality and NPS pollution priorities. Although the size, type, and target audience of the local NPS projects may vary greatly, they all share the same basic objectives. These common objectives are: 1) increase public awareness of NPS pollution, 2) reduce/prevent the delivery of NPS pollutants to waters of the state, and 3) disseminate information on effective solutions to NPS pollution.

To assist local entities in meeting their project goals, the NPS Program provides financial and technical assistance for a variety of project activities including: educational events; BMP implementation; water quality monitoring; and conservation planning. Projects focused on education are typically initiated to familiarize the general public or a specific audience (e.g., agricultural producers) with the types of NPS pollution in the state or local area, as well as the various methods available for NPS pollution control. In conjunction with the educational activities, many projects, particularly the watershed projects, also provide financial and technical assistance to plan and implement BMPs that reduce or prevent NPS pollution. Ultimately, the success of all the NPS projects will be dependent on the sponsors' ability to educate local residents on NPS pollution issues and solutions and encourage the voluntary implementation of the appropriate corrective measures.

Financial and technical assistance provided by the NPS Program is typically used to support local staff, BMP implementation, water quality monitoring, data interpretation, and public meetings or other information/education (I/E) events. The Section 319 funding allocated to the local sponsors is provided at a 60% Section 319 and 40% local matching ratio. The local match, provided in the form of cash and/or in kind services, is derived from a number of partners including, soil conservation districts, water resources boards, city councils, private foundations and trusts, landowners, NGOs, agricultural groups and other state agencies. In most projects, these same groups will be represented on the local project advisory team.

The Natural Resources Conservation Service (NRCS) is the primary source of federal financial and technical assistance within many of the local NPS projects. Technical assistance provided by NRCS generally includes staff time to assist with landuse or riparian assessments, public meetings, educational events and/or farm unit planning. Office space and some equipment are also typically provided to the local NPS projects by the NRCS. The USDA cost share programs also provide the additional financial support needed to expand the implementation of BMPs within the watershed projects. The Environmental Quality Incentive Program (EQIP), in particular, has proven to be a valuable program for many NPS projects to help meet their BMP implementation goals and objectives.

From a state perspective, two main sources of financial assistance are available to local NPS projects. These sources are the State Water Commission Trust Funds and the Outdoor Heritage Fund. These sources are not direct appropriations, but instead, they are available through a competitive application process and subject to approval by the state agency administering the funds. The budgets for these two state funding pools are set on a biennial basis by the state legislature.

The State Water Commission Trust Fund (SWC Trust Fund) has been a longtime source of state funding available to the Department for qualifying NPS projects. Qualifying projects are limited to those that provide engineering assistance to other NPS projects. The SWC Trust Funds must be secured by the Department from the State Water Commission through a biennial application process. Each biennium, up to \$200,000 in SWC Trust Funds can be awarded to the Department to support eligible NPS projects. For the successful applicants, the SWC Trust Funds fulfill the 40% match requirement associated with Section 319 funds used to support the development of

engineering designs for BMP such as livestock manure management systems and riparian restoration projects.

During the 2013 legislative session, the ND legislature passed a bill to create and fund the ND Outdoor Heritage Fund (OHF). The legislation committed up to \$30 million per biennium to support projects addressing natural resource management and outdoor recreation. Water quality management is recognized as one of the eligible resource concerns under the OHF. These funds are available to local NPS projects through a competitive grant application process conducted on a quarterly basis throughout the biennium. During the first year of implementation, over \$2 million in OHF funds were awarded to NPS projects for BMP implementation. Looking forward, under this Management Plan, it is expected the OHF fund will play a much greater role in expanding the level of financial support available for BMP implementation within the NPS project areas.

Although direct funding allocations can be a key component of NPS project budgets, the cash and in-kind match contributions from the sponsoring entities and their partners are also a significant part of most local NPS project budgets. These local contributions typically represent a majority of the 40% non-federal match commitments for the NPS projects. As such, the local sponsors and their partners, not only play a lead role in administering the NPS projects, but they are also the major financial source for the NPS projects and delivery of the NPS Program. Table 3 lists some of the sponsoring entities and financial partners that may provide support for the development, implementation and/or management of NPS projects over the next 5 years.

Table 3. Local NPS project sponsors and financial partners.

Soil Conservation Districts	State Water Commission	Lake Associations
Water Resource Districts	N.D Department of Agriculture	Grazing Associations
City Councils	RC&D Councils	Universities
ND Stockmen's Association	County Commissions	Ducks Unlimited
Industrial Commission (OHF)	ND Game & Fish Department	Wildlife Clubs
NDSU Extension Service	Commodity Groups	Landowners/Producers

Successful delivery of the NPS Program takes a significant amount of assistance from all partners involved in the NPS projects. The specific type and amount of assistance needed by the NPS projects is variable and usually dependent on several factors. The most common factors are generally associated with varying degrees of limitations in financial and technical resources to develop and implement a NPS project. The NPS Program's objective and tasks for project assistance are focused on providing the means to address these limitations and ensure the local sponsors can implement the most effective NPS projects.

Assistance Objective: Coordinate with local partners to secure sufficient financial and technical resources to support the development and implementation of priority watershed assessments; educational programs and watershed restoration or protection projects.

Task 1: Provide financial and technical assistance to local partners to develop and implement 15 watershed assessments. *[NOTE: At the onset of this Management Plan, the assessments will be*

primarily accomplished through soil conservation districts and/or water resources boards. However, as the Basin Framework develops and basin stakeholder advisory groups are formed, it is anticipated the number of watershed assessment projects will increase toward the end of the Management Plan period. As such, the number of watershed assessments may be elevated to 25, if the Basin Framework is implemented as planned]

Products/Milestones

- NPS Program contractual agreements committing approximately 3% of the annual Section 319 budget to plan and implement watershed assessment projects focused on priority waterbodies. *[NOTE: When available, 604(b) funds may supplement the Section 319 commitments.]*
- Full analytical support for water quality sample analysis by the Department's Chemistry and Microbiology laboratories. When applicable, the budgets for each assessment project will include the appropriate funding (i.e., 319 or 604(b) funding) to support contracted services to analyze macroinvertebrate and/or fish samples. Approximately 900 samples analyzed per year.
- Technical support for 12 NPS Assessment Reports and/or TMDL's identifying beneficial use impairments, sources and causes of NPS pollution, and watershed specific pollutant reduction targets. *[NOTE: Due to time constraints, the assessment reports and/or TMDLs for assessments initiated the final two years of the Management Plan period will be completed outside the time period for the Management Plan.]*

Task 2: On an annual basis, assist with the development of 7-10 new NPS projects and manage contracts for 30-40 active/ongoing projects. These projects will include education, support and watershed projects.

Products/Milestones

- Technical support for local sponsors to plan and develop approximately 35 (i.e., 7/year) project implementation plans (PIP) for education, watershed, and/or support projects seeking Section 319 financial support. The approximate break down for the project types is 20 watershed projects; 11 education projects and 4 support projects.
- Two NPS Pollution Task Force meetings, annually, to review draft and final project proposals requesting Section 319 funding. The project proposal review schedule is provided in Appendix A.
- New contractual agreements (7-10/year) committing approximately 80% of the annual Section 319 awards to local sponsors responsible for the administration of newly approved NPS projects. Under each grant award, over 50% of the state's FFY Section 319 appropriation will be awarded to watershed-based projects, with the balance committed for watershed assessments; education programs; support projects and NPS Program staffing.

- Active contractual agreements with 30-40 ongoing projects maintained annually to track project progress; expenditures and compliance with administrative responsibilities.

Task 3: Coordinate with NPS Program partners and local project sponsors to obtain technical and/or financial assistance through other state and federal sources to support project planning and implementation efforts.

Products/Milestones

- Financial support from the ND Outdoor Heritage Fund (OHF) to supplement or expand the BMP budgets for 6 watershed projects annually. The financial target is the acquisition of approximately \$1,500,000 annually from the OHF.
- Secure \$200,000 in State Water Commission Trust Funds each biennium to support engineering costs associated with the development of BMP construction designs for NPS projects.
- USDA cost share assistance through the EQIP and other NRCS programs. Also includes additional cost share assistance available through the National Water Quality Initiative (NWQI) and Resource Conservation Partnership Program (RCPP).

Task 4: Evaluate the feasibility and benefits of alternative methods for supporting BMP implementation and planning in the watershed project areas and, when appropriate, develop applicable policies and agreements and incorporate the new policies into the NPS Program BMP Cost Share Guidelines and/or applicable sections in the Management Plan.

Products/Milestones

- Draft guidelines for an output based cost share program by 2018. The initial draft guidelines will be focused on establishing preliminary criteria and measures for an output based cost share program for cropland nutrient management that is consistent with the needs of the ND Nutrient Reduction Strategy.
- A pilot project, initiated in cooperation with a watershed project sponsor and other partners (e.g., Extension Service, NRCS, Commodity Groups), to evaluate the feasibility, acceptance and effectiveness of an output based cost share program under the current NPS Program delivery system. The pilot project is tentatively scheduled for initiation in 2019.
- Options for NRCS consideration regarding the feasibility of incorporating outputs (e.g., maps; loading information) from targeting tools/models (e.g., AnnANPS model; James River Basin Decision Support Tool) into the ranking criteria for EQIP and other applicable NRCS cost share programs.
- Annual updates to the ND NPS Program Cost Share Guidelines for NPS Pollution Control Best Management Practices to revise cost share policies and incorporate new or modified BMP, as needed.

- Conservation Systems Manual developed in cooperation with the agricultural workgroup for the ND Nutrient Reduction Strategy, NRCS, Extension Service and the SWQMP. Target completion date is 2016.
- NRCS input on the feasibility of incorporating 319 cost share funds committed to priority watersheds into the locally lead EQIP funding pool. Under this approach, the 319 funds would be planned and contracted by the District Conservationist using the NRCS planning system (i.e., Toolkit). If feasible, policies and procedures would be developed, in cooperation with NRCS, in 2017. *[NOTE: The 319 cost share assistance would still be limited to the priority watersheds and subject to review and approval by the local NPS project sponsors.]*
- Draft policies for a riparian management program that would provide cost share for the establishment and maintenance of riparian management systems in watershed project areas. These agreements would be 5-10 years in length and limit uses to specific practices or management systems that prevent overuse/degradation of the riparian corridor, but do not prohibit all uses during the agreement period. The first draft will be developed by 2016.
- NRCS feedback on the feasibility of establishing and supporting NRCS liaison positions to serve as the coordinator within watersheds supported with Section 319 funding. If feasible, develop draft policies in cooperation with NRCS by 2017.

D. Coordination

With limited resources at the state and local level, effective delivery of the NPS Program requires a significant amount of coordination with other federal, state, and local agencies; landowners; agricultural producers; and NGOs. The primary means for coordinating statewide efforts is through direct interaction with resource management partners (e.g., NRCS, NDASCD, Extension Service) as well as through the North Dakota NPS Pollution Task Force (Task Force).

Locally, coordination is primarily accomplished through direct contact and participation on local project advisory committees. However, as the Basin Framework is implemented, the local project advisory committees will be consolidated to establish basin stakeholder advisory groups (BSAGs) which will play a lead role in facilitating coordination between all entities with interests in water quality management in the basin. Participation on the technical advisory groups (TAGs) formed by each BSAG will provide the avenue for resource professionals to be engaged in the decision-making for water quality and NPS pollution management in the major river basins in the state.

At the state level, the annual NPS Task Force project proposal review process offers a forum to connect local NPS project sponsors with potential partners on the Task Force. During the Task Force review process, the members are given the opportunity to become familiar with all the new NPS projects seeking Section 319 financial support and the local project sponsors are given the opportunity to describe their projects to multiple potential partners in one setting. This interaction between the Task Force members and local sponsors serves as the catalyst for follow-up contacts between interested organizations on the Task Force and the local NPS project sponsors. The Task

Force meetings also provide the outlet for its members to exchange information on how and where their agency programs are addressing resource management in the state.

The long standing partnership between the NPS Program and NRCS is a key relationship for most of the state's NPS pollution management efforts. Nearly all of the Section 319 watershed projects utilize USDA Programs (e.g. EQIP, EWP, CRP), to some degree, to expand the amount of financial resources available for BMP planning and implementation. When possible, the NRCS also provides training and technical support to local NPS project staff to assist them in conducting riparian assessments, developing conservation plans, evaluating range conditions, and planning or designing manure management systems. Most local NPS watershed project coordinators are also co-located in a NRCS field office. By coordinating multiple funding sources and co-locating staff with NRCS, the NPS projects are able to implement more BMPs, which greatly enhance the overall effectiveness of their NPS pollution abatement efforts. Given the benefits of the NRCS/NPS Program partnership, all NPS project sponsors are encouraged to utilize the USDA programs, when possible; to compliment Section 319 funding budgeted for BMP implementation.

Coordination and cooperation between the NRCS and NPS Program was further strengthened in 2015, with the signing of a memorandum of understanding (MOU) that recognizes the Department as a conservation cooperator. With the MOU, data sharing will be simplified and the relationship between BMP applied through the NRCS programs and water quality trends can be interpreted more accurately in the NWQI watersheds and watershed projects supported with Section 319 funding.

The NDSU Extension Service (Extension Service) is another major partner of the NPS Program. At the state level, the Extension Service has taken the lead role in delivering an educational program focused on improving livestock manure management. This program, not only assists the NPS Program in educating livestock producers, but it also serves as a technical support program for local NPS project staff providing planning assistance focused on manure management. In addition to this program, the Extension Service is also sponsoring other projects focused on issues such as: 1) development of riparian ecological site descriptions; 2) documenting the benefits of BMPs; and 3) managing soil salinity and soil health. County Extension Agents also continue to be involved in the planning and delivery of many of the educational events sponsored by the local NPS projects.

Local project sponsors are currently the main avenue for coordinating programs within the NPS project areas. Soil Conservation Districts (SCD) are generally the lead sponsors for the waterbody assessments and watershed projects, while Extension Service, Resource Conservation and Development Councils, state agencies and NGOs are typically the sponsors for the education and support projects. Primary responsibilities of the project sponsors include: 1) PIP development; 2) project administration; 3) progress reporting; 4) financial and technical assistance delivery; 5) PIP revisions; and 6) public outreach and education. As the Basin Framework is implemented, the BSAGs will have these same responsibilities, but will also have a larger role in project prioritization and implementation throughout the basins. The BSAGs will also take the lead in the development and implementation of the basin water quality management plans. Membership on the BSAGs will be more diverse and include partnerships throughout the basin. However, similar to the current project sponsor members, the BSAGs will typically have a

“core” membership of soil conservation districts, county Extension agents, and water resource boards.

Given the agricultural focus of most projects, SCDs will continue to be the lead sponsor for most of the local NPS projects and key members of the BSAGs. The SCDs provide the local leadership necessary to implement and manage projects as well as the “familiar face” to encourage greater producer/landowner involvement. The SCDs long-standing partnership with NRCS also strengthens the coordination of cost share funds provided through the EQIP and NPS Program. Other local or regional organizations that will also be important partners and sponsors include universities; state agencies, resource conservation and development councils, and water resource boards. Appendix H lists the major NPS Program partners and the general type of assistance each entity provides to the NPS Program.

Coordination Objective: Maintain and expand partnerships at the state, basin and local levels to diversify input for project development and implementation as well as to increase opportunities for securing and coordinating resources to more efficiently address identified NPS pollution impacts.

Task 1: Assist local resource management entities (e.g., SCDs, WRBs, lake associations) with the establishment of sponsorships and associated advisory groups that will be responsible for the prioritization, development and implementation of NPS pollution management projects. *[NOTE: As the Basin Framework is implemented in each river basin, the formation of BSAGs (see Task 2) will replace this Task]*

Products/Milestones

- Lead sponsors and advisory groups for new NPS projects established each year.
- Membership on advisory groups for active NPS projects

Task 2: Coordinate with SWQMP staff and local partners to establish basin stakeholder advisory groups and technical advisory groups as the Basin Framework is implemented within each river basin.

Products/Milestones

- Basin stakeholder advisory groups established for each of the five major river basins. Three basin management committees formed from 2015-2020.
- Technical advisory groups (TAGs) formed by the basin stakeholder advisory groups for each major river basin. Three TAGs established 2015-2020. The NPS Program will be a member of each TAG.

Task 3: Maintain partnerships and communication with the NGOs, as well as local, state, and federal agencies to increase awareness of coordination opportunities for addressing water quality concerns related to NPS pollution.

Products/Milestones

- Two Task Force meetings annually to obtain input and recommendations on local NPS projects seeking Section 319 funding.
- Participation in meetings (e.g., NRCS Technical Committee, Extension Service Advisory Committee, NDASCD annual meetings, ND Action Group) focused on the delivery of state and federal natural resource management programs that directly or indirectly address NPS pollution impairments to the state's water resources.
- Meet with NRCS, annually, to review the status of the MOU and discuss options for coordinating financial and technical assistance within the NPS project areas.
- Periodic meetings with NPS Program partners (e.g., Extension Service, ND Association of Soil Conservation Districts, Commodity Groups, EPA, wildlife organizations) to keep them updated on the NPS Program. Multiple meetings annually throughout the Management Plan period.
- Participate in annual SCD Area meetings (5 meetings/year) to keep the SCDs in the state informed on the progress and future plans of the NPS and TMDL Programs, Basin Framework, Nutrient Reduction Strategy, and other SWQMP Programs.

E. Information & Education

Delivery of a balanced information and education (I&E) program throughout the state is a critical component of the NPS Program. While watershed projects are effective at abating known sources and causes of NPS pollution, the state and local I&E projects are the primary means for creating the awareness and understanding of NPS pollution issues needed to ensure the necessary support and participation in NPS pollution management efforts. The delivery method, NPS pollution topic, and target audience of the educational projects vary considerably, which is reflective of the diversity in NPS pollution education in the state. However, despite the differences, the state and local I&E projects deliver a common message on NPS pollution impacts and solutions and form the delivery network for the NPS Program's statewide educational program.

The primary purpose of the statewide NPS pollution education network is to establish the knowledge base needed to ensure NPS pollution impacts are always considered by individuals involved in natural resource management, whether they are agricultural producers, consultants, engineers, homeowners, or federal/state/local agency personnel. To establish this wide spread awareness, the target audiences will vary between educational projects and generally cover the entire spectrum including K-12 students, teachers, resource management professionals, agricultural producers, landowners, and the general public. These educational initiatives may utilize a variety of media and methods to "get-the-word-out," including newsletters, workshops, BMP demonstrations, tours, fact sheets, radio ads, and videos. Educational projects providing technical support and training to NPS watershed project coordinators; project sponsors; and producers/landowners will also be recognized as critical statewide education efforts. Regardless of the audience or focus, priority educational efforts under the NPS Program must include

educational offerings focused on the dissemination of information on NPS pollution sources, causes and solutions.

Given the importance of an informed public, up to 20% of the state's annual Section 319 allocation can be used to support projects focused on the dissemination of NPS pollution information. The cumulative amount of Section 319 financial support awarded for educational projects each funding cycle will be determined on a case-by-case basis through the annual NPS Task Force project review process.

Information and Education Objective: Strengthen support for and participation in NPS pollution management projects by increasing public awareness and understanding of NPS pollution impacts and the solutions for restoring and protecting those water resources impaired or threatened by NPS pollution.

Task 1: Maintain delivery of a balanced statewide I&E Program that addresses priority NPS pollution issues and targets all age groups.

Products/Milestones

- Network of 8-10 statewide or regional educational programs targeting K-12 students, teachers, resource management professional, agricultural producers, landowners, and the general public. Approximately one third of the projects will be focused on youth education and the balance will be designed to train-the-trainer, promote new agricultural management systems; distribute educational materials, provide technical support; demonstrate new technologies or practices; and/or disseminate information on specific NPS pollution issues and solutions
- Participate on project advisory committees to ensure I&E programs remain current and focused on NPS pollution education.
- Educational components maintained and/or strengthened in watershed-based projects to supplement the statewide educational network. Approximately, 35 educational events within the watershed projects each year.
- In-house library of various NPS pollution/water quality I&E materials developed by state, local, federal, and private organizations and make the information available to program partners and resource managers.
- NPS Program web site: http://www.ndhealth.gov/WQ/sw/Z1_NPS/default.htm.

Task 2: Strengthen the abilities of resource managers and agricultural producers to recognize and address beneficial use impairments associated with NPS pollution.

Products/Milestones

- Coordinate with NDSU Extension Service, NDASCD, SSCC, SCD Employees Association; NRCS and others to organize and conduct a series of 4 workshops that cover: 1) NPS pollution sources, causes and solutions; 2) watershed project development; 3)

education and outreach methods; and 4) project implementation/management. The primary target audience will be local resource managers (e.g. SCD technicians and supervisors, county extension agents, WRB supervisors) and NRCS field office staff.

- Provide county newspapers and other local media with 2 articles per year that discuss local NPS pollution issues; management options for NPS pollution; and any other subjects related to NPS pollution and water quality.
- Two training workshops addressing BMP planning and targeting to address water quality impairments. The target audience will include watershed project coordinators, SCD staff involved in watershed projects and NRCS field office staff within active or pending watershed project areas.
- Annual NPS watershed project coordinator and NRCS District Conservationist conferences

Task 3: Document the degree of public awareness and understanding of NPS pollution issues in the state to identify steps needed to strengthen statewide educational offerings.

Products/Milestones

- Statewide survey in 2016 to evaluate the general public's current understanding and awareness of NPS pollution issues and concerns in the state.
- A five-year I&E strategy, based on the statewide survey results, that schedules actions that will eliminate "shortcomings" in the statewide educational network and increase public awareness and understanding of NPS pollution issues and solutions .
- Coordinated effort with local resource managers, universities and other state agencies to develop new statewide or local educational initiatives that will improve the balance of the statewide educational offerings.
- Follow-up survey in 2020 to evaluate the benefits of past educational efforts and reassess the awareness and understanding of the general public regarding NPS pollution management and impacts.

IV. PROGRAM EVALUATION

Evaluation of NPS Program accomplishments will be primarily based on data collected within the watershed project areas; documented progress toward individual project goals and objectives; and completion of measurable outputs identified in the Management Plan. The GRTS; annual and final project reports; EPA water quality program measures (e.g., WQ10, SP12); and annual program reports will be the primary means used to disseminate information on NPS Program and local project progress and success.

As a part of the Statewide Monitoring Strategy, the NPS Program Monitoring Strategy (Appendix F) focuses on the collection of data to assess waterbody conditions as well as evaluate the benefits of watershed restoration/protection projects supported by the NPS Program. The NPS Program Monitoring Strategy is project-based and includes two basic goals. The first goal is to assist local resource managers with the collection of data in priority watersheds to determine NPS pollution management needs and, when applicable, develop TMDLs. This goal applies to the watershed assessment projects. For the implementation phase watershed projects, the monitoring goal is to evaluate the extent of pollutant load reductions and beneficial use improvements resulting from BMPs applied within the targeted watersheds.

The specific monitoring methods used for the assessment or implementation phases of the watershed projects are variable and dependent on many factors. These factors include such variables as project size; project goals; planned BMPs; sources and causes of NPS pollution; land use; location; and type of beneficial use impairments. The monitoring approaches employed are also variable and may include photo-monitoring, computer modeling, biological monitoring; in-stream or in-lake monitoring; and/or BMP tracking. The Quality Assurance Project Plan (QAPP) for each project addresses these variables by describing, in detail, how the watershed project will be monitored as well as how the project will be evaluated. Each QAPP will be unique to the targeted watershed project and will be the working document that identifies the specific steps and procedures associated with the planned data collection activities. All data collected within the watershed projects are used to measure pre-and-post project water quality conditions to describe progress toward project-specific goals and objectives.

From a program perspective, annual progress and progress at the end of the Management Plan period will be measured by evaluating the outcomes resulting from the completion of the tasks listed in Appendix E. The tasks described in Appendix E are a compilation of the actions the NPS Program must complete annually and over the course of the Management Plan period to achieve the goals and planned outcomes of the Management Plan. Evaluation of overall NPS Program progress will be based on the extent to which the NPS Program outcomes have been achieved on an annual basis as well as for the entire Management Plan period. Specific planned outcomes for the current Management Plan period are as follows:

- Waterbodies assessed and associated TMDLs completed – 15 assessed waterbodies with approved TMDLs or Alternative Plans (3/year)
- Waterbodies with one or more restored beneficial uses – 5 waterbodies (1/year)
- Waterbodies with improving trends in water quality and/or beneficial uses – 10 waterbodies (2/year)
- Estimated annual nitrogen and phosphorus load reductions based on model results. Annual nitrogen and phosphorus load reductions will be approximately 100,000 and 50,000 pounds, respectively.
- Increased public awareness and understanding of NPS pollution issues in the state – 20% increase in survey respondents with a good understanding of NPS pollution issues.
- Basin Stakeholder Advisory Groups (BSAGs) established in 3 of the 5 major river basins in the state – 3 BSAGs (1 BSAG established in 2015; 2017 & 2019)

- Basin Management Plans developed, in cooperation with the BSAGs, for 2 of the 5 major river basins in the state (1 Plan in 2017 & 2019)

The affect that applied BMPs have on impaired use(s) and/or water quality has been, and will continue to be, the primary means for describing and documenting local watershed project success and, ultimately, NPS Program success. However, given the delayed response (i.e., pollutant load reductions) to applied BMP in larger watersheds, the Department will track the locations, types and amounts of BMPs installed and use computer models to estimate pollutant load reductions resulting from the applied BMPs. Models such as the STEPL and the animal feedlot runoff risk index worksheet (AFRRIW) will compliment the in-stream or in-lake data by providing interim estimates on annual pollutant load reductions associated with applied BMPs. At the end of the watershed projects, all available data are used to document water quality trends as well as the degree of progress toward the quantified water quality or beneficial use goals and objectives.

When applicable, the data collected within the watershed projects is also used to satisfy program performance measures established by the EPA (i.e., WQ10, SP12, SP10, WQ27, WQ28). In future years, when the Basin Framework is fully implemented, post-project monitoring of the watershed projects will be much more feasible and will likely become a major component of the NPS Program Monitoring Strategy. The first post-project monitoring opportunities under the Basin Framework are expected to become available in 2020.

All locally sponsored NPS projects will be evaluated on a yearly basis through required annual project reports. Each project will also be required to submit a final project report to document progress toward the goals and objectives described in the approved PIP. For the local watershed projects, the final reports will also include a water quality report which will describe progress toward the project's beneficial use and/or water quality improvement goals. These data summaries will be based on actual in-stream or in-lake water quality data and/or the outputs generated by computer models (e.g., STEPL, AnnAGNPS). For the projects that do not require water quality or biological data collection (i.e., education and support projects), the annual and final evaluations will be focused on the degree of progress made toward quantified objectives and tasks in the approved PIP. In some cases, if the project is addressing a specific NPS pollution source, models such as the AFRRIW or STEPL may also be used to document the estimated load reductions resulting from the applied BMPs. All annual and final project reports will be entered into EPA's Grants Reporting and Tracking System (GRTS) to update EPA on the progress of the local projects as well as the NPS Program. Overall, the success of the NPS Program is directly linked to the success of the local projects supported by the program and, as a consequence, evaluation of the NPS Program is based almost exclusively on the cumulative accomplishments of the locally sponsored projects.

Evaluation Objective: Document the effectiveness and success of the NPS Program and its state and local partners in identifying and addressing the sources and causes of NPS pollution impairing or threatening the beneficial uses of waters of the state.

Task 1: Evaluate and document local NPS project progress toward approved PIP goals

Products/Milestones

- Approved annual and final project reports. Approximately 30 annual reports and 5 final project reports will be completed, annually.
- Final water quality reports for completed watershed projects that describe progress towards beneficial use and/or pollutant load reduction goals. 3-5 final water quality reports for inclusion in the final project reports.
- Estimated annual pollutant load reductions (based on modeled results) associated with applied BMPs within the watershed and support project areas. Estimated annual load reductions for nitrogen and phosphorus are 100,000 pounds and 50,000 pounds, respectively.
- Annual updates to the GRTS, including estimated pollutant load reductions and applied BMPs per applicable project.

Task 2: Identify additional modeling options and/or improvements to generate better pollutant load reduction estimates.

Products/Milestones

- Additional BMP efficiency coefficients that will expand the STEPL modeling capabilities to more fully account for the pollutant load reductions for a broader range of applied BMPs.
- Pilot modeling process (i.e., AnnAGNPS, Decision Support Tool) to evaluate the feasibility to efficiently and accurately estimate pre-and-post BMP load reductions on small acreages to accommodate a performance based cost share system.
- LiDAR-based Decision Support Tools for estimating load reductions in priority areas in the James and Wild Rice River Basins

Task 3: Track the sustainability of the benefits achieved through BMPs applied within the watershed projects and document delayed responses to BMPs applied near the end of the watershed projects.

Products/Milestones

- Data collected through post-project monitoring of priority watershed projects completed through the Basin Framework. Given the current status of the development of the Basin Monitoring Framework, the first post-project monitoring efforts will be initiated in the Red River Basin in 2018. *[NOTE: This task will be coordinated through the basin stakeholder advisory groups involved in the development of the basin water quality management plans under the Basin Framework. It is anticipated that each basin plan will include the priority watershed monitoring sites in a basin monitoring network to allow long term post-project monitoring. Particular emphasis will be placed on targeting post-project monitoring toward watersheds that have been recognized as candidate watersheds for meeting EPA performance measures SP-12 and WQ-10.]*

Task 4: Review and update the Management Plan in 2017 and 2020, as needed, to ensure the program will effectively address coordination with other pending SWQMP initiatives or strategies and account for any changes in NPS pollution impacts to the water quality and beneficial uses of the state's water resources.

Products/Milestones

- Interim review and update to the Management Plan in 2017 to incorporate any revisions needed to better describe coordination with the pending Basin Framework, TMDL Vision, and Nutrient Reduction Strategy.
- Two NPS Task Force meetings in 2020 to obtain input on updates to the Management Plan for the next 5-year period.
- Questionnaire distributed to sponsors and partners in 2019 to solicit feedback regarding the delivery of NPS Program financial assistance and technical support.
- Updated Management Plan for the period of 2020 – 2025 based on recommendations and feedback from the Task Force and program partners.

Appendix A

ND NPS Pollution Management Program Task Force Section 319 Project Proposal Review Process, Policies and Schedule

ND NPS Pollution Task Force Section 319 Project Proposal Review Process (3/15)

Approximate Schedule for the Annual Review Process

October 1st: Draft project proposals are due. All proposals must be submitted to the NPS Program by this due date. The draft proposals are posted on the NPS Program website and the Task Force members are notified when they are posted.

November: The NPS Task Force reviews all draft project proposals. Local project sponsors are invited to the Task Force meeting to present their project and answer any questions. If necessary, the Task Force meeting may be scheduled over two days to allow adequate time for sponsor presentations and Task Force questions, discussion, and project ranking/scoring.

November - December: Based on Task Force input, the NPS Program identifies the draft project proposals that are eligible for final review in January/February and forwards the Task Force comments to the appropriate project sponsors. Recommended Section 319 funding levels are also provided to the sponsors of the eligible projects. The project sponsors finalize their project proposals by addressing the Task Force and NPS Program comments.

January : Final project proposals are due. The specific due date is variable and is set after the draft project proposal review process is complete. The final project proposals are posted on the NPS Program web site and the Task Force is notified of their availability.

January/February: The NPS Task Force reviews the final project proposals. The NPS Program coordinates with the project sponsors to adjust the final project implementation plans, as needed, to address any additional feedback from the Task Force.

February/March: The NPS Program submits the Section 319 grant application to EPA and forwards the approved final project implementation plans to EPA. The submittal date for the Grant Application will be dependent on when the federal fiscal year Section 319 budget is provided to EPA.

March-April: EPA reviews the final project implementation plans and Section 319 grant application.

April/May: EPA issues the Section 319 Grant Award and the NPS Program develops the appropriate agreements (i.e., Notice of Grant Award and Federal Requirements Form) to complete the allocation of the requested Section 319 funds to the local sponsors/projects.

A. Draft Project Proposal Review

The draft project proposal review will include two basic steps. The first step of the process will focus on project presentations. The sponsors of all the proposed projects will be invited to the Task Force meeting to present their project and answer any questions from the Task Force members. These presentations will be approximately 30 minutes, including a question and answer period. The second step will involve an open Task Force discussion on the eligibility, strengths, weaknesses, goals/objectives, etc. of each draft proposal. The draft project proposal review process should be completed by September 15th of each year.

When necessary, the draft review process may be conducted over a two day period to allow sufficient time for presentations and discussions. To the extent possible, project presentations will be scheduled so that a sponsor's presentation and the Task Force discussions on their project proposal will occur on the same day. This will allow all sponsors the opportunity to attend the Task Force discussions following their presentations. During the Task Force discussions, the local sponsors will only be allowed to respond to direct questions on their project. Representatives for Task Force member organizations sponsoring a draft project that is under review will also be limited to responses to direct questions on their organization's project.

Task Force members will use the appropriate Draft Project Proposal Prioritization Worksheet (Appendix B) to evaluate each project proposal. Project evaluations will focus on the relationship between the project's goal, identified water quality/beneficial use impairments; and NPS pollution sources/causes. Other components of the draft proposals that will be evaluated include the degree of local support, partnerships, coordination, evaluation methods, and costs. Only one "set" of project evaluation worksheets can be submitted per Task Force member organization. All completed evaluation worksheets must be submitted to the NDDH approximately two weeks after the draft project review meeting. The specific due date will be determined by the Task Force at the draft review meeting.

If a project is requesting continuation funding, a summary of accomplishments made with funds previously awarded should be provided with the draft proposal. The Task Force members will need to take these past accomplishments into account when reviewing the draft continuation proposal. A review of the progress of all continuation projects should be part of the Task Force discussions following the presentations. When completing the evaluation worksheet for a continuation project, the Task Force members should note in the Comments section if they are satisfied with the past accomplishments. The degree of progress should be a major factor to consider when assigning a final priority ranking for the project.

Project-specific funding levels will not be decided during the draft proposal review process. Instead, the Task Force will use the attached evaluation worksheets to provide funding recommendations to the NDDH. These recommendations will indicate a general funding level (i.e., full, partial, or no) relative to what was requested by the sponsors. The Task Force will also provide written comments on specific revisions needed in the proposed project budgets. These recommendations and comments will serve as guidelines for the NDDH to assist local sponsors with the development of the budgets for the final project implementation plans (PIP). The NDDH will coordinate with the local sponsors to make the necessary budget revisions to ensure the

cumulative Section 319 funding request for the eligible projects is “close” to the anticipated Section 319 allocation for the fiscal year.

The priority rankings, funding recommendations, and Task Force comments provided on the evaluation worksheets will be compiled and used by the NDDH to identify specific projects that will be eligible to resubmit a final project implementation plan (PIP) in November. A project will be considered eligible to resubmit a final PIP if: 1) more than 50% of the Task Force rankings on the worksheets indicate a “medium to high” priority rating; and 2) some level of funding is recommended on a majority of the worksheets. In the event sufficient Section 319 funding is expected to be available to support all the draft project proposals, the Task Force can recommend that all the draft project proposals be eligible to resubmit a final PIP. Such a recommendation would negate the need for the NDDH to determine the specific eligibility of each project.

All Task Force comments on the draft project proposals will be forwarded to the local sponsors to assist with the development of the final PIP’s.

B. Final Project Proposal Review and Approval

In preparation for the final review, the NDDH will coordinate with the local sponsors to establish specific Section 319 funding levels for each eligible project. During this interim period, the sponsors will also revise the project implementation plans (PIP) to address Task Force comments provided through the draft review process. The Task Force will review the NDDH funding recommendations and the revised PIPs to determine if previous Task Force comments have been adequately addressed. The final project review will also evaluate each project’s consistency with the goals and objectives of the NPS Pollution Management Program. The NPS Task Force will complete the review of the final project proposals by December 15th of each year.

The final review process will focus on the evaluation of the “programmatic” benefits of each project. Consideration will be given to such criteria as: 1) new project locations; 2) potential for statewide application; 3) innovativeness; 4) transferability of information; 5) benefits to ongoing projects; and 6) cost effectiveness. Using these criteria, the Task Force will have the option to assign priority rankings to the final PIPs. These priority rankings will only be necessary if the cumulative funding request for the projects exceeds the anticipated Section 319 allocation for that fiscal year. Under such situations, the Task Force will use the Final Project Proposal Evaluation Worksheet (Appendix C) to establish project-specific rankings. These priority rankings and any specific budget recommendations will be used by the NDDH to make the necessary budget adjustments (per project) if the fiscal year Section 319 allocation is insufficient to fully support the original funding requests for all the approved projects.

C. Project Evaluation Worksheets

The appropriate Draft Project Proposal Prioritization Worksheets (Appendix B) will be provided to the Task Force members during the draft project proposal review process. These worksheets should be completed for each project proposal to evaluate and document project appropriateness and eligibility. The completed worksheets must be provided to the NDDH by the deadline set at the Task Force meeting.

During the final project proposal review process, Task Force members will be provided the Final Project Proposal Evaluation Worksheet (Appendix C). This worksheet lists several programmatic criteria to consider when evaluating the overall benefits of the projects. When it is anticipated insufficient Section 319 funds available, the worksheet may also be used to assign relative priority rankings to each project. In such cases, projects offering the greatest programmatic benefits should be assigned the highest priority ranking. If the priority rankings are needed, the complete evaluation worksheets must be submitted to the NDDH immediately following the final project proposal review meeting.

D. Task Force Voting Policy

When project approvals or other issues are determined by casting a vote, Task Force member organizations will be limited to one vote per agency or organization. In addition, when evaluating project proposals only one “set” of evaluation worksheets can be submitted per agency or organization.

Organizations and agencies represented on the Task Force can request Section 319 funding for eligible projects they are sponsoring. Under such circumstances, the Task Force representative for that organization can evaluate or vote on other projects participating in the review process, but they must abstain from evaluating or voting on their own project proposal. Also, during the project proposal discussions, the Task Force representative of that organization will not be allowed to promote their project and will only be allowed to respond to direct questions on their organization’s project.

E. General Guidelines for the Distribution of Section 319 Funding

Up to 20% of the state’s Section 319 funding may be utilized to support NPS Program staff and/or local NPS Assessment or TMDL Development projects. The NDDH, in cooperation with the state’s Region VIII EPA Project Officer, will be responsible for the review and approval of the NPS Program Staffing and Support Workplans as well as the Quality Assurance Project Plans (QAPP) for NPS Assessment or TMDL Development projects. The Section 319 funds that are not committed for NPS Program staffing or local NPS Assessment/TMDL projects will be available for allocation to locally sponsored NPS projects involved in the Task Force project proposal review process.

Through the annual review process, the Task Force will be given the opportunity to provide comments and recommendations on all the locally sponsored projects seeking Section 319 financial support. As a general guideline, a majority (80% or more) of the state’s Section 319

funding should be allocated to locally sponsored projects addressing NPS pollution. This includes all the projects that can be defined as Information/Education Projects; Support Projects; or Watershed Projects. Project category definitions are provided in Section II. In addition, to maintain an even greater “on-the-ground emphasis,” over sixty percent (60%) of the available Section 319 funding should be awarded to projects that directly address impaired beneficial uses through the implementation of best management practices (BMP). Projects with this type of focus are those included in the Watershed Project or Support Project categories. However, to strengthen and expand public support for these on-the-ground efforts, up to 20%, of the state’s Section 319 funding should be committed to the Information /Education projects focused on public education.

Appendix B

Evaluation Worksheets for Draft Project Proposals

Evaluation Worksheet for Information & Education Project Proposals

Project Name: _____

The purpose of the pre-proposal review is to: 1) determine if the proposed actions are applicable for addressing the identified NPS pollution concerns or a statewide priority NPS pollution issue; 2) evaluate if the project is consistent with the goals of the NPS Pollution Management Program; and 3) recommend the extent of Section 319 funding for the project. A fourth component of the review process is to provide written comments on steps that should be taken to strengthen the project plan to prepare it for final review and funding consideration.

Statement of Need

- | | |
|--|--------|
| 1) Is the educational message focused on water quality issues associated with NPS pollution? | Yes/No |
| 2) Is the focus of the project consistent with the educational goals and objectives of the ND NPS Pollution Management Program? | Yes/No |
| 3) Will the educational message help fill an educational need or strengthen/compliment other local or statewide educational projects addressing NPS pollution? | Yes/No |
| 4) Is the primary target audience appropriate? | Yes/No |

Provide comments to improve/clarify the statement of need: _____

Goals, Objectives, and Tasks

Score

- | | |
|---|--------|
| 1) Is the goal consistent with the NPS pollution issues and educational focus described in the Statement of Need section? | Yes/No |
| 2) Is the proposed level and type of technical support appropriate for the size and scope of the project? | Yes/No |
| 3) Do the Objective Statements include realistic and measurable targets to be achieved through the educational programs and activities? | Yes/No |
| 4) Are the Tasks for each Objective clearly stated and focused on the target set for the Objective? | Yes/No |
| 5) Are the type and number of planned educational activities appropriate and attainable? | Yes/No |
| 6) Are the delivery methods for the educational message appropriate? | Yes/No |

Provide comments to improve/clarify the goals, objectives and tasks: _____

Coordination

1) Are the appropriate partners involved in the project? If not, provide suggestions for other entities that should be involved. Yes/No

2) Will the project be working with other projects or programs with similar goals (e.g., Extension Service, Schools, other 319 projects, Universities, etc.) to avoid duplication of efforts? Yes/No

3) Has the extent of local support been described or confirmed through feedback from potential partners and participants or support letters (sources of letters can be listed or the letters can be attached)? Yes/No

Provide comments to improve/clarify project coordination: _____

Monitoring and Evaluation

1) Have sufficient measures been scheduled to evaluate or gauge progress toward the targets set in the project's goals and objectives? Yes/No

2) Are the evaluation methods appropriate for the target audience and type of educational events? Yes/No

Provide comments to improve/clarify project monitoring and evaluation: _____

Budget

1) Does the Part 1 Budget Table include sufficient State/Local Match to match the Section 319 funds being requested? [Note: A 60% Section 319/40% State/Local Match matching ratio is required] Yes/No

2) Are the costs listed in the Part 2 Budget reasonable and appropriate, given the activities described in the project's objectives and tasks? Yes/No

Provide comments to improve/clarify the budget information: _____

Task Force Member Recommendations

1) Based on the information in the project proposal, are the goals of the project consistent with the goals of the ND NPS Pollution Management Program? Yes/No

Provide recommendations to strengthen consistency with Program goals: _____

2) At what level should the project be funded? (a) Fully Fund; (b) Partially Fund; (c) Do Not Fund

Additional Recommendations: _____

Evaluation Worksheet for Support Project Proposals

Project Name: _____

The purpose of the pre-proposal review is to: 1) determine if the proposed actions are applicable for addressing the identified NPS pollution concerns or a statewide priority NPS pollution issue; 2) evaluate if the project is consistent with the goals of the NPS Pollution Management Program; and 3) recommend the extent of Section 319 funding for the project. A fourth component of the review process is to provide written comments on steps that should be taken to strengthen the project plan to prepare it for final review and funding consideration.

Statement of Need

- | | |
|--|--------|
| 1) Are the services or support offered by the project needed to better address NPS pollution priorities within local NPS project areas and/or at the statewide level? | Yes/No |
| 2) Have the primary types of beneficial uses and impairments to be addressed by the project's services or support been adequately identified? | Yes/No |
| 3) Is the size of the project area appropriate for the type of services offered? | Yes/No |
| 4) Are the project's services or support clearly described and consistent with the identified needs of the project and the goals of the NPS Pollution Management Program Plan? | Yes/No |
| 5) Have the primary NPS pollutants to be addressed by the project been adequately identified and have the linkages been made between the identified beneficial use impairments and the NPS pollutants? | Yes/No |
| 6) Have the NPS pollution sources (e.g., degraded riparian corridors, cropland, etc.) and causes (e.g., excess tillage; reduced riparian vegetation, etc.) to be addressed by the project been adequately identified and have the linkages been made between the sources and causes? | Yes/No |

Provide comments to improve/clarify the statement of need: _____

Goals, Objectives, and Tasks

- | | |
|--|--------|
| 1) Is the project goal consistent with the local or statewide needs described in the Statement of Need section? | Yes/No |
| 2) Is the amount and type of services or support appropriate for addressing the identified needs? | Yes/No |
| 3) Do the Objective Statements include realistic and measurable targets for the delivery of the services and/or support? | Yes/No |
| 4) Are the Tasks for each Objective clearly stated and focused on the target set for the Objective? | Yes/No |
| 5) Will a process be established to schedule and prioritize the delivery of the planned services or support? | Yes/No |

Provide comments to improve/clarify the goals, objectives and tasks: _____

Coordination

1) Are all the appropriate partners involved in the project? If not, provide suggestions for other entities that should be involved. Yes/No

2) Will the project be working with other projects or programs with similar goals (e.g., NRCS, other 319 projects, Extension Service, etc) to avoid duplication of efforts Yes/No

3) Has the extent of local support been described or confirmed through feedback from potential project partners and participants or support letters (sources of letters can be listed or the letters can be attached)? Yes/No

Provide comments to improve/clarify project coordination: _____

Monitoring and Evaluation

1) Are the evaluation methods sufficiently described and adequate for gauging the success and extent of the services or support provided by the project? Yes/No

Provide comments to improve/clarify project monitoring and evaluation _____

Budget

1) Does the Part 1 Budget Table include sufficient State/Local Match to match the Section 319 funds being requested? [Note: A 60% Section 319/40% State/Local Match matching ratio is required] Yes/No

2) Are the costs listed in the Part 2 Budget reasonable and appropriate, given the activities described in the project's objectives and tasks? Yes/No

Provide comments to improve/clarify the budget information: _____

Task Force Member Recommendations

1) Based on the information in the project proposal, are the goals of the project consistent with the goals of the ND NPS Pollution Management Program? Yes/No

Provide recommendations to strengthen consistency with Program goals: _____

2) At what level should the project be funded? (a) Fully Fund; (b) Partially Fund; (c) Do Not Fund

Additional Recommendations: _____

Evaluation Worksheet for Watershed Project Proposals

Project Name: _____

The purpose of the pre-proposal review is to: 1) determine if the proposed actions are applicable for addressing the identified NPS pollution concerns or a statewide priority NPS pollution issue; 2) evaluate if the project is consistent with the goals of the NPS Pollution Management Program; and 3) recommend the extent of Section 319 funding for the project. A fourth component of the review process is to provide written comments on steps that should be taken to strengthen the project plan to prepare it for final review and funding consideration.

Statement of Need

- | | |
|--|--------|
| 1) Is the size of the watershed or project area manageable given the type of the NPS pollution issue(s) to be addressed and the amount of technical and financial resources described in the project plan? | Yes/No |
| 2) Are the impaired or threatened beneficial uses (e.g., recreation, aquatic life, drinking water, etc.) to be addressed adequately identified? | Yes/No |
| 3) Have the NPS pollutants impairing or threatening the beneficial uses been adequately identified and has the linkage been made between the impairment and the pollutant? | Yes/No |
| 4) Have the NPS pollution sources (e.g., degraded riparian corridors, cropland, confined feeding areas, etc.) and associated land management activities causing the NPS pollution been adequately identified and have the linkages been made between the sources and causes? | Yes/No |
| 5) Are the priority areas for the sources and causes of the water quality impairments clearly identified to provide direction for targeting technical and financial resources? | Yes/No |

Provide comments to improve/clarify the statement of need: _____

Goals, Objectives, and Tasks

- | | |
|---|--------|
| 1) Is the project goal focused on the identified beneficial uses impairments or threats? | Yes/No |
| 2) Is the proposed level and type of technical assistance appropriate for the size and scope of the project? | Yes/No |
| 3) Do the Objective Statements include realistic and measurable targets for addressing the sources and causes of the NPS pollutants impairing or threatening beneficial uses? | Yes/No |
| 4) Are the Tasks for each Objective clearly stated and focused on the target set for the Objective? | Yes/No |
| 5) Are the types and amount of planned best management practices (BMPs) appropriate to address the identified causes of NPS pollution? | Yes/No |
| 6) Are the planned education and outreach events focused on the appropriate subject matter and target audience? | Yes/No |

Provide comments to improve/clarify the goals, objectives and tasks: _____

Coordination

- 1) Are all the appropriate partners involved in the project? If not, provide suggestions for other entities that should be involved. Yes/No
- 2) Will the project be working with other projects or programs with similar goals (e.g., NRCS, other 319 projects, Extension Service, etc) to avoid duplication of efforts? Yes/No
- 3) Has the extent of local support been described or confirmed through feedback from potential partners and participants or support letters (sources of letters can be listed or the letters can be attached)? Yes/No

Provide comments to improve/clarify project coordination: _____

Monitoring and Evaluation

Due to potential changes in the size and scope of the draft project plans, the Quality Assurance Project Plan (QAPP) for the proposed projects will not be developed until the final project plan is completed. Therefore, the monitoring and evaluation section will not be evaluated during the review of draft project proposals.

Budget

- 1) Does the Part 1 Budget Table include sufficient State/Local Match to match the Section 319 funds being requested? [Note: A 60% Section 319/40% State/Local Match matching ratio is required] Yes/No
- 2) Are the costs listed in the Part 2 Budget reasonable and appropriate, given the activities described in the project's objectives and tasks? Yes/No

Provide comments to improve/clarify the budget information: _____

Task Force Member Recommendations

- 1) Based on the information in the project proposal, are the goals of the project consistent with the goals of the ND NPS Pollution Management Program? Yes/No

Provide recommendations to strengthen consistency with Program goals: _____

- 2) At what level should the project be funded? (a) Fully Fund; (b) Partially Fund; (c) Do Not Fund

Additional Recommendations: _____

Appendix C

Evaluation Worksheet for Final Project Proposals

Final Project Proposal Evaluation & Prioritization Worksheet

Project Name: _____

NOTE: The following criteria should be considered when evaluating the statewide and/or programmatic benefits of the final project proposals. Each criterion should be ranked on a 0 to 10 point scale. A score of "0" will indicate very low programmatic benefits and a score of "10" will indicate very high benefits.

1) Location of the project will help expand NPS Program efforts into an area of the state with only minimal NPS pollution management activity. _____

2) The project will implement and demonstrate a unique or innovative approach for addressing specific or multiple sources and/or causes of NPS pollution. _____

3) The project is addressing a substantial, well defined NPS pollution issue or concern in the state. _____

4) The delivery process; BMPs applied or demonstrated; or information generated and/or disseminated by the project will have statewide applications and can be easily transferred to other projects. _____

5) The project will provide or demonstrate a cost effective approach for addressing NPS pollution in the state. _____

6) Project progress will be measurable and the information and data can also be used to evaluate overall program benefits and accomplishments . _____

TOTAL SCORE _____

Comments: _____

Appendix D

Basin Water Quality Management Framework Tentative Implementation Schedule

[Note: The Basin Framework was still under development when this Management Plan was updated. As such, the following schedule is only presented as a rough approximation of the order and timing for the implementation of the Basin Framework. The Basin Framework schedule will be finalized when the Management Plan is updated in 2017]

Calendar Year	Red River Basin	James River Basin	Missouri River - Lake Oahe Basin	Souris River Basin	Missouri River - Lake Sakakawea Basin
2015	Form BMC, Compile Data, & Develop Basin Plan	NA	NA	NA	NA
2016	Implement Projects & Assess Basin	Form BMC, Compile Data, & Develop Basin Plan	NA	NA	NA
2017	Implement Projects & Assess Basin	Implement Projects & Assess Basin	Form BMC, Compile Data, & Develop Basin Plan	NA	NA
2018	Update Basin Plan	Implement Projects & Assess Basin	Implement Projects & Assess Basin	Form BMC, Compile Data, & Develop Basin Plan	NA
2019	Implement Projects	Update Basin Plan	Implement Projects & Assess Basin	Implement Projects & Assess Basin	Form BMC, Compile Data, & Develop Basin Plan
2020	Implement Projects	Implement Projects	Update Basin Plan	Implement Projects & Assess Basin	Implement Projects & Assess Basin
2021	Implement Projects & Reassess Basin	Implement Projects	Implement Projects	Update Basin Plan	Implement Projects & Assess Basin
2022	Implement Projects & Reassess Basin	Implement Projects & Reassess Basin	Implement Projects	Implement Projects	Update Basin Plan
2023	Update Basin Plan	Implement Projects & Reassess Basin	Implement Projects & Reassess Basin	Implement Projects	Implement Projects
2024	Implement Projects	Update Basin Plan	Implement Projects & Reassess Basin	Implement Projects & Reassess Basin	Implement Projects
2025	Implement Projects	Implement Projects	Update Basin Plan	Implement Projects & Reassess Basin	Implement Projects & Reassess Basin
2026	Implement Projects & Reassess Basin	Implement Projects	Implement Projects	Update Basin Plan	Implement Projects & Reassess Basin
2027	Implement Projects & Reassess Basin	Implement Projects & Reassess Basin	Implement Projects	Implement Projects	Update Basin Plan

Appendix E

NPS Program Milestones

[NOTE: The tasks listed in this appendix are the activities the NPS Program must initiate and complete to achieve the planned NPS Program outcomes for the Management Plan period. The specific NPS Program outcomes are listed under Section IV Program Evaluation (pages 27 & 28). These programmatic outcomes are the “products” that are expected to be realized through the satisfactory completion of all the tasks in this appendix. The tasks and outputs also provide a means for setting annual NPS Program workloads and measuring progress toward specific Management Plan objectives.]

Prioritization Objective: Provide direction for the delivery of financial and technical assistance to assess, restore or protect waterbodies impaired or threatened by NPS pollution.

Task 1: Based on the most current Integrated Report, identify NPS Program priority waterbodies in each of the five major river basins in the state.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
NPS Program priority waterbodies identified for assessment, restoration or protection	1	X					

Task 2: Coordinate with the other SQWMP programs (i.e., TMDL, assessment and monitoring) to develop and apply the ND Recovery Potential Screening Tool (RPST) to establish state and basin level priorities.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Functioning ND Recovery Potential Screening Tool	1		X				
State level NPS Program priorities established in 2016 at the 8 digit HU scale for watershed assessment, restoration and protection	1		X				
Apply the RPST within the five major river basins to establish five priority lists at the 12 digit HU scale for the assessment, restoration and protection	5		1	2	2		

Task 3: Utilize the AnnAGNPS model and, where available, the LiDAR-based Decision Support Tool to assist local partners with the identification and ranking of priority sub-watersheds and locations within priority watersheds.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
20 AnnAGNPS maps for approved watershed projects & 2 Decision Support Tool priority maps in the James and Wild Rice River Basins in 2016	22 maps		7	5	5	5	
New Decision Support Tool developed for part of the Sheyenne River basin	1					X	

Task 4: Using the state and basin level waterbody priority lists as a starting point, coordinate with the applicable soil conservation districts and basin management committees (as they are formed) to further define local priorities and set implementation schedules for waterbody assessment, restoration and/or protection projects.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Local waterbody assessment and restoration priorities established for 5 soil conservation districts and 3 river basins	8	1	1	2	3	1	

Task 5: Determine NPS project funding priorities through the annual NPS Pollution Task Force project review process

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Task Force comments and recommendations on draft project proposals and relative priority rankings.	7-10 Projects annually	X	X	X	X	X	X
Final project implementation plans for 7-10 projects approved for Section 319 financial support.	7-10 Projects annually		X	X	X	X	X

Assessment Objective: Document beneficial use and water quality conditions of local priority waterbodies and identify the sources and causes of beneficial use impairments.

Task 1: Coordinate with local partners to develop Quality Assurance Project Plans (QAPP) for 15 priority waterbodies scheduled for assessment.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Watershed-specific Quality Assurance Project Plans (QAPPs) for 15 targeted waterbodies	15	1	2	3	4	3	2

Task 2: Complete the QAPP objectives and tasks for each targeted waterbody to document beneficial use conditions; identify sources and causes of NPS pollutants impairing or threatening the beneficial; determine land management needs and gauge local support.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
15 priority maps developed with AnnAGNPS or a River Basin Decision Support Tool (where available) for the watersheds of each assessed waterbody	15 Maps	1	3	3	3	3	2
Water quality/quantity and macroinvertebrate data collected from approximately 45 sites. Approximately 900 samples will be collected from the sites	900 Samples	60	180	180	180	180	120
Summary of planned and applied NRCS BMPs per 12 digit hydrologic unit (HU) in the watersheds	15 Summaries	1	3	3	3	3	2
Survey results describing watershed resident and landowner/operator awareness of NPS pollution impacts, sources, causes and solutions as well as their degree of interest in future restoration of protection initiatives in the watershed.	15 Surveys	1	3	3	3	3	2
Characterizations and ratings (e.g., good, fair, poor , etc.) of riparian conditions in 15 assessed watersheds	15	1	3	3	3	3	2
NPS Pollution Assessment reports and TMDLs for the assessed watershed. 15 assessment reports or TMDLs	15	1	3	3	3	3	2

Project Assistance Objective: Coordinate with local partners to secure sufficient financial and technical resources to support the development and implementation of priority watershed assessments; educational programs and watershed restoration or protection projects.

Task 1: Provide financial and technical assistance to local partners to develop and implement 15 watershed assessments.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
15 contractual agreements committing approximately 3% of the annual Section 319 budget to plan and implement watershed assessment projects.	15	1	3	3	3	3	2
Analytical support for sample analysis by the Department's Chemistry and Microbiology laboratories. The budget for each project also includes funding (i.e., 319 or 604(b) funding) to support analysis of macroinvertebrate or fish samples. Approximately 900 samples analyzed per year	900	60	180	180	180	180	120
Technical support for development of 12 NPS Assessment Reports and/or TMDLs	12		1	3	3	3	2

Task 2: On an annual basis, assist with the development of 7-10 new NPS projects and manage contracts for 30-40 active/ongoing projects. These projects will include education, support and watershed projects.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Technical support to plan and develop approximately 35 project implementation plans for education, watershed, and/or support projects seeking Section 319 funding. Approximate break down of the project types is 20 watershed projects; 11 education projects and 4 support projects	35	7	7	7	7	7	
Two NPS Pollution Task Force meetings, annually, to review draft and final project proposals requesting Section 319 funding.	10	1	2	2	2	2	1

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
New contractual agreements (7-10/year) committing approximately 80% of the annual Section 319 awards to sponsors of approved NPS projects. Over 50% of the FFY Section 319 award will be allocated to watershed-based projects, with the balance committed for assessments; education programs; support projects and NPS Program staffing.	35	7	7	7	7	7	
Active contractual agreements with 30-40 ongoing projects maintained annually	30 annually	X	X	X	X	X	X
Task 3: Coordinate with NPS Program partners and local project sponsors to obtain technical and/or financial assistance through other state and federal sources to support project planning and implementation efforts.							
Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Financial support from the ND Outdoor Heritage Fund (OHF) to supplement or expand the BMP budgets for 6 watershed projects annually. The financial target is the acquisition of approximately \$1,500,000 annually from the OHF	OHF Support for 30 projects	3	6	6	6	6	3
Secure \$200,000 in State Water Commission Trust Funds each biennium to support engineering costs associated with the development of BMP construction designs for NPS projects	Engineering Support	X		X		X	
USDA cost share through the EQIP and other NRCS programs. Also includes cost share assistance available through the National Water Quality Initiative and Resource Conservation Partnership Program	NA	X	X	X	X	X	X
Task 4: Evaluate the feasibility and benefits of alternative methods for supporting BMP implementation and planning in the watershed project areas and, when appropriate, develop applicable policies and agreements and incorporate the new policies into the NPS Program BMP Cost Share Guidelines and/or applicable sections in the Management Plan.							
Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Draft guidelines for an outcome based cost share program. Initial draft guidelines will be focused on setting preliminary criteria for nutrient management	Draft Guidelines				X		

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
A pilot project, initiated in cooperation with a watershed project sponsor and other partners (e.g., Extension Service, NRCS, Commodity Groups, etc.) to evaluate the feasibility, acceptance and effectiveness of an output based cost share program	1 pilot project					X	
Annual updates to the ND NPS Program Cost Share Guidelines for NPS Pollution Control Best Management Practices to revise cost share policies and incorporate new or modified BMPs, as needed	5 Updates		X	X	X	X	X
Conservation Systems Manual developed in cooperation with the agricultural workgroup for the ND Nutrient Reduction Strategy, NRCS, Extension Service and the SWQMP.	1		X				
NRCS input on the feasibility of incorporating 319 cost share funds committed to priority watersheds into the locally lead EQIP funding pool. The 319 funds would be planned and contracted by the NRCS District Conservationist using the NRCS planning system. If feasible, policies and procedures would be developed, in cooperation with NRCS	NA			X			
Draft policies for a riparian management program to provide cost share for the establishment and maintenance of riparian management systems in watershed project areas. These agreements would be 5-10 years in length and limit uses to specific practices or management systems that prevent overuse and degradation of the riparian corridor, but do not prohibit all uses during the agreement period	Draft Riparian Management Cost Share Policy		X				
NRCS feedback on the feasibility of establishing and supporting NRCS liaison positions to serve as the coordinator within watersheds supported with Section 319 funding	Agreement for 319/NRCS Liaison Positions			X			

Coordination Objective: Maintain and expand partnerships at the state and local levels to diversify input for project development and implementation as well as to increase opportunities for securing and coordinating resources to more efficiently address identified NPS pollution impacts.

Task 1: Assist resource management entities (e.g., SCDs, WRB, Universities) with the establishment of sponsorships and associated advisory committees that will be responsible for the prioritization, development and implementation of NPS pollution management projects

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Lead sponsors and advisory committees for new NPS projects established each year	NA	X	X	X	X	X	X
Membership on advisory committees for active NPS projects	NA	X	X	X	X	X	X

Task 2: Coordinate with SWQMP staff and local partners to establish basin stakeholder advisory groups and technical advisory groups as the Basin Framework is implemented within each river basin.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Basin stakeholder advisory groups established for each of the five major river basins.	3	1		1		1	
Technical advisory groups (TAGs) formed by the basin stakeholder advisory groups for each major river basin. Three TAGs established 2015-2020.	3	1		1		1	

Task 3: Maintain partnerships and communication with the NGOs, as well as local, state, and federal agencies to increase awareness of coordination opportunities for addressing water quality concerns related to NPS pollution.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Two Task Force meetings annually to obtain input and recommendations on local NPS projects seeking Section 319 funding	10	1	2	2	2	2	1
Participation in meetings (e.g., NRCS Technical Committee, Extension Service Advisory Committee, NDASCD annual meetings, etc.) focused on the delivery of state and federal natural resource management programs that directly or indirectly address NPS pollution impairments to the state's water res	NA	X	X	X	X	X	X
Meet with NRCS, annually, to review the status of the MOU and discuss options for coordinating financial and technical assistance within the NPS project areas.	5 Meetings		1	1	1	1	1

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Periodic meetings with NPS Program partners (e.g., Extension Service, ND Association of Soil Conservation Districts, Commodity Groups, EPA, wildlife organizations) to keep them updated on the NPS Program. Multiple meetings annually throughout the Management Plan	NA	X	X	X	X	X	X
Participate in annual SCD Area meetings (5 meetings/year) to keep the SCD's in the state informed on the progress and future plans of the NPS and TMDL Programs, Basin Framework, Nutrient Reduction Strategy, other SWQMP Programs	25	2	5	5	5	5	3

Information and Education Objective: Strengthen support for and participation in NPS pollution management projects by increasing public awareness and understanding of NPS pollution impacts and the solutions for restoring and protecting those water resources impaired or threatened by NPS pollution.

Task 1: Maintain delivery of a balanced statewide I&E Program that addresses priority NPS pollution issues and targets all age groups.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Network of 8-10 statewide or regional educational programs targeting K-12 students, teachers, resource management professional, agricultural producers, landowners, and the general public. Approximately one third of the projects will be focused on youth education and the balance will be designed to train-the-trainer, promote new agricultural management systems; distribute educational materials, provide technical support; demonstrate new technologies or practices; and/or disseminate information on specific NPS pollution issues and solutions	I&E Network	X	X	X	X	X	X
Participate on project advisory committees to ensure I&E programs remain current and focused on NPS pollution education	NA	X	X	X	X	X	X
Educational components maintained in watershed-based projects to supplement the statewide educational network. Approximately, 35 educational events within the watershed projects each year	174 projects	17	35	35	35	35	17
In-house library of various NPS pollution/water quality I&E materials developed by state, local, federal, and private organizations and make the information available to program partners and resource management	NA	X	X	X	X	X	X
NPS Program web site: http://www.ndhealth.gov/WQ/sw/Z1_NPS/default.htm	NA	X	X	X	X	X	X

Task 2: Strengthen the abilities of resource managers and agricultural producers to recognize and address beneficial use impairments associated with NPS pollution.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Coordinate with NDSU Extension Service, NDASCD, SSCC, SCD Employees Association; NRCS and others to organize and conduct a series of 4 workshops that cover: 1) NPS pollution sources, causes and solutions; 2) watershed project development; 3) education and outreach methods; and 4) project implementation/management. The primary target audience will be local resource managers (e.g. SCD technicians & supervisors, County Agents, WRB supervisors) and NRCS field office staff	4 workshops		X	X	X	X	
Provide county newspapers and other local media with 2 articles per year that discuss local NPS pollution issues; management options for NPS pollution; and any other subjects related to NPS pollution and water quality	10 articles	1	2	2	2	2	1
Two training workshops addressing BMP planning and targeting to address water quality impairments. The target audience will include watershed project coordinators, SCD staff involved in watershed projects and NRCS field office staff within active or pending watershed project areas	2 Planning workshops		1		1		
Annual watershed and NRCS DC conference	5		1	1	1	1	1

Task 3: Document the degree of public awareness and understanding of NPS pollution issues in the state to identify steps needed to strengthen statewide educational offerings.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Statewide survey in 2016 to evaluate the general public's current understanding and awareness of NPS pollution issues and concerns in the state	1 survey		X				

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
A five-year I&E strategy, based on the statewide survey results, that schedules actions that will eliminate “shortcomings” in the statewide educational network and increase public awareness and understanding of NPS pollution issues and solutions.	Five-year Statewide I&E Strategy		X				
Coordinated effort with local resource managers, universities and other state agencies to develop new statewide or local educational initiatives that will improve the balance of the statewide educational offerings	NA			X	X	X	
Follow-up survey in 2020 to evaluate the benefits of past educational efforts and reassess the awareness and understanding of the general public regarding NPS pollution management and impacts	1 survey						X

Evaluation Objective: Document the effectiveness and success of the NPS Program and its state and local partners in identifying and addressing the sources and causes of NPS pollution impairing or threatening beneficial uses of waters of the state.

Task 1: Evaluate and document local NPS project progress toward approved PIP goals

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Approved annual and final project reports. Approximately 30 annual reports and 5 final project reports will be completed, annually	150 annual and 25 final reports	35	35	35	35	35	
Final water quality reports for completed watershed projects that describe progress towards beneficial use and/or pollutant load reduction goals. 3-5 final water quality reports, annually, for inclusion in the final project reports	25	5	5	5	5	5	
Estimated annual pollutant load reductions (based on modeled results) associated with applied BMP within the watershed and support project areas. Estimated annual load reductions for nitrogen and phosphorus are 100,000 pounds and 50,000 pounds, respectively	500,000 pounds of nitrogen & 250,000 pounds of phosphorus		100,000 # of N & 50,000 # of P	100,000 # of N & 50,000 # of P	100,000 # of N & 50,000 # of P	100,000 # of N & 50,000 # of P	100,000 # of N & 50,000 # of P
Annual updates to the GRTS, including estimated pollutant load reductions and applied BMPs per applicable project	5 updates		1	1	1	1	1

Task 2: Identify additional modeling options and/or improvements to generate better pollutant load reduction estimates.

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Additional BMP efficiency coefficients that will expand the STEPL modeling capabilities to more fully account for the pollutant load reductions for a broader range of applied BMPs	5-10 new BMP efficiency coefficients		X	X			

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Pilot modeling process (i.e., AnnAGNPS, Decision Support Tool) to evaluate the feasibility to efficiently and accurately estimate pre-and-post BMP load reductions on small acreages to accommodate a performance based cost share system	1 pilot project			X	X		
LiDAR-based Decision Support Tools for estimating load reductions in priority areas in the James and Wild Rice River Basins	2 Decision Support Tools	X	X				
Task 3: Track the sustainability of the benefits achieved through BMPs applied within the watershed projects and document delayed responses to BMPs applied near the end of the watershed projects.							
Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Data collected through post-project monitoring of priority watershed projects completed through the Basin Framework. Given the current status of the development of the Basin Monitoring Framework, the first post-project monitoring efforts will be initiated in the Red River Basin in 2018.	Post-project monitoring in 5 completed watersheds				1	2	2
Task 4: Review and update the Management Plan in 2017 and 2020, as needed, to ensure the program will effectively address coordination with other pending SWQMP initiatives or strategies and account for any changes in NPS pollution impacts to the water quality and beneficial uses of the state's water resources.							
Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Interim review and update to the Management Plan in 2017 to incorporate any revisions needed to better describe coordination with the pending Basin Framework, TMDL Vision, and Nutrient Reduction Strategy	1 interim update			X			

Outputs	Qty.	5/2015	2016	2017	2018	2019	4/2020
Two NPS Task Force meetings in 2020 to obtain input on updates to the Management Plan for the next 5-year period	2 Task Force meetings						2
Questionnaire distributed to sponsors and partners in 2019 to solicit feedback regarding delivery of NPS Program financial assistance and technical support	1 Questionnaire					X	
Updated Management Plan for the period of 2020 – 2025 based on recommendations and feedback from the Task Force and program partners	Updated Management Plan						X

Appendix F
NPS Program Monitoring Strategy

NPS PROGRAM MONITORING STRATEGY

A. Monitoring Overview

As a part of the Statewide Monitoring Strategy, the NPS Program monitoring strategy focuses on data collection designed to assist with the implementation and evaluation of projects supported by the ND NPS Pollution Management Program. The NPS Program monitoring strategy is project-based and includes two basic goals. The first goal is to assist local resource managers with the collection of various data to determine NPS pollution management needs within priority watersheds. The second monitoring goal is to evaluate the benefits of BMPs applied within watershed projects supported by the NPS Program and its local partners. To accomplish these goals, the NPS Program is dependent on the support and involvement of entities such as the Natural Resources Conservation Service (NRCS); soil conservation districts; Extension Service; water resource boards and most importantly, the participation of landowners, farmers and ranchers.

Implementation of the NPS Program monitoring strategy is directed, in a large part, by information provided in the most current “Integrated Section 305(b) Water Quality Assessment Report and Section 303(d) List of Waters Needing Total Maximum Daily Loads” (Integrated Report). Waterbodies included on the 303(d) list that have beneficial uses impaired by NPS pollution will be considered priority waterbodies for assessment work under the NPS Program. These 303(d) listed waterbodies will be the starting-point when planning assessment efforts with local project sponsors. To ensure a greater likelihood for the implementation of post-assessment corrective measures, the degree of local interest and support is also used to further define local watershed assessment priorities. Through this process, the priorities established by the local sponsors may include a mix of 303(d) listed waterbodies along with some previously unlisted waterbodies. These local watershed priorities are the focus of assessment efforts initiated under the NPS Program monitoring strategy. The TMDL reports or NPS pollution assessment reports (i.e., for previously unlisted waterbodies) developed with the assessment data, provide the foundation for the development of projects that will address the identified NPS pollution impairments.

Evaluation of the NPS Program’s “on-the-ground” benefits primarily targets the local watershed projects. Upon completion of local assessment efforts, the NPS Program coordinates with local resource managers and agencies to develop and implement watershed-based projects that will address specific water quality impairments associated with NPS pollution. The affect the applied BMP have on the impaired use(s) and/or water quality is the primary means used to define the success of these local watershed projects as well as the NPS Program. Assessment data collected within the watershed projects describes the baseline water quality and beneficial use conditions for the waterbody and also identifies the necessary pollutant load reductions. Conversely, the implementation phase data is used to track trends relative to baseline conditions and documents attainment of quantified water quality or beneficial use goals identified in the watershed management plan. When applicable, data collected within the watershed project areas is also used to satisfy program performance measures established by the EPA.

Central to each monitoring project is the Quality Assurance Project Plan (QAPP). The QAPP describes, in detail, how the watershed will be assessed or how the project will be evaluated. Each QAPP will be unique for the targeted watershed and will be the working document that describes the steps and procedures associated with the planned data collection activities. Despite the many different monitoring options, the development and implementation of all NPS Program monitoring efforts generally follow a similar process from the assessment phase through the evaluation phase. Typical steps in this process are as follows:

- Coordinate with local entities (e.g., SCD, WRD, County Commissions, etc.) to identify local watershed assessment and/or implementation priorities. The main criteria used to define priorities will include current 303(d) waterbody listings; degree of local interest; observed beneficial use conditions, and current land management activities.
- Develop an assessment phase Quality Assurance Project Plan (QAPP) for the highest priority waterbody.
- Collect the appropriate data (e.g., chemistry, biological, etc.) to document current beneficial use conditions and identify causes of any beneficial use impairments.
- Assess current land management in the watershed to determine types and sources of pollutants impairing beneficial uses and also identify the types of BMPs needed that are feasible and accepted.
- Utilize the assessment data to develop NPS Watershed Assessment Reports (for unlisted waterbodies) and/or TMDL reports, when applicable.
- Coordinate with local partners to identify feasible solutions to restore and/or improve impaired beneficial uses
- Develop a watershed management plan that includes a QAPP to evaluate benefits associated with the implementation of the watershed plan.
- On an annual basis, track the implementation of corrective measures and, when applicable, utilize computer models to estimate associated pollutant load reductions. Primary models to be used include AnnAGNPS; STEPL; Decision Support Tools for the James and Wild Rice River basins; and the Animal Feedlot Runoff Risk Index Worksheet (AFRRIW).
- When feasible, collect the appropriate post-project data to document actual in-stream and/or in-lake responses to land management improvements in the watershed.
- At the end of the project, compile and interpret all data to quantify water quality trends; redefine beneficial use conditions; and evaluate progress toward goals for pollutant load reductions and beneficial use improvements. Develop the final water quality report for entry into the GRTS.

- Based on data summaries, reevaluate future beneficial use restoration or maintenance needs.

As previously indicated, the NPS Program Monitoring Strategy is not designed to monitor NPS pollution trends throughout the state. Other monitoring activities under the Statewide Monitoring Strategy (e.g., ambient monitoring program; TMDL Program; etc.) are used to gauge general statewide NPS pollution impacts and trends. Instead, the NPS Program monitoring strategy is designed to document the specific needs and/or success of locally sponsored watershed projects. The following sections provide a general description of the different components of the NPS Program Monitoring Strategy as they relate to the assessment or evaluation of local NPS pollution management projects.

B. Monitoring Objectives

Monitoring activities supported through the NPS Program can be segregated into one of two general categories: NPS Pollution Assessment or NPS Project Evaluation. Data collected through NPS pollution assessment activities provide the foundation to: 1) define watershed management needs; 2) set beneficial use improvement goals; and 3) quantify pollutant reduction goals for the waterbody. This same assessment data is also used to update the Integrated Reports and/or develop TMDLs for 303(d) listed waterbodies within the assessed watershed.

The baseline conditions documented through assessment monitoring are the “reference points” used when evaluating progress during the implementation of watershed management plans. This same assessment data and all subsequent data (e.g., water chemistry, biological, landuse, etc.) are used to quantify NPS pollution reductions and describe beneficial use improvements resulting from land management improvements in the watershed. In addition, to support the in-stream and in-lake data, models such as STEPL and the AFRIW are also used to estimate interim and ending pollutant load reductions associated with some of the applied BMP.

Ultimately, NPS Program progress in improving water quality and beneficial use conditions will be defined by the accomplishments of the local projects. For this reason, the NPS Program will continue to direct most of its monitoring efforts toward local priority watersheds supported by the NPS Program.

C. Monitoring Design

All NPS Program monitoring efforts are influenced by a number of factors including: 1) watershed size; 2) waterbody type; 3) type of impaired beneficial uses; 4) NPS pollution sources and causes; 5) seasonal weather patterns; and 6) local land use practices. These same variables will also affect monitoring design considerations such as monitoring locations, sampling frequencies, targeted parameters, and sampling methods. Given the diversity between watersheds, it is not feasible to have a set monitoring design for all NPS Program projects. Instead, all factors that may influence the effectiveness of a project’s monitoring efforts are evaluated and addressed during the development of the site-specific QAPP. The QAPP will describe the specific monitoring design and methods that will be used to ensure all data are representative of conditions within the waterbody and its watershed.

D. Core and Supplemental Water Quality Indicators

The QAPPs always differ somewhat between projects to account for variations in each watershed. However, in most cases, the QAPPs do share the same basic objectives. These common objectives and the purposes of each are as follows:

- Water quality/quantity monitoring – Quantify parameters such as nitrogen, phosphorus and total suspended solids to track loadings and trends. E. coli bacteria concentrations are also monitored to evaluate the status of recreational uses.
- Macroinvertebrate monitoring – Establish a baseline Index of Biological Integrity (IBI) score to evaluate relative trends, over time, in aquatic life use.
- Riparian Area Assessment – Evaluate the functionality and stability of the riparian corridor. Document the capability to support aquatic life and potential for sediment loading.
- Watershed land use modeling and inventory – Document current land management activities in the watershed to gauge the extent of additional resource management needs and identify priority areas and BMP.
- Local Interest – Conduct surveys to evaluate public awareness of local NPS pollution issues and determine the degree of landowner interest in participating in a watershed restoration project.

The direct measurement of water quality trends and beneficial use improvements are very challenging due to variables such as annual weather patterns and delayed responses to applied practices. This is particularly true for the first 5-7 years of a watershed project. For this period and for annual reporting purposes, several supplemental methods may also be used to estimate water quality and/or beneficial use improvements. Some of the supplemental monitoring methods or tools that may be employed include: 1) STEPL or AnnAGNPS models; 2) Animal Feedlot Runoff Risk Index Worksheet; 3) tracking BMP type, location and amount; and 4) photo monitoring. The specific monitoring approach will vary between projects and be dependent on the specific goals and objectives of the project.

E. Quality Assurance

The Quality Assurance Project Plan (QAPP) will provide a detailed description of each project's monitoring goals, objectives and tasks. The QAPP will also include information on applicable quality assurance/quality control measures, sampling frequencies and procedures, STORET sites; targeted parameters; and sample transportation and preservation procedures. Each QAPP will comply with the applicable EPA requirements and will be approved by the Department's Quality Assurance Coordinator.

F. Data Management

All water quality data collected by the NPS Program is stored in the Department's Sample Information Database (SID). This same data is also transferred to the EPA WQX/STORET data warehouse. Biological data collected within the NPS projects is stored in the EDAS database managed by the Department.

G. Data Analysis and Assessment

The ND Department of Health's Chemistry and Microbiology labs are responsible for the analysis of the water quality, fecal coliform bacteria and E. coli samples collected by the NPS Program projects. Fish or macroinvertebrate samples are analyzed through contractual agreements with private firms and/or Valley City State University. Data interpretation is completed at the end of the projects and accomplished by Surface Water Quality Management Program staff. The specific methods used to interpret data will vary between projects and will be described in each QAPP. Some methods that may be used include descriptive statistics, Seasonal Kendall test, BATHTUB model, and FLUX model.

H. Reporting

A minimum of two reports will be developed during the course of a local watershed project. The first report will be developed at the conclusion of the assessment phase and the second report will be completed upon conclusion of the implementation phase. Data collected during an assessment project will be summarized in a watershed-specific TMDL report or a NPS Pollution Assessment Report, if the waterbody was not included in the most recent 303(d) list. Either report will include the data interpretations needed to direct the development of a watershed management plan to address the NPS pollutants impairing the beneficial uses of the assessed waterbody.

For implementation phase watershed projects, an end-of-project report will be developed to summarize all data collected during the project period. These final water quality reports provide a comparative analysis of pre and post project conditions. The reports focus on the relationship between water quality and beneficial use trends and the documented land use changes in the watershed. The degree to which the project achieved its goals for beneficial use improvement and/or pollutant load reductions will also be discussed in the final reports. The final water quality reports are incorporated into the comprehensive final project reports entered in the Grants Reporting and Tracking System (GRTS).

I. Monitoring Program Evaluation

The effectiveness of the NPS Program's monitoring efforts is essentially measured by the number of successful monitoring projects supported by the program. Success is defined by the completion of all components of the QAPP and the development of the applicable data summary reports. Feedback from local project sponsors and staff will also provide a means to evaluate satisfaction with the delivery of NPS Program technical and financial assistance.

J. General Support and Infrastructure Planning

The NPS Program Staffing and Support Workplans posted in the GRTS describe the roles and responsibilities of Department staff involved in the NPS Program. Under the staffing and support workplans, Department staff are committed to assist with local watershed monitoring and assessment projects as well as to provide analytical support for samples collected within local NPS project areas. The SWQMP also maintains standard operating procedures and quality assurance/quality control protocols to ensure the integrity and accuracy of data collected by the NPS projects.

Appendix G

Key Components of an Effective NPS Pollution Management Program

KEY COMPONENTS OF AN EFFECTIVE NPS POLLUTION MANAGEMENT PLAN

National NPS Program Guidance developed by the EPA identifies eight key components that must be included in an effective state NPS Pollution Management Program. Each of the components are addressed in the May 2015 ND NPS Pollution Management Program Plan. This section identifies where the key components have been addressed in the Management Plan. The eight components are presented in bold print, followed by applicable discussion.

1. The state program contains explicit short and long term goals, objectives and strategies to restore and protect surface and ground water, as appropriate.

The long term NPS Program vision and mission statement and the 5-year goals for the current Management Plan are found in Section II, Program Overview. Section III, Program Delivery, and Appendix E, NPS Program Milestones, identify specific objectives, tasks and outputs for the Management Plan period.

2. The state strengthens its working partnerships and linkages to appropriate state, interstate, tribal, regional, and local entities (including conservation districts), private sector groups, citizen groups, and federal agencies.

Given the nature of NPS pollution issues in the state, a majority of the NPS Program partners are involved in resource management on private agricultural lands. Specific partnerships and coordination are discussed throughout Sections II, Program Overview, and Section III, Program Delivery. In particular, the Assistance and Coordination subsections and associated Tasks under Section III discuss NPS Program coordination and its major partners.

3. The state uses a combination of statewide programs and on-the-ground projects to achieve water quality benefits; efforts are well integrated with other relevant state and federal programs.

This element is addressed throughout the Management Plan, particularly in the subsections A-E in Section III, Program Delivery.

4. The state program describes how resources will be allocated between (a) abating known water quality impairments from NPS pollution and (b) protecting threatened and high quality waters from significant threats caused by present and future nonpoint source activities.

To some degree, each section of the Management Plan addresses various components of the state's overall efforts to identify and address beneficial uses impaired or threatened due to NPS pollution. The subsections under Section III, Program Delivery, are specifically designed to focus on a different step in the delivery of financial and technical resources to projects addressing identified or potential NPS pollution impairments.

5. The state program identifies waters and their watersheds impaired by NPS pollution as well as priority unimpaired waters for protection. The state establishes a process to assign priority and to progressively address identified watersheds by conducting more detailed watershed assessments, developing watershed-based plans and implementing the plans.

Section III, particularly the subsections for Prioritization, Assessment and Project Assistance, address the process for setting priorities and directing assistance. The subsection for the Basin Water Quality Management Framework also describes some of the anticipated changes to the watershed prioritization and implementation process when the Basin Framework is fully implemented.

6. The state implements all program components required by Section 319(b) of the Clean Water Act, and establishes strategic approaches and adaptive management to achieve and maintain water quality standards as expeditiously as practicable. The state reviews and upgrades program components, as appropriate. The state program includes a mix of regulatory, non-regulatory, financial and technical assistance, as needed.

Section III, Program Delivery, and Section IV, Program Evaluation, address this element.

7. The state manages and implements its NPS management program efficiently and effectively, including necessary financial management.

The NPS Program actions described throughout the Management Plan are designed to ensure efficient delivery of NPS Program resources and proper management of allocated funds.

The Department's Division of Accounting uses an EPA-approved financial accounting system to track and document the expenditure of Section 319 funds committed for NPS pollution management in the state. The NPS Program also has separate databases for tracking local project expenditures and match as well as the costs, amounts and locations of applied BMPs. Contractual agreements are used to identify state and local financial commitments as they relate to the implementation of each NPS project. The financial expenditures of local sponsorships are reviewed on a monthly or quarterly basis.

8. The state reviews and evaluates its NPS management program using environmental and functional measures of success, and revises its NPS management plan at least every five years.

Section IV, Program Evaluation, Section III, Program Delivery, and the NPS Program Monitoring Strategy in Appendix F describe efforts to evaluate and update the Management Plan.

Appendix H

Summary Table of Partner Organization Assistance to the NPS Program

	Organization Type	Assistance Type **		NPS Program Interaction with Partner Organizations				
Agency or Organization	Federal, NGO* or State/Local	TA	FA	Task Force Member	Attend Partner Meetings	NPS Project Sponsor	BMP Support	NPS Project Planning Assistance
Natural Resource Conservation Service	Federal	X	X	X	X		X	X
US Geological Survey	Federal	X	X	X	X			X
US Farm Services Agency	Federal	X	X	X			X	
US Fish & Wildlife Service	Federal	X		X				X
US Forest Service	Federal	X		X				X
US Environmental Protection Agency	Federal	X	X	X	X		X	X
US Army Corps of Engineers	Federal	X						
ND Association of Soil Conservation Districts	NGO	X		X	X			
ND Stockmen's Association	NGO	X	X	X	X	X	X	X
Red River Basin Commission	NGO	X		X	X			X
Resource Conservation & Development Councils	NGO	X	X		X	X	X	X
Ducks Unlimited	NGO	X	X		X		X	
ND Grazing Lands Coalition	NGO	X	X		X	X	X	X
ND Certified Crop Advisors Board	NGO	X			X			
Keep ND Clean Inc.	NGO	X			X			X
International Water Institute	NGO	X			X	X		X
Local Soil Conservation Districts	State/Local	X	X		X	X	X	X
Water Resource Boards (county-level)	State/Local	X	X		X	X	X	X
ND Department of Agriculture	State/Local	X	X	X		X	X	X
ND Game & Fish Department	State/Local	X	X	X			X	X
Upper Sheyenne Joint Water Resource Boards	State/Local	X			X			X
NDSU Extension Service (State-level)	State/Local	X	X	X	X	X		X
ND State Water Commission	State/Local	X	X	X	X	X	X	X
ND Forest Service	State/Local	X		X	X		X	X
ND Industrial Commission	State/Local		X				X	
Universities (NDSU, UND, VCSU)	State/Local	X	X			X		X
ND Department of Public Instruction	State/Local	X			X			X
Cities	State/Local	X	X		X			X
ND State Historic Preservation Office	State/Local	X						X

* NGO- Nongovernmental Organization

** TA – Technical Assistance; FA – Financial Assistance