

EPA 9 Elements of a Watershed Plan

Using Nonpoint Source Funds to Develop a Watershed Plan

This information is excerpted from the "2004 Nonpoint Source Program and Grants Guidelines for States and Territories"; Page 60653-60674 of the Federal Register, October 23, 2003.

Watershed-Based Plans

These guidelines promote the use of Section 319 funding for developing and implementing watershed-based plans to protect unimpaired waters and restore impaired waters.

Watershed-based plans to restore impaired waters are required, as described in the guidance, for all projects implemented with incremental dollars. However, even for watershed projects implemented with base funds, EPA recommends that whenever feasible, watershed-based plans be developed and implemented for all watershed projects, whether they are designed to protect unimpaired waters, restore impaired waters, or both.

For projects funded with incremental dollars, where a NPS TMDL for the affected waters has already been developed and approved or is being developed, the watershed-based plan must be designed to achieve the load reductions called for in the NPS TMDL.

However, where a NPS TMDL has not yet been developed and approved or is not yet being developed for the waters, the State may use Section 319 funds to develop a watershed-based plan in the absence of the TMDL. In such cases, the plan must be designed to reduce nonpoint source pollutant loadings that are contributing to water quality threats and impairments. Where feasible, the plan should be designed to meet water quality standards. In this way, progress towards achieving water quality standards continues even before a TMDL is established.

Once the TMDL is completed and approved, the plan must be modified as appropriate to be consistent with the load allocation portion contained within the TMDL. Alternatively, through the course of implementing the plan, the State may find that water quality standards are met, obviating the need to establish the TMDL. EPA believes that improving the integration of TMDLs and watershed plans to implement nonpoint source management measures will provide the most effective means for accelerating achievement of water quality standards.

To ensure that Section 319 projects make good progress towards remediating waters impaired by nonpoint source pollution, a watershed-based plan must have been completed before a State implements a watershed-based plan funded with incremental Section 319 dollars. These watershed-based plans must include the information set forth in items (a) - (i) below. This information will help provide assurance that the nonpoint source load allocations identified in the NPS TMDL (and/or anticipated in NPDES permits for the watershed) will be achieved. Furthermore, this information is critical in any case for ensuring the development of realistic plans to achieve protection goals or water quality standards, while at the same time providing a significant degree of flexibility to work with stakeholders in the watershed to use a range of innovative approaches to implement the plan. To the extent that necessary information already exists in other documents (e.g., various State and local watershed planning documents, or watershed plans developed to help implement conservation programs administered by USDA), the information may be incorporated by reference. In addition, we encourage States to incorporate by reference any voluminous material that already exists in other documents. Thus, the State need not duplicate any existing process or document that already provides needed information.

Components of a Watershed-Based Plan

Beginning in FY 2004, the following information must be included in watershed-based plans to restore waters impaired by nonpoint source pollution using incremental Section 319 funds. These requirements are not retroactive to watershed plans developed in accordance with the FY 2002 or FY 2003 Section 319 guidelines; those plans may continue to be developed and implemented with funds available in FY 2004 and future years in accordance with the previously applicable requirements of the Section 319 guidelines.

1. An identification of the causes and sources or groups of similar sources that will need to be controlled to achieve the load reductions estimated in this watershed-based plan (and to achieve any other watershed goals identified in the watershed-based plan), as discussed in item (b) immediately below. Sources that need to be controlled should be identified at the significant subcategory level with estimates of the extent to which they are present in the watershed (e.g., X number of dairy cattle feedlots needing upgrading, including a rough estimate of the number of cattle per facility; Y acres of row crops needing improved nutrient management or sediment control; or Z linear miles of eroded streambank needing remediation).

2. An estimate of the load reductions expected for the management measures described under paragraph (c) below (recognizing the natural variability and the difficulty in precisely predicting the performance of management measures over time). Estimates should be provided at the same level as in item (a) above (e.g., the total load reduction expected for dairy cattle feedlots; row crops; or eroded streambanks).

3. A description of the NPS management measures that will need to be implemented to achieve the load reductions estimated under paragraph (b) above (as well as to achieve other watershed goals identified in this watershed-based plan), and an identification (using a map or a description) of the critical areas in which those measures will be needed to implement this plan.

4. An estimate of the amounts of technical and financial assistance needed, associated costs, and/or the sources and authorities that will be relied upon, to implement this plan. As sources of funding, States should consider the use of their Section 319 programs, State Revolving Funds, USDA's Environmental Quality Incentives Program and Conservation Reserve Program, and other relevant Federal, State, local and private funds that may be available to assist in implementing this plan.

5. An information/education component that will be used to enhance public understanding of the project and encourage their early and continued participation in selecting, designing, and implementing the NPS management measures that will be implemented. NPS management measures identified in this plan that is reasonably expeditious.

6. A schedule for implementing the NPS management measures identified in this plan that is reasonably expeditious.

7. A description of interim, measurable milestones for determining whether NPS management measures or other control actions are being implemented.

8. A set of criteria that can be used to determine whether loading reductions are being achieved over time and substantial progress is being made towards attaining water quality standards and, if not, the criteria for determining whether this watershed-based plan needs to be revised or, if a NPS TMDL has been established, whether the NPS TMDL needs to be revised.

9. A monitoring component to evaluate the effectiveness of the implementation efforts over time, measured against the criteria established under item (h) immediately above.

EPA recognizes the difficulty of developing the information described above with precision and, as this guidance reflects, believes that there must be a balanced approach to address this concern. On one hand, it is absolutely critical that States make, at the pollutant subcategory level, a reasonable effort to identify the significant sources; identify the management measures that will most effectively address those sources; and broadly estimate the expected load reductions that will result. Without such information to provide focus and direction to the project's implementation, it is much less likely that the project can efficiently and effectively address the nonpoint sources of water quality impairments.

On the other hand, EPA recognizes that even with reasonable steps to obtain and analyze relevant data, the available information at the planning stage (within reasonable time and cost constraints) may be limited; preliminary information and estimates may need to be modified over time, accompanied by mid-course corrections in the watershed plan; and it often will require a number of years of effective implementation for a project to achieve its goals. EPA fully intends that the watershed planning process described above should be implemented in a dynamic and iterative manner to assure that projects with plans that contain the information above may proceed even though some of the information in the watershed plan is imperfect and may need to be modified over time as information improves.

Scale and Scope of Watershed-Based Plans

The watershed-based plan must address a large enough geographic area so that its implementation will address all of the sources and causes of impairments and threats to the waterbody in question. These plans should include mixed ownership watersheds when appropriate to solve the water quality problems (e.g., Federal, State, and private lands). While there is no rigorous definition or delineation for this concept, the general intent is to avoid single segments or other narrowly defined areas that do not provide an opportunity for addressing a watershed's stressors in a rational and economic manner. At the same time, the scale should not be so large as to minimize the probability of successful implementation. Once a watershed plan that contains the information identified above has been established, a State may choose to implement it in prioritized portions (e.g., based on particular segments, other geographic subdivisions, nonpoint source categories in the watershed, or specific pollutants or impairments), consistent with the schedule established pursuant to item (f) above.

EPA recognizes that States already have in place or have been developing watershed plans and strategies of varying levels of scale, scope, and specificity that may contribute significantly to the process of developing and implementing watershed-based plans. We encourage States to use these plans and strategies, where appropriate, as building blocks for developing and implementing the watershed-based plans. In doing so, to the extent that other documents contain the information identified above, this information may be incorporated by reference into States' watershed-based plans. (Where these plans and strategies have been developed at a large geographic scale, they will in many cases need to be refined at a smaller watershed scale to provide the information needed to produce effective watershed-based plans.) In particular, we recommend that States use their continuing planning processes, water quality management plans (WQMPs), Watershed Restoration Action Strategies (WRASs), comprehensive conservation and management plans (CCMPs), and other similar holistic watershed documents, to help guide their watershed-based approaches to watershed-based plan development and implementation.

EPA encourages States to develop NPS TMDLs or, where applicable, sets of NPS TMDLs on a watershed basis. We encourage States to implement watershed-based plans holistically, as this approach usually provides the most technically sound and economically efficient means of addressing water quality problems. Consistent with this approach, EPA encourages States to include in their watershed-based plans approaches that will address all of the sources and causes of impairments and threats to the watersheds in question. Thus, the watershed-based plans should address not only the sources of water quality

impairment, but also any pollutants and sources of pollution that need to be addressed to assure the long-term health of the watershed, including both surface and ground water that serve as sources of drinking water. Finally, since watersheds with completed TMDLs have the best documentation of the load reductions needed to achieve water quality standards, EPA recommends that States assign the highest priority to implementing watershed-based plans for waters that have completed TMDLs.

We further recommend that States give their highest funding priority to projects that are supported by additional funding from other Federal, State, and local agencies (particularly USDA-supported programs), SRF, or private sector funding. Additionally, States should consult their SRF Program's Integrated Planning and Priority Setting System, if such system is in use, to address the highest priority water quality improvement projects (see www.epa.gov/owm/finan.html). Given the significant expense of many watershed projects, such an approach will help expedite successful implementation of needed practices and thus speed the restoration of water quality. It will also help assure that watersheds are addressed in a holistic manner that accounts for the broad variety of stressors in the watersheds.