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North Dakota
Nonpoint Source Pollution Management Program Plan

2026 – 2030

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2026-2030

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I. INTRODUCTION

When the Clean Water Act (CWA) was reauthorized in 1987, the inclusion of nonpoint source pollution control provisions under Section 319 provided states with the opportunity to develop a federally supported, state managed program to address water quality impairments caused by nonpoint source pollution (NPS pollution). To implement these programs, states were required to develop a management plan identifying areas and activities known to contribute NPS pollution and cause impairments to waters of the state. 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. Starting in 2010, a 5-year cycle was established to conduct regular updates to the management plan. Under this schedule, the management plan was revised in 2015, 2020 and 2025. This document includes all updates approved during the 2025 revision cycle and sets forth the goals for the North Dakota Nonpoint Source Pollution Management Program (NPS Program) from 2026-2030.

During the 2026-2030 period for the Nonpoint Source Pollution Management Program Plan (Management Plan), the NPS Program continues to be a voluntary, incentive-based program. The program remains focused on the delivery of financial and technical assistance to mitigate NPS pollution concerns across the state. The NPS Program prioritizes addressing NPS pollution on a watershed scale but provides flexibility for statewide programs designed to target specific NPS concerns. To successfully address NPS pollution through the adoption of best management practices (BMPs) and community actions, the NPS program supports initiatives that educate on the importance of protecting high quality waterbodies and restoring beneficial uses to threatened and/or impaired waterbodies.

Implementation of the Management Plan is accomplished through a coordinated effort with local, state and federal agencies as well as non-governmental organizations (NGOs). Through the formation of these partnerships, necessary financial and technical resources are made available to local sponsors. These resources allow them to meet their goals and demonstrate that nonpoint source pollution mitigation can be accomplished effectively through voluntary programming. The success of the NPS Program is dependent on project sponsors and their partners engaging with agricultural producers and community members.

The Management Plan includes three sections that describe the implementation of the NPS Program. The Program Overview section outlines the NPS Program's core components, long-term vision, mission and 5-year goals. Implementation of the Management Plan is described in the Program Delivery section. Each Program Delivery

subsection identifies the objectives and associated actions required to achieve the 5-year goals of the Management Plan. The Program Evaluation section describes the measurable outputs to be tracked at both the program and project levels.

II. PROGRAM OVERVIEW

A. Program Mission, Vision and Goals

The vision of the North Dakota NPS Program is to ensure that all state waters support their designated beneficial uses by reducing the impacts of nonpoint source pollution.

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.

Five goals have been established to maintain progress toward the mission and vision over the next 5 years (i.e., 2026-2030).

> Goal 1: Expand the number and distribution of assessed waterbodies in the state to better define local and statewide needs for addressing NPS pollution threatening or impairing waterbody beneficial uses.
>
> Goal 2: Through the local watershed projects, improve water quality trends and/or restore impaired beneficial uses of 5 waterbodies by 2030.
>
> Goal 3: Increase public awareness and understanding of the sources and causes of NPS pollution as well as the feasible and sustainable solutions for addressing NPS pollutants impairing beneficial uses of waterbodies.
>
> Goals 4: Increase the capacity and ability of soil conservation districts and other resource managers to develop and implement comprehensive watershed-based projects to address local water quality priorities.
>
> Goal 5: Support the implementation of the components of the ND Nutrient Reduction Strategy for Surface Waters that are focused on evaluating and/or addressing nonpoint sources of nitrogen and phosphorus.

Advancement toward the NPS Program mission and vision will be measured by the outcomes of actions related to the five NPS Program goals and the delivery objectives described in Section III. Communication with North Dakota residents regarding program progress and available services is an important component of the NPS Program. The NPS Program website, articles, social media, newsletters, meetings, radio, and other forms of media are used (when appropriate) to "report to the public" on progress toward statewide and local NPS pollution management goals.

B. Program Technical Support

Given the diversity of the NPS Program, successful implementation of the Management Plan requires the involvement of ND DEQ personnel with a wide range of water quality and watershed management expertise. To ensure that the appropriate technical support is available, state general funds and approximately 20% of the state's annual Section 319 allocation are used to support staff assisting with the implementation of the Management Plan. These funds are used to support staff involved with: 1) program administration and coordination; 2) information and education (I/E) programs; 3) watershed assessment and implementation projects; 4) analysis of water quality and biological samples collected within project areas; 5) maintenance of the Grants Reporting and Tracking System (GRTS); 6) data management and interpretation; and 7) inspection of manure management systems supported by the NPS Program. The NPS Program provides technical assistance directly through NDDEQ staff and indirectly through local and statewide projects supported by the NPS Program. This technical support is focused on strengthening the abilities of project staff and sponsors to assess NPS pollution impacts; analyze water quality data to determine trends; expand educational efforts; and develop stronger, more focused NPS pollution management projects.

While the primary responsibilities of the different ND DEQ staff positions are focused on specific components of the Management Plan, many of the NPS Program's objectives and tasks require involvement from several Department staff. 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 & Watershed 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)
- Chemists (Sample Analysis)
- Environmental Scientist/Engineer (Animal Feeding Operation Inspections)
- Staff Support

The Program staffing and support workplans are posted under their respective grant year in the GRTS.

C. Priority NPS Pollutants

Within any watershed, the amount and type of NPS pollution is variable and dependent on many natural or anthropogenic factors. Some of the natural factors that affect NPS pollution delivery include precipitation intensity and frequency, wind, soil type, salinity

and topography. Alteration of the physical landscape through activities such as construction; overgrazing; excess tillage; concentrated livestock feeding area; surface and tile drainage; stream channelization; and wetland drainage also influence the type and amount of NPS pollution delivered to a waterbody. Encouragingly, land use activities such as these are manageable and are the focus of restoration and protection projects supported by the NPS Program. **Table 1** lists the potential sources of NPS pollutants most applicable to North Dakota.

Table 1. Land use categories and subcategories that are potential NPS pollution sources

Agriculture
Cropland agriculture (irrigated and non-irrigated)
Nutrient, manure, and pesticide application
Surface and subsurface (tile) drainage
Livestock grazing (riparian and upland)
Animal feeding operations (feedlots) and winter-feeding areas

Hydromodification and Drainage
Drainage and filling of wetlands
Channelization and streambank modification
Shoreline alteration (compaction, sluffing, removal of vegetation)
Dams and impoundments
Flow regulation
Flood-related erosion and sediment transport

Urban
Stormwater Runoff (industrial and residential)
Road salt, sand and brine applications
Snowmelt Runoff

Construction
Highway, road and bridge projects

Resource Extraction
Petroleum development and production
Surface and subsurface mining
Abandoned mines (gravel pits)

Land Disposal
Sludge
Wastewater
Landfills
Industrial land treatment
On-site wastewater treatment systems

Silviculture
Forest Management (harvesting, restoration, residue management)
Logging road construction and maintenance

Natural
Atmospheric deposition
Natural background sources

Other
Golf Courses
Erosion from derelict land
Spills
Internal nutrient cycling
Sediment resuspension
Waste storage/storage tank leaks
Unclassified sources

While all these sources are present in the state, under proper management, NPS pollutants originating from any of these sources can be greatly diminished. These sources include nitrogen, phosphorus, sediment, E. coli bacteria and, in some cases, other less common NPS pollutants which cause beneficial use and/or water quality impairments. The NPS Program is focused on addressing priority sources identified by local sponsors in the project implementation plans (PIPs). These priorities are based on water quality data collected through assessment sampling, physical observations, approved TMDLs, and testimonials from the public.

D. Project Types and Focus

Approximately 80% of the Section 319 funds awarded to the state are used to evaluate and address NPS pollution associated with the sources identified in Table 1. These funds will be distributed to local and state programs to support educational activities; conduct watersheds assessments; implement watershed restoration projects and support the implementation of best management practices (BMPs). The NPS Program identifies all eligible BMPs in the NPS Program BMP Guidelines which are reviewed and updated annually. Given most of the land in North Dakota is used for agricultural production, addressing NPS pollution associated with agricultural sources is the primary use of passthrough funding.

Under the NPS Program, roughly 30-35 projects are active during any given year. While the length, size, target audience, and structure of the projects vary, they share common 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 are classified under one of four different project types. These project types 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 primary programming categorized as Development projects is watershed assessments. Watershed assessments formulate from local interest in response to an observed water quality problem (e.g. harmful algal bloom occurrences) or other information on water quality conditions of a specific waterbody (e.g. lake water quality reports). Information and/or data collected through the watershed assessment projects is 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 reduction targets; 4) identify feasible solutions to achieve NPS pollutant load reduction goals; and 5) develop a Total Maximum Daily Load (TMDL), Watershed Based Plan (WBP) or Advanced

Restoration Plan (ARP), when applicable. In addition to the watershed assessments, development phase projects also include projects focused on watershed plan development, watershed scale public outreach, assessment tool/resource development, pilot programs, BMP demonstration and exploration, or the evaluation of new or emerging NPS pollutants. Development phase projects are generally one to two years in length but can be extended at the discretion of the NPS Program.

Watershed Projects: Watershed projects are the most comprehensive and long-term projects implemented through the NPS Program. These projects are designed to address NPS pollution impacts identified through previous development/assessment projects or TMDLs/WBPs. Watershed projects provide technical and financial assistance within a watershed area with the goal of restoring or protecting the beneficial uses of waterbodies that are impaired or threatened by NPS pollution. Primarily, this assistance takes the form of design, specification interpretation and cost-share for BMP implementation. Local sponsors utilize multiple funding sources, whenever possible, to achieve this goal. These sources may include Section 319 funds, Farm Bill funding, North Dakota Outdoor Heritage funds (OHF Funds), and local contributions. 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. Watershed projects are generally five years in length for a singular phase.

Support Projects: Support projects deliver specialized services or provide financial and/or technical assistance to implement specific BMPs. Examples of services provided by these projects include development of engineering designs for BMPs that require them (as outlined in the NPS Program BMP Guidelines) and technical assistance using precision agriculture or modelling services to guide targeted BMP implementation. Support projects can be statewide in scope or targeted toward specific NPS projects, geographic areas or priority watersheds. Support projects are generally five years in length for a singular phase.

Information/Education Projects: Information/Education (I/E) projects are designed to educate the public on various NPS pollution issues. Educational projects vary in size, focus and target audience and are delivered statewide or locally. Some projects use demonstrations or workshops to reach the target audience while others combine multiple educational frameworks to deliver a NPS pollution management message. Information/education projects are generally one to three years in length for a singular phase.

It is common for Implementation (watershed, support and information/education) projects to span multiple phases (i.e. the sponsor reapplies for additional Section 319 funding to support project continuation).

Project sponsors include, but are not limited to, soil conservation districts (SCDs) water resource boards (WRBs), universities, non-governmental organizations (NGOs), cities, and other state agencies. Conversations have been initiated to create/strengthen Tribal partnerships and explore opportunities to bolster tribal efforts with State Section 319 funds. NPS Program financial assistance provided to the project sponsors is used to support activities such as staffing; BMP implementation; biological and water quality sample collection; and public outreach or other I/E activities. NPS Program staff provide technical support to project sponsors for project planning and management, interpretation of grant guidelines, and water quality data analysis. Access to the NPS Program's web-based database is provided to the project sponsors and is required to be used for submission of reimbursement requests. Additionally, the database is used for developing contracts for BMP implementation. Section 319 funding awarded to the projects is provided at a 60% Section 319 and 40% local matching ratio. The local match can be in the form of cash and in-kind services.

E. Project Review Process

The North Dakota NPS Pollution Management Task Force (Task Force) serves as the 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 and effective NPS Program is implemented in North Dakota. Through the Task Force meetings, the members are given the opportunity to review 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 NPS project sponsors. The Task Force is comprised of members representing Federal, State and Public/Private Partners whose priorities align with the NPS Program goals. A list of agencies represented on the annual Task Force is published on the NPS webpage.

The process for the Task Force project review is as follows:

1. The Task Force is provided the draft project implementation plans (PIPs) to review. Task Force members are provided with an application review packet which lists instructions, key components the proposal should include, the NPS goals with which the project aligns, and provides space for written comments/questions. Members are asked to bring any comments/questions they have from the draft review to the official Task Force review meeting.

2. Representatives of the sponsoring entities are invited to the official Task Force review meeting to present their project and address questions from the Task Force members.
3. Following the presentations, the Task Force discusses the eligibility, strengths, weaknesses, goals and objectives of each draft proposal as well as the anticipated project budget.
4. Following adjournment of the review meeting, Task Force members are given a deadline for submitting written feedback (i.e. suggestions to modify or exclude components of the project plans that need improvement or do not align with the goals of the NPS Program) on the proposals to the NPS Program. Additionally, members are asked to provide general recommendations for funding the projects in full, in part, or do not fund.
5. Task Force feedback (inclusive of the items discussed during the meeting and written feedback) are organized and compiled by NPS Program staff and shared with the project sponsors to assist them in completing the final project implementation plans (PIP). Considering the funding recommendations made by the Task Force, and the State allocation total from EPA, the NPS Program staff will provide figures for project funding and request the project budget be updated accordingly.

Project sponsors are given a deadline for submission of their final PIPs. The final project plans are submitted as part of the Section 319 grant application package from the North Dakota Department of Environmental Quality to Grants.gov. This packet also includes the final budgets for the funds being requested.

An approximate schedule for the annual Section 319 grant cycle including the Task Force review process is outlined in Appendix A.

III. PROGRAM DELIVERY

Delivery of the NPS Program is accomplished through five interrelated delivery objectives addressing: Waterbody Prioritization; Resource Assessment; Project Assistance; Coordination; and Information & Education. Each objective includes actions to be initiated and/or completed during the Management Plan period. These actions describe the types of events or activities that will be implemented to advance toward the delivery objectives and NPS Program goals. The planned outcomes resulting from the cumulative actions of the NPS Program are provided in the Evaluation section.

A. Waterbody Prioritization

At the state level, the most current Integrated Report serves as the main information source for establishing NPS Program priorities. Waterbodies on the 303(d) list that are

ranked as high priority for TMDL development and those with approved TMDLs are always considered priority waterbodies for assessment or restoration under the NPS Program. Other sources such as TMDLs; survey results; applied BMP data; and NPS pollution assessment reports are also used to further define local priorities for watershed assessment, restoration or protection projects. Waterbodies that have no beneficial use impairments as determined through a local assessment project are recognized as priority for protection planning by the NPS Program.

In addition to the determination of impairments, project sponsors are encouraged to use additional criteria to more accurately represent local priorities. Observed conditions, local interest and resource limitations are some additional factors project sponsors are encouraged to consider when identifying watershed priorities. Unassessed waterbodies can be a priority only if local interest is high and observed conditions suggest beneficial uses are impaired. The local priorities established through this process may include a single waterbody or several waterbodies which may require subsequent assessment work if sufficient water quality data is not available.

Waterbodies that have sufficient assessment data or a TMDL are considered priorities for the implementation of corrective or protection measures. If significant local interest exists, waterbody restoration or protection projects are likely implemented following the completion of an assessment (if needed). 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). In these instances, the watershed for the impaired waterbody is considered a priority area for educational efforts to strengthen support by increasing awareness and understanding of the NPS pollution impacts and solutions.

As a third implementation priority, an NPS pollutant source contributing to the impairment of beneficial uses in multiple watersheds can be identified as a high priority and targeted for mitigation activities. Concentrated livestock feeding areas, declining riparian areas, cropland with saline areas and/or impacted by frequent flooding, abandoned mines (gravel pits), and on-site sewage treatment systems are examples of priority sources in the state. Projects focusing on priority sources can be implemented on a statewide, basin or sub-basin, or watershed level.

Modelling tools such as the Annualized Agriculture Nonpoint Source Pollution model (AnnAGNPS) or the Prioritize, Target and Measure Application (PTMApp) are used to identify areas and/or sub-watersheds within priority watersheds that are potential sources of nitrogen, phosphorus and/or sediment. These models identified target areas can then be the focus for BMP implementation within the watershed project area. The NPS Program will continue to support the development, expansion and exploration of

tools that can be used to define priority areas and implement prescriptive NPS mitigation efforts.

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

NPS Program priorities are intended to be dynamic and subject to revision as new data become available. Program priorities will be reviewed every year and adjusted accordingly to keep the program focused on the most pressing needs in the state. General descriptions for the NPS Program waterbody priorities for the Management Plan period are as follows:

- Waterbodies on the most current 303(d) list with impaired beneficial uses due to NPS pollution
- Waterbodies with an approved TMDL , WBP, or ARP that address NPS pollution impairments.
- Locally assessed waterbodies that have a beneficial use impairment that can be attributed to NPS pollution (non-303(d) waterbodies)
- Lakes with chronic harmful algal bloom occurrences
- Waterbodies that are fully supporting all beneficial uses, but threatened by potential NPS pollutants
- Priority sources including small and medium animal feeding operations, degraded riparian areas, cropland with saline areas and/or impacted by frequent flooding, abandoned mines (gravel pits), and failed septic systems.
- Watershed areas overlying sensitive or shallow aquifers
- Watershed areas with a majority of the population classified as underserved

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 support state and local NPS pollution mitigation efforts as well as provide direction for ongoing and future educational initiatives.

Assessment of the conditions and trends of beneficial uses and water quality is accomplished through the Watershed Management Program (WMP) and Groundwater Monitoring Programs and local assessment projects targeting specific watersheds. The WMP conducts ambient river sampling in collaboration with the United States Geological Survey (USGS) on major systems in North Dakota. In addition to the river data collected, the Lakes Water Quality Assessment (LWQA) is a five-year rotational project where data is collected on select classified lakes. The groundwater monitoring program conducts

ambient groundwater sampling to identify areas of groundwater impacted by NPS pollution. Data collected through the watershed assessments conducted by project sponsors are used to develop TMDLs, WBPs, ARPs, PIPs, and/or NPS pollution assessment reports that: 1) document beneficial use impairments; 2) identify NPS pollutant causes/sources; and 3) establish goals for land use improvement and NPS pollution mitigation. This data is also used to update future Integrated Reports.

A greater awareness of harmful algal blooms (HABs) has increased public questions regarding the sources and causes of HABs as well as potential solutions. The increased public attention has emphasized the need to expand NPS Program assessment efforts to include data collection on lakes impacted by HABs. This data will provide the foundation needed to better address public concerns and lead future actions to minimize the intensity, duration and frequency of HABs and improve the recreational uses of the impacted waterbodies.

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.

2026-2030 Assessment Actions:

- Provide financial and technical assistance to develop and implement watershed assessments that document the sources and causes of NPS pollutants impairing beneficial uses.
  Milestone: *Assist in the development (watershed selection and design) and execute funding agreements for assessment projects (as needed).*
- Support costs associated with sample collection, analysis and data interpretation to determine the need for public advisories/warnings for waterbodies experiencing HABs.
  Milestone: *Annual management of recreational season HABs monitoring program.*
- Provide sample collection training; analytical support and data interpretation for samples collected within NPS projects to document: 1) water quality and beneficial use conditions, 2) sources and causes of NPS pollution, and/or 3) progress toward water quality goals and objectives.
  Milestone: *Conduct annual training (when necessary) and audits for all projects collecting water quality data under the NPS Program.*
- Support research/assessment projects on lakes experiencing chronic HABs to evaluate temporal trends in nutrient concentrations; contributions from internal and external nutrient sources; watershed and in-lake management solutions; etc..
  Milestone: *Explore resources and work with partners to develop a tool to identify sources, causes, and severity of HABs on recreational lakes and reservoirs.*

- Coordinate with universities and/or other partners to implement field scale assessments or research projects to evaluate soil health management system effects on water quality at the field edge and in nearby receiving waters (e.g., streams, wetlands, lakes, etc.).
  Milestone: *Participate in research advisory committees related to NPS pollution mitigation.*
- Incorporate conservation planning tools such as PTMApp at assessing nutrients of concern and identify priority areas for BMP implementation.
  Milestone: *Support trainings and share educational resources for staff, local sponsors and partners to learn how to use conservation planning tools.*
- Integrate groundwater quality and water-level data into watershed assessments and post-implementation monitoring to evaluate groundwater contributions to nutrient loading and assess the effectiveness of implemented BMPs.
  Milestone: *Incorporate groundwater data into reports generated with assessment data to define priority areas for future BMP implementation.*
- Evaluate the feasibility and utility of using remote sensing for assessing HABs, potential reference sites; riparian conditions; etc.
  Milestone: *Assess data limitations, costs, and applicability for program use; Ongoing review of NASA developed products.*
- Incorporate post implementation assessment monitoring to determine the success of BMPs implemented through Watershed program efforts.
  Milestone: *Pilot the collection and analysis of post-implementation water quality data for select Watershed Projects*

C. Project Assistance

As a voluntary, incentive-based program, successful development and implementation of NPS Program projects are dependent on local support and partnerships. Local participation during project development provides the opportunity to design project plans with goals and objectives that focus on local and state water quality and NPS Program priorities.

The Natural Resources Conservation Service (NRCS) is a major source of federal financial and technical assistance for most of the NPS Program watershed projects. Technical assistance provided by NRCS includes staff time to assist with land use assessments, public meetings, educational events and/or conservation planning. Office space and some supplies may also be provided to the sponsors of the NPS projects. The United States Department of Agriculture (USDA) cost share programs provide additional financial support to expand the implementation of BMPs within the watershed project area.

Cash and in-kind match contributions from the sponsoring entities, non-federal project partners, and agricultural producers are also a significant portion of the NPS program project budgets.

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

2026-2030 Assistance Actions:

- Develop and implement 5 new NPS pollution management projects (education, support and/or watershed projects).
  Milestone: *One new NPS Project per application cycle.*
- Oversee the management and implementation of 25-30 active NPS projects, annually.
  Milestone: *Conduct routine project reviews, check-ins, and progress assessments*
  Milestone: *Update the NPS Annual Report StoryMap with details of the current year's active and lapsing projects.*
- Pool financial resources with NPS Program partners to increase assistance available for projects addressing nutrient sources in priority watersheds, particularly those addressing lakes impacted by HABs.
  Milestone: I*dentify partner programs and funding sources aligned with NPS priorities and provide support for sponsors in pursuit of alternative funding sources.*
- Solicit funding from other state and federal programs (e.g., Outdoor Heritage Funds, USDA Resource Conservation Partnership Program) to increase the level of funding committed to NPS pollution management in the state.
- ***Milestone:*** *Explore options for utilizing Sewer Overflow and Stormwater Reuse Municipal Grants (OSG).*
- Review the status of the NRCS MOU and discuss options for coordinating financial and technical assistance, reduce duplication of efforts, and maximize water quality benefits within the NPS project areas.
  Milestone: *Schedule and conduct annual coordination meetings with NRCS*
- Support development/maintenance of watershed models (e.g., AnnAGNPS, PTMApp) and strengthen the ability of local resource managers (e.g., SCD staff, watershed coordinators, NRCS) to prioritize, plan and implement comprehensive watershed restoration projects addressing NPS pollution impairments.
  Milestone: *Coordinate trainings for partners on modeling/prioritization tools for watershed planning*
  Milestone: *Host and support maintenance and expansion of the PTMApp model.*

D. Coordination

Local project sponsors are the main avenue for coordinating programs within the NPS project areas. Soil Conservation Districts (SCD) make up the greater portion of project sponsors for waterbody assessments and watershed projects, while Extension Service, state agencies and NGOs are more commonly the sponsors for the education and support projects. 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 USDA and NPS Programs. As part of the project coordination, sponsors are expected to develop and revise PIP plans, oversee project administration, complete required reporting, deliver financial and technical assistance, and conduct public outreach and education in their project area.

In support of locally lead coordination efforts, NPS Program staff attend and participate in project sponsor meetings to evaluate and provide feedback on project initiatives and progress toward defined goals.

Coordination Objective: Maintain and expand state and local coordination efforts to diversify input for project development and implementation, support program/project staff, and increase opportunities for securing resources to more efficiently address NPS pollution impacts.

2026-2030 Coordination Actions:

- Initiate watershed restoration projects that identify and address in-lake and watershed nutrient sources and causes for 2 lakes. Emphasis will be placed on projects focused on lakes experiencing frequent HABs.
  Milestone: *Utilizing partner input, identify priority areas and work with local leadership to establish restoration project(s) focused on addressing landscape NPS contributing to in-lake concerns.*
- Increase the level of watershed management planning assistance available to soil conservation districts and other resource management organizations to build their capacity to develop and implement strategies addressing water quality impairments, soil degradation, and other natural resource challenges.
  Milestone: *Update program guidelines, guidance documents, and technical resources.*
  Milestone: *Provide direct technical assistance for watershed planning, project scoping, and implementation strategy development.*
- Provide structured coordination opportunities (e.g., meetings, partner check-ins, and information sharing) to support state and local project staff, clarify roles and expectations, and improve the efficiency of NPS project development and delivery.
  Milestone: *Host an annual NPS Coordinators Meeting.*

Milestone: *Explore options for Bi-Monthly Coordinator calls to open communication channels between project sponsors.*

- Work with the agricultural producers, SCDs, NGOs and commodity groups in the state (e.g., Soybean Growers, Corn Growers, Stockmen's etc.) to identify feasible steps for increasing producer adoption of management systems that improve and protect water quality.
  Milestone: *Conduct focused discussions during group meetings and one-on-one with project sponsors to identify barriers.*

E. Information & Education

Delivery of information and education (I&E) programs throughout the state is critical for NPS Program success. While watershed projects are effective at direct mitigation of the sources and causes of NPS pollution, I&E projects address NPS pollution indirectly. I&E projects create greater awareness and understanding of NPS pollution issues and the solutions for addressing those issues. Subsequently, these projects provide tools for the public to make informed decisions and support direct action (adoption of best management practices) to address NPS pollution. The delivery method, NPS pollution topics, and target audience of the educational projects vary to ensure a greater network of people is reached. These educational initiatives utilize a variety of media and methods (e.g., newsletters, social media, workshops, BMP demonstrations, tours, etc.) to disseminate NPS pollution information. Educational projects providing technical support and training to NPS watershed project coordinators; project sponsors; and producers/landowners are also recognized as important statewide education efforts.

Given the importance of an informed public, up to 25% of the state's annual Section 319 allocation will be available 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 water resources impaired or threatened by NPS pollution.

2026-2030 Information and Education Actions:

- Implement a balanced public education program focused on priority NPS pollution issues and solutions with an emphasis on reaching K-12, university students/staff, producers, conservation professionals, etc..
  Milestone: *Support the development or update of educational materials focused on watershed planning and NPS pollution management and tailored to each audience.*

Milestone: *Utilize Task Force review of project applications to ensure overlaps are minimal and programs/materials align with the NPS Program.*
Milestone: *Participate in instruction or facilitation of I/E programs.*

- Utilize all forms of media to provide the public with a consistent stream of information on NPS pollution management issues and solutions.
  Milestone: *Produce and disseminate educational content through websites, social media, newsletters, and other media – coordinate with DEQ Public Information Officer*
  Support and expand producer-led education and technical assistance, including educational events and producer-to-producer mentoring, to promote the adoption of soil health and water runoff management systems on agricultural lands.
  Milestone: *Provide funding or logistical support for producer-led education and demonstrations*
- Appraise the degree of public awareness and understanding of NPS pollution issues in the state to identify steps needed to strengthen statewide educational offerings.
  Milestone: *Explore options for "quantifying" this – surveys, census analysis, etc.*

IV. PROGRAM EVALUATION

Evaluation of NPS Program accomplishments will be 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. EPA's GRTS, annual and final project reports, EPA measures and annual program reports will be the primary means used to document NPS Program progress and success. The NPS Program Monitoring Strategy (Appendix B) is project-based and includes two basic goals. The first goal is to assist resource managers with the collection of data in priority watersheds to determine NPS pollution management needs and, when applicable, develop workplans. The second goal is to evaluate the extent of pollutant reductions and beneficial use improvements resulting from BMPs applied within the targeted watersheds during implementation.

Monitoring approaches vary based on the needs and goals of the project. Methods for monitoring include photo-monitoring, computer modeling, biological monitoring; stream or lake sampling; and/or BMP tracking. If stream and/or lake sampling is part of the project's monitoring, a Sampling and Analysis Plan (SAP) is created to describe how and where monitoring will be conducted. The SAP identifies the standard operating procedures (SOPs) associated with the planned data collection in abidance with federal quality assurance/quality control (QA/QC) requirements. Data collected are used to evaluate progress toward project-specific goals and objectives.

Monitoring the effectiveness of applied BMPs in restoring the impaired use(s) and/or water quality in targeted waterbodies is the primary means used to document watershed project success and, ultimately, NPS Program success. The Department uses two interim measures to evaluate BMP effectiveness post implementation. The first interim measure focuses on tracking the locations, types and amounts of BMPs installed to gauge the degree of producer involvement and extent of land management improvements in the watersheds. The second measure involves using models such as EPA's Pollutant Load Estimation Tool (PLET) and the animal feedlot runoff risk index worksheet (AFRRIW) to estimate annual nitrogen, phosphorus and sediment load reductions associated with applied BMPs. These load reduction estimates are entered in the GRTS and used to quantify the anticipated water quality benefits of the watershed projects. At the end of the watershed projects, all available stream and/or lake data are compiled into a document describing water quality trends illustrating (if any) progress toward beneficial use restoration goals and objectives. A framework for post implementation effectiveness monitoring will be developed throughout the duration of this Management Plan.

Projects supported by the NPS Program will be evaluated on a yearly basis through required annual project reports. Each project is required to submit a final project report to document progress toward the goals and objectives described in the approved PIP. For the watershed projects, the final reports include the water quality summary as described above. For projects that do not require water quality or biological data collection (e.g., education and some support projects), the annual and final evaluations will focus on the degree of progress toward the objectives and tasks in the approved PIP. All annual and final project reports will be entered in the GRTS to update EPA on the progress of the projects supported by the NPS Program.

Measurable outcomes for NPS Program delivery and water quality improvement or protection that will be used to gauge success at the end of the Management Plan period are as follows:

NPS Program Delivery Outcomes

- Five new watershed-based projects addressing NPS pollution impairments.
- Four assessed waterbodies with adequate data to develop TMDLs or alternative plans as well as comprehensive watershed management plans
- Deliver standardized water quality and nonpoint source pollution education through events, training, materials and digital platforms.
- Approximately 80% of annual Section 319 Grant Award used for NPS project development and implementation

Water Quality Improvement/Protection Outcomes

- Five waterbodies with notable improvements towards or successful restoration of beneficial uses
- Estimated annual load reductions for nitrogen, phosphorus and sediments of 70,000 pounds, 35,000 pounds and 15,000 tons, respectively.
- Create educational materials describing the relationship between stream/lake water quality and agricultural practices to promote awareness and inspire participation in the development of future watershed management projects.
- Assessments and/or restoration projects initiated on 4 lakes with beneficial uses impaired due to harmful algal blooms.

APPENDIX A

ND NPS Pollution Task Force Section 319 Project Proposal Review Process

ND NPS Pollution Task Force Section 319 Project Proposal Review Process

Approximate Schedule for the Annual Review Process

November 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 Program identifies the draft project proposals that are eligible for final review by the Task Force.

December/January: The NPS Task Force reviews all draft project proposals. Project sponsors are invited to the Task Force meeting to present their project and answer questions from the Task Force. If necessary, the Task Force meeting may be scheduled over two days to allow adequate time for sponsor presentations, Task Force questions and discussion. A summary of requested Section 319 funding is provided to the Task Force for the projects under consideration

February: Comments/feedback from Task Force are due. The NPS Program staff will compile all comments and send them to the project sponsors. The project sponsors finalize their project proposals by addressing the Task Force and NPS Program staff comments.

March: Final project proposals are due. The specific due date is variable and is set after the draft project proposal review process is complete.

April: NPS Program staff reviews revisions to the PIPs and request additional input/comments on the final PIPs (if needed). The NPS Program staff will coordinate with the project sponsors to revise the PIP to address additional comments from the Task Force (if needed).

April/May: The final project proposals are posted on the NPS Program website, and the Task Force is notified. The NPS Program staff submits the Section 319 grant application through Grants.gov and forwards the final PIPs to EPA. The submittal date for the grant application is dependent on when the federal fiscal year Section 319 budget is provided by EPA.

May: EPA reviews the final PIPs and Section 319 grant application.

May/June: EPA issues the Section 319 Grant Award and the NPS Program staff develops subawards for the project sponsors to finalize the allocation of the requested Section 319 funds.

APPENDIX B

NPS Program Monitoring Strategy

NPS PROGRAM MONITORING STRATEGY

A. Monitoring Overview

The NPS Program Monitoring Strategy, a component of the Statewide 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 goals. The first goal is to assist resource managers with the collection of 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 partners. To accomplish these goals, the NPS Program coordinates with entities such as the Natural Resources Conservation Service (NRCS); United State Geological Survey (USGS); soil conservation districts; universities; Extension Service; and water resource boards. The support and involvement of landowners, farmers and ranchers is also an important component of most monitoring activities.

Implementation of the NPS Program Monitoring Strategy is directed 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 with beneficial uses impaired by NPS pollution are considered priority waterbodies for assessment work under the NPS Program. These 303(d) listed waterbodies will be the starting point when planning assessment projects with program partners. To ensure a greater chance of post-assessment implementation work, the degree of local interest and support is used to further define watershed assessment priorities. The TMDL reports or Water Quality Summaries developed with the assessment data provide the foundation for the development of watershed-based projects that will implement practices to address the identified NPS pollution impairments.

Assessment data collected within the watershed projects describes the baseline water quality and beneficial use conditions whereas the water quality data collected during the implementation phase is used to track trends to document attainment of water quality and/or beneficial use improvement goals identified in the watershed management plans. The success of these watershed projects is dependent on widespread implementation of best management practices (BMP). As such, the specific monitoring approach and water quality parameters for a project are dependent on the type of BMP to be used to address the impaired use(s) and/or water quality impairments. All data collected within a project are used to evaluate the progress and success of the project as well as the NPS Program. When applicable, data collected within a watershed project are also used to satisfy program performance measures established by the EPA.

The implementation plans for all NPS Program projects that schedule water quality and/or biological data collection must also include a Sampling and Analysis Plan (SAP). Due to the diversity of the monitoring goals between projects, specific monitoring details are described in a project-specific SAP. Since the NPS Program is part of the WMP, the WMP Quality Assurance Project Plan (QAPP) serves as an umbrella document outlining the quality assurance/quality control requirements for all monitoring projects supported by the NPS Program. Each NPS Program SAP must align with the WMP QAPP and should address the key elements of EPA's Guidance for Quality Assurance Project Plans that are not covered in the WMP QAPP. The SAPs are prepared before monitoring begins and may be revised at any time during the life of the project.

Each SAP is unique for the targeted watershed and serves as the working document that describes the steps and procedures associated with the planned data collection activities. In most cases, NPS Program monitoring efforts follow a similar process from the assessment phase through the implementation phase. Typical steps in this process are as follows:

- Coordinate with program partners (e.g., SCD, WRD, County Commissions, etc.) to identify local watershed assessment and/or implementation priorities. Criteria used to define priorities may include current 303(d) waterbody listings, degree of local interest, current data available, observed beneficial use conditions, and current land management activities.
- Develop an assessment phase SAP for the area of interest.
- Collect data (e.g., chemical, biological, etc.) according to the SAP to document current beneficial use conditions and identify causes of beneficial use impairments.
- Assess current land management in the watershed to determine types and sources of pollutants impairing beneficial uses and identify potential BMP for addressing the impairment(s).
- Utilize assessment data to develop Water Quality Summaries and/or TMDL reports.
- Coordinate with project partners to identify feasible solutions to restore and/or improve impaired beneficial uses. Aligned with opportunity to apply for competitive Section 319 funding.
- Update the SAP to address identified concerns and monitor for BMP effectiveness during the implementation of the watershed project implementation plan.
- On an annual basis, track the implementation of corrective measures and, when applicable, utilize computer models to estimate associated pollutant load reductions. Models that may be used include AnnAGNPS; Pollutant Load Estimation Tool (PLET); Prioritize, Target and Measure Application (PTMApp); and the Animal Feedlot Runoff Risk Index Worksheet (AFRRIW).

- At the end of the project, compile and interpret all data to quantify water quality trends; define beneficial use conditions; and evaluate progress toward project goals for pollutant reductions and beneficial use improvements. Develop a final water quality summary for inclusion in the final project report and entry in the GRTS.
- Based on data summaries, reevaluate future beneficial use restoration or maintenance needs.
- If feasible, coordinate with program partners to collect post-project data to document delayed stream and/or lake responses to land management improvements in the watershed.

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. The NPS Program monitoring strategy is designed to document the specific needs and/or success of watershed-based 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 NPS pollution management projects.

B. Monitoring Objectives

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 chemical, biological, land use, etc.) are used to track NPS pollutant trends; quantify reductions; and document beneficial use improvements resulting from land management improvements in the watershed. Models such as EPA's PLET and the AFRRIW are used to estimate pollutant load reductions associated with applied BMP (e.g., reduced cropland tillage, manure management systems, grassed waterways, etc.).

C. Monitoring Design

The SAP describes the specific monitoring design and methods that will be used to ensure all data are representative of conditions within the waterbody and its watershed. A standard Department approved template is used for the development of Sampling and Analysis Plans (SAP) for 319 funded projects. NPS Program staff modify project specific items such as maps, project contacts and sampling site locations and internal review protocols are in place to ensure consistency and correctness of modified components.

D. Quality Assurance

The SAP, in conjunction with the WMP QAPP, will describe actions to be taken by each project to ensure data quality, integrity and accuracy. This will include information such as 1) applicable quality assurance/quality control measures; 2) sampling frequencies and procedures; 3) STORET sites; 4) parameters; and 5) sample transportation and preservation procedures. Each SAP will address the EPA requirements not covered in the WMP QAPP and must be approved by the Division's Quality Assurance Coordinator.

E. Data Management

As of January 1, 2026, 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 projects is stored in the Ecological Data Applications System (EDAS) database managed by the Department. A new database is expected to come online in 2026 to house water quality data – specific details of how the program will utilize this database to access WQ data was unknown at the time of this update.

F. Data Analysis and Assessment

The State's Chemistry and Microbiology labs are responsible for the analysis of the water quality samples collected by the NPS Program projects. Fish or macroinvertebrate samples are analyzed through contractual agreements with private firms, EPA and/or Valley City State University. Data interpretation is completed at the end of the projects and accomplished by WMP staff. The specific methods used to interpret data will vary between projects based on best professional judgement of the WMP staff.

G. Reporting

A water quality summary will be developed at the conclusion of the assessment or implementation phase, or prior to a reapplication to continue into additional phases of implementation to support project need or demonstrate improvements related to BMP implementation. Interim data summaries may also be provided to assist project sponsors with decisions regarding project revisions and are available upon request.

When applicable and in alignment with the State's TMDL programs vision plan, data collected during an assessment/implementation project will be summarized and described in a TMDL report. Both TMDLs and water quality summaries will include the data interpretations needed to describe: 1) current water quality conditions and trends; 2) document beneficial use impairments or threats; and 3) identify the sources and causes of pollutants impairing or threatening beneficial uses. The degree to which the project achieved its goals for beneficial use improvement and/or pollutant load reductions will also be described in the water quality summaries created post implementation and are incorporated into the comprehensive final project reports entered in the Grants Reporting and Tracking System (GRTS).

H. Monitoring Program Evaluation

The effectiveness of the NPS Program monitoring efforts is measured by the number of monitoring projects developed and implemented in the state. Success is defined by such measures as: 1) completion of all components of the SAPs; 2) collection and storage of quality data; 3) implementation of effective quality assurance/quality control measures; and 4) development of the applicable data summary reports. Feedback from project sponsors and staff will also provide a means to evaluate satisfaction with the delivery of NPS Program technical and financial assistance.

I. 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, several Department staff are committed to assist local personnel involved with the watershed monitoring and assessment projects as well as to provide analytical support for samples collected within the NPS project areas. The WMP 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 C

Key Components of an Effective NPS Pollution Management Program

KEY COMPONENTS OF AN EFECTIVE NPS POLLUTION MANAGEMENT PLAN

National NPS Program Guidance (2024) developed by the EPA identifies seven key components that must be included in an effective state NPS Pollution Management Program. Each of the components are addressed in the 2026-2030 ND NPS Pollution Management Program Plan. This section identifies where the key components have been addressed in the Management Plan. The seven components are presented in bold print, followed by applicable discussion.

1. The state program identifies water restoration and protection goals and program strategies (regulatory, nonregulatory, financial and technical assistance, as needed) to achieve and maintain water quality standards. It includes relevant, current, and trackable annual milestones that best support program implementation.

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, identifies specific objectives, actions and milestones for the Management Plan period.

2. The state program identifies the primary categories and subcategories of NPS pollution and a process for prioritizing impaired and unimpaired waters and identify how national and state priorities may align.

The process for prioritizing use of Section 319 funds to address impaired and unimpaired waters and the primary categories and subcategories of NPS pollution prioritized by the State of North Dakota are outlined in Section II, Program Overview, Subsection C and Table 1 respectively.

3. The state program identifies management measures (i.e., systems of practices) that will be undertaken to reduce pollutant loadings resulting from each category, subcategory, or particular nonpoint source identified in component 2 above. The measures should also consider the impact of the BMPs on groundwater quality.

This element is addressed throughout the Management Plan, and reference to the programs BMP Guidelines is provided in Section II, Program Overview, specifically Part D.

4. The state uses both watershed projects and well-integrated regional or statewide programs to restore and protect waters, achieve water quality benefits, and advance any relevant climate resiliency goals.

The types of projects offered through North Dakota's NPS Program are outlined in Section II, Program Overview, Subsection D. It has been proven that restoration and protection of waters is achieved through the effective delivery and balance of the four project types (Development, Watershed, Support and Information & Education) with the greatest priority on Watershed and Support projects that provide financial and technical

assistance for best management practice implementation. Climate Resiliency (i.e. resiliency to drought, floods and fire) is a secondary benefit of the sustainable land management strategies supported by the NPS Program.

5. The state identifies and enhances its collaboration with appropriate federal, state, interstate, Tribal, and regional agencies as well as local entities (including conservation districts, private sector groups, utilities, and citizen groups) that will be utilized to implement the state program. Furthermore, the state supports capacity-building in disadvantaged, underserved, or overburdened communities.

The diverse group of partners and sponsors for the NPS Program/Projects are referenced throughout the Management Plan. The NPS Task Force is comprised of State, Federal and NGO organizations that review the Section 319 annual applications. This ensures that the projects are meeting goals of multiple stakeholders in addition to those put forth by the NPS Program. Section III, particularly subsections C and D outline the partnerships and coordination necessary to execute the NPS Projects. Conversations have been started with Tribal partners on how the State NPS Program can bolster tribal efforts and support underserved communities in the state (Tribal areas and census identified underserved communities are priority areas for Projects under the NPS Program – Section II, subsection C).

6. The state manages and implements its NPSMP efficiently and effectively, including necessary financial management.

The NPS Management Plan enforces and is subject to reporting requirements set forth in EPA's State NPS Program Guidelines. Additional record reviews, project check-ins, award tracking, and bookkeeping are integral pieces of project management executed by the NPS Program staff to guarantee efficient and effective use of Section 319 funds. An online database is used as the primary tracking mechanism for funding awards, reimbursements and BMPs implemented under the NPS Program's individual projects.

7. The state evaluates its NPSMP using environmental and functional measures of success and revises its NPSMP plan at least every five years.

The State of North Dakota commits to revising the NPS Management Plan every five years as required by EPA's State NPS Program Guidelines. The next scheduled update of the North Dakota NPS Management Plan will take place in 2031 (pending no revisions to the current plan).