

XIII. Appendices

Appendix A—Key Components of an Effective State Nonpoint Source Management Program

This guidance is an update of the nine key elements guidance contained in the U.S. Environmental Protection Agency's (EPA's) *1997 Guidance for Section 319(h) Grants* (water.epa.gov/polwaste/nps/npsguid1.cfm#IIIa), and contains a description of the key components that characterize an effective state nonpoint source (NPS) management program. The original guidance was developed by EPA with input from state lead NPS control agencies. Similarly, during the spring of 2012, EPA convened an EPA-state workgroup to inform section 319 program improvements; this update was developed with input from this workgroup and further refined by comments and input from other states.

EPA expects all states to review and, as appropriate, revise and update their NPS management programs every five years. An updated, comprehensive program is critical to the states and EPA. It will allow EPA and the states to ensure that section 319 funding, technical support and other resources are directed in an effective and efficient manner to support state efforts to address water quality issues on a watershed basis. States should refer to these key components during review and update of their programs. States will then submit their updated programs to EPA for approval.

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

The state's long-term goals reflect a strategically focused state NPS management program designed to achieve and maintain water quality standards and to maximize water quality benefits. The shorter-term objectives consist of activities, with annual milestones, designed to demonstrate reasonable progress toward accomplishing long-term goals as expeditiously as possible. Since the NPS management program is a longer-term planning document, the annual milestones may be more general than are expected in an annual section 319 grant workplan, but are specific enough for the state to track progress and for EPA to determine satisfactory progress in accordance with section 319(h)(8). Annual milestones in a state's NPS management program describe outcomes and key actions expected each year, e.g., delivering a certain number of WQ-10 success stories or implementing projects in a certain number of high priority impaired watersheds. The state program includes objectives that address nonpoint sources of surface water and ground water pollution as appropriate (including sources of drinking water) in alignment with the goals of the Clean Water Act. The objectives include both implementation steps and how results will be tracked (e.g., water quality improvements or load reductions).

The state program includes long-term goals and shorter-term (e.g., three- to five-year) objectives that are well integrated with other key environmental and natural resource programs, such as those described under component #3. State program goals and objectives are periodically revised as necessary to reflect progress or problems encountered, strategies to make progress towards achieving the goals, and indicators to measure progress.

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

The state uses a variety of formal and informal mechanisms to form and sustain these partnerships. Examples include memoranda of agreement, letters of support, cooperative projects, sharing and combining of funds, and meetings to share information and ideas.

The state NPS lead agency works collaboratively with other key state and local NPS entities in the coordinated implementation of NPS control measures in high priority watersheds. Interagency collaborative teams, NPS task forces, and representative advisory groups can be effective mechanisms for accomplishing these linkages, as can more informal but ongoing program coordination and outreach efforts. The state works to ensure that its local partners and grantees have the capacity to effectively carry out watershed implementation projects funded to support its NPS management program.

Further, the state seeks public involvement from local, regional, state, interstate, tribal and federal agencies, and public interest groups, industries, academic institutions, private landowners and producers, concerned citizens and others as appropriate, to comment on significant proposed program changes. This involvement helps ensure that environmental objectives are well integrated with those for economic stability and other social and cultural goals.

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.

The state has the flexibility to design its NPS management program in a manner that is best suited to achieve and maintain water quality standards. The state may achieve water quality results through a combination of watershed approaches and statewide programs, including regulatory authorities, as appropriate. The state NPS management program emphasizes a watershed management approach and includes an explanation of the state's approach to prioritizing waters and watersheds to achieve water quality restoration and protection.

The state NPS management program is well integrated with other relevant programs to restore and protect water quality, aligning priority setting processes and resources to increase efficiency and environmental results. These include the following programs, as applicable:

- Total Maximum Daily Loads (TMDLs);
- Clean Water State Revolving Fund (CWSRF);
- U.S. Department of Agriculture (USDA) farm bill conservation programs;
- state agricultural conservation;
- state nutrient framework or strategy
- source water protection;
- point sources (including stormwater, confined animal feeding operations, and enforcement of permitted facilities);
- ground water;

Appendix A – Continued

- drinking water;
- clean lakes
- wetlands protection;
- national estuary program;
- coastal nonpoint pollution control program;
- pesticide management;
- climate change planning;
- forestry, both federal (U.S. Forest Service) and state;
- U.S. Army Corps of Engineers programs;
- and other natural resource and environmental management programs.

Because of the significant resources potentially available through USDA conservation programs, the state makes a strong sustained effort to coordinate and leverage with USDA NRCS.

Similarly, a state NPS management program is well-integrated and clearly identifies processes to incorporate some of the significant resources of the CWSRF loan program for eligible nonpoint source activities.

Where applicable, the state NPS management program explains how NPS projects fit into the state's prioritization scheme for CWSRF funding, and describes state efforts to increase the use of the state CWSRF for the NPS management program. If there are barriers to prioritization of NPS projects, the state NPS management program describes efforts to coordinate with the CWSRF program and potential future steps to encourage NPS projects are considered.

If, in reviewing federal programs, the state identifies federal lands and activities that are not managed consistently with state nonpoint source program objectives, the state may seek EPA assistance to help resolve issues at the federal agency level. Federal programs subject to review by the state include the land management programs of the Bureau of Land Management and the U.S. Forest Service, USDA's conservation programs, and the U.S. Army Corps of Engineers waterway programs, as well as development projects and financial assistance programs that are, or may be, inconsistent with the state's NPS management program.

As a federal agency, EPA has a role to play in support of the state's NPS management program by working with other federal agencies to enhance their understanding of the significance of nonpoint source pollution and of the need to work cooperatively with the state to solve nonpoint source problems. Where appropriate, EPA will assist in resolving particular issues that arise between the state and federal agencies with respect to federal consistency with the state NPS management program. As EPA becomes aware of these issues, EPA works at a national level to improve consistency among federal programs.

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 NPS impacts.

The program describes its approach to addressing the twin demands of remedying waters that the state has identified as impaired by NPS pollution and preventing new water quality problems

from present and reasonably foreseeable future NPS impacts, especially for waters which currently meet water quality standards.

With limited resources, the state will likely need to make choices about the relative emphasis on restoring impaired waters and protecting high quality waters. The state's program describes how it will approach setting priorities and aligning resources between these two areas of emphasis based on their water quality challenges and circumstances.

5. The state program identifies waters and 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.

The state identifies waters impaired by nonpoint source pollution based on currently available information (e.g., in reports under sections 305(b), 319(a), 303(d), 314(a), and 320), and revises its list periodically as more up-to-date assessment information becomes available. As feasible, the state also identifies important unimpaired waters that are threatened or otherwise at risk from nonpoint source pollution.

In addition the state identifies the primary categories and subcategories causing the water quality impairments, threats, and risks across the state. At regular intervals the state updates the identification of waters impaired or threatened by NPS pollution preferably as part of a single comprehensive state water quality assessment which integrates reports required by the Clean Water Act. The state establishes a process to assign priority and to progressively address identified waters and watersheds by conducting more detailed watershed assessments, developing watershed-based plans, and implementing the plans. Factors used by the state to assign priority to waters and watersheds may include a variety of considerations, for example:

- human health considerations including source water protection for drinking water;
- ecosystem integrity, including ecological risk and stressors;
- beneficial uses of the water;
- value of the watershed or ground water area to the public;
- vulnerability of surface or ground water to additional environmental degradation;
- likelihood of achieving demonstrable environmental results;
- degree of understanding of the causes of impairment and solutions capable of restoring the water;
- implementability (site-specific technical feasibility);
- adequacy of existing water quality monitoring data or future monitoring commitments;
- degree to which TMDL allocations made to point sources are dependent on NPS reductions being achieved;
- extent of partnerships with other federal agencies, states, local public and private agencies/organizations and other stakeholders to coordinate resources and actions;
- availability and access of funding sources other than section 319(h); and
- readiness to proceed among stakeholders and project partners.

The state links its prioritization and implementation strategy to other programs and efforts such as those listed under component #3. In establishing priorities for ground water activities, the state considers wellhead protection areas, ground water recharge areas, and zones of significant ground water/surface water interaction, including drinking water sources.

There are different approaches for prioritizing waters for restoration and protection and EPA offers several tools to assist. For example, EPA’s Recovery Potential Screening Tool, available at www.epa.gov/recoverypotential, is useful for comparing restorability of impaired waters across various watersheds. Also, the Nitrogen and Phosphorus Pollution Data Access Tool (NPDAT), at www.epa.gov/nutrientpollution/npdat, is a GIS-based tool designed to assist in identifying priority watersheds to address nutrient pollution.

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, nonregulatory, financial and technical assistance, as needed.

Under section 319(b) state NPS management programs include all of the following components:

(i) An identification of measures (i.e., systems of practices) that will be used to control NPS pollution, focusing on those measures which the state believes will be most effective in achieving and maintaining water quality standards. These measures may be individually identified or presented in manuals or compendiums, provided that they are specific and are related to the category or subcategory of nonpoint sources. They may also be identified as part of a watershed approach towards achieving water quality standards, whether locally, within a watershed, or statewide;

(ii) An identification of the key programs to achieve implementation of the measures, including, as appropriate, nonregulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects. The state is free to decide the best approaches for solving the problems that it identifies under key component #5 above. These approaches may include one or all of the following:

- watershed or water quality-based approaches aimed at meeting water quality standards directly;
- iterative, technology-based approaches based on best management practices or measures, applied on either a categorical or site-specific basis; or
- an appropriate mix of these approaches.

(iii) A description of the processes used to coordinate and, where appropriate, integrate the various programs used to implement NPS pollution controls in the state;

(iv) A schedule with goals, objectives, and annual milestones for implementation at the earliest practicable date: legal authorities to implement the program; available resources; and institutional relationships;

(v) Sources of funding from federal (other than section 319), state, local, and private sources;

(vi) Federal land management programs, development projects and financial assistance programs; and

(vii) A description of monitoring and other evaluation programs that the state will conduct to help determine short- and long-term NPS management program effectiveness.

In addition, the state incorporates existing baseline requirements established by other applicable federal or state laws to the extent that they are relevant. For example, a coastal state or territory with an approved coastal zone management program incorporates its approved state coastal nonpoint pollution control programs required by section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA) of 1990, into its NPS management program since CZARA requires implementation through the state's NPS management program. In this manner, the state ensures that this program and other relevant baseline programs are integrated into, and consistent with, section 319 programs.

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

The state implements its program to solve its water quality problems as effectively and expeditiously as possible, and makes satisfactory progress each year in meeting program goals. To help assure that priority water quality problems are addressed cost-effectively and in a timely manner, the state includes in its program a process for identifying priority problems and/or watersheds, and deploys resources in a timely fashion to address priorities, including any critical areas requiring treatment and protection within watersheds.

The state employs appropriate programmatic and financial systems that ensure section 319 dollars are used efficiently and consistent with its legal obligations, and generally manages all section 319 funds to maximize water quality benefits. The state ensures that section 319 funds complement and leverage funds available for technical and financial assistance from other federal sources and agencies.

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

The state establishes appropriate measures of progress in meeting programmatic and water quality goals and objectives identified in key component #1 above. The state also describes a monitoring/evaluation strategy and a schedule to measure success in meeting those goals and objectives. The state integrates monitoring and evaluation strategies with ongoing federal natural resource inventories and monitoring programs.

The state NPS management program is reviewed and revised every five years. The revision is not necessarily a comprehensive update unless significant program changes warrant a complete

Appendix A – Continued

revision; instead, an update targets the parts of the program that are out-of-date. At a minimum, this includes updating annual milestones and the schedule for program implementation, so that they remain current and oriented toward achieving water quality goals.