



U.S. Department of Commerce
National Oceanic and Atmospheric Administration
Washington, DC 20235



U.S. Environmental Protection Agency
Office of Water
Washington, DC 20460

COASTAL NONPOINT POLLUTION CONTROL PROGRAM

Program Development and Approval Guidance

October 1991

FOREWORD

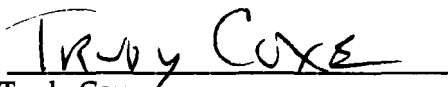
As part of the Coastal Zone Act Reauthorization Amendments of 1990, Congress enacted a new section 6217 entitled "Protecting Coastal Waters." This provision requires states with coastal zone management programs that have received Federal approval under section 306 of the Coastal Zone Management Act (CZMA) to develop and implement Coastal Nonpoint Pollution Control Programs. These coastal nonpoint programs are to be used to control sources of nonpoint pollution that impact coastal water quality.

Section 6217 requires coastal states to submit their coastal nonpoint programs to the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) for approval. Failure to submit an approvable program will result in a state losing a portion of its Federal funding under section 306 of the CZMA and section 319 of the Clean Water Act.

This document, developed by NOAA and EPA, contains proposed guidance for states in developing and implementing their coastal nonpoint programs. It describes the requirements that must be met, including: the geographic scope of the program; the pollutant sources to be addressed; the types of management measures used; the establishment of critical areas; technical assistance, public participation, and administrative coordination; and the process for program submission and Federal approval. The document also contains the criteria by which NOAA and EPA will review the states' submissions.

This document should be reviewed in conjunction with the Proposed Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters which was published by EPA in June 1991. Copies of that document can be obtained from EPA, 401 M ST, SW, Washington D.C. 20460.

NOAA and EPA invite public comment on this document, and any other comments or information which can aid or support this major ongoing effort to protect coastal water quality.


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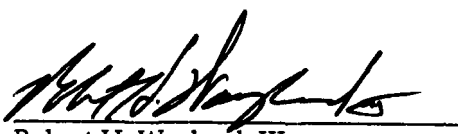

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EXECUTIVE SUMMARY

This document is NOAA's and EPA's proposed program development and approval guidance for state coastal nonpoint programs developed under section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990. (This document should be read in conjunction with EPA's proposed management measures guidance, which is discussed below.)

Section 6217 requires states to establish coastal nonpoint programs that must be approved by both the National Oceanic and Atmospheric Administration (NOAA) and the Environmental Protection Agency (EPA). Once approved, the programs will be implemented through changes to the state nonpoint source pollution programs approved by EPA under section 319 of the Clean Water Act (CWA) and through changes to the state coastal zone management program approved by NOAA under section 306 of the Coastal Zone Management Act (CZMA). States that fail to submit an approvable coastal nonpoint program face reductions in Federal funds awarded under both section 306 of the CZMA and section 319 of the CWA.

The first section of this guidance introduces the coastal nonpoint program. The second section provides an overview of the legislative requirements. The third section describes the scope of the program, including the process for delineating the geographic area in which the coastal nonpoint program will apply; identifying the types of nonpoint source pollution states will need to control through management measures; and discussing the relationship of the coastal nonpoint program to existing programs under section 306 of the CZMA and section 319 of the CWA. The fourth section discusses the specific program requirements, including requirements for coordination with other programs; coastal zone boundary review and modification; implementation of management measures in conformity with EPA's guidance and additional state-developed management measures; technical assistance; public participation; administrative coordination; and enforceable policies and mechanisms. The final section describes EPA's and NOAA's process for review and approval of coastal nonpoint programs submitted by states.

The statute and legislative history indicate that the central purpose of section 6217 is to strengthen the links between Federal and state coastal zone management and water quality programs in order to enhance state and local efforts to manage land use activities that degrade coastal waters and coastal habitats. To accomplish this purpose, the statute seeks to improve state and local governments' capability to control and manage land uses that affect coastal waters, primarily through the implementation of (1) management measures in conformity with guidance published by EPA under section 6217(g) and (2) additional state-developed management measures as necessary to achieve and maintain applicable water quality standards.

EPA published the proposed management measures guidance on June 14, 1991 (see 56 FR 27618). Comments on that proposed guidance are due November 14, 1991.¹ Additional management measures are to be developed by states to address more localized problems resulting from particular land uses or to manage critical coastal areas adjacent to impaired or

¹ Copies of the proposed management measures guidance may be obtained from, and comments sent to, Steve Dressing, Assessment and Watershed Protection Division (WH-553), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, D.C. 20460.

threatened coastal waters. Implementation of these additional management measures in combination with the basic section 6217(g) management measures should be designed to result in the achievement and maintenance of water quality standards in coastal waters and the protection of designated uses of those waters.

As summarized on the following pages, this program development and approval guidance includes statutory requirements for coastal nonpoint programs and additional expectations that NOAA and EPA have for those programs.

6217(g) Guidance Management Measures and Additional Management Measures

The statute requires states to implement management measures in conformity with EPA's guidance under 6217(g) and additional management measures for land uses and critical coastal areas adjacent to impaired or threatened coastal waters.

In meeting these requirements, EPA and NOAA expect states to include the following elements in their coastal nonpoint programs:

6217(g) Guidance Management Measures

- Identification of those categories and subcategories of nonpoint sources that impact coastal waters for which applicable (g) guidance management measures will be implemented. This should also include a description of and justification for any targeting of (g) guidance measures to eliminate sources within a category or subcategory which, individually or cumulatively, do not contribute significantly to coastal pollution or do not pose an unacceptable risk. EPA and NOAA solicit comments regarding targeting of (g) guidance management measures.
- Description of the (g) guidance management measures a state will employ, and technical documentation for any alternative measures selected by the state for implementation in conformity with the (g) guidance.
- Description of the practices to ensure implementation in conformity with (g) guidance management measures, including operation and maintenance practices, inspection procedures, and monitoring.

Additional Management Measures

- Identification of the land uses and critical coastal areas that will require additional management measures. For program approval, states should demonstrate that their coastal nonpoint programs establish critical areas where coastal water quality is threatened or impaired.
- Description of state-developed additional management measures to be implemented.

Implementation of All Management Measures

- Documentation of the authorities a state will use to implement both the (g) guidance and additional management measures, including: designation of a lead agency for each source category and/or subcategory, description of the legal authorities to implement the management measures (e.g., enforceable policies and mechanisms for coastal zone portion of the program), and description of the lead agency's resources to implement the program (e.g., staff or sources of funds).
- Schedule for full implementation of (g) guidance management measures within three years of program approval and full implementation of additional management measures within six years of program approval. New activities will be subject to management measures requirements immediately. EPA and NOAA solicit comments on the concept of scheduling for full management measures implementation and on the proposed time limitations.

Coastal Zone Boundary Modification

The statute requires each state to include a proposal to modify its coastal zone boundary as the coastal management agency deems necessary to implement NOAA's boundary recommendation. The statute requires NOAA to make its recommendation to the states by May 1992.

NOAA and EPA expect that states will respond by either modifying the coastal zone boundary in response to NOAA's recommendation or by including other authorities to implement the coastal nonpoint program outside the state's current coastal zone boundary but within the necessary 6217 management area.

Enforceable Policies and Mechanisms

Section 306(d)(16) of the CZMA requires state coastal zone management programs to contain enforceable policies and mechanisms to implement the applicable requirements of the coastal nonpoint programs.

NOAA expects the coastal nonpoint program to include enforceable policies and mechanisms to implement the (g) guidance management measures and the additional management measures. These enforceable policies and mechanisms may be traditional state and local regulatory controls and/or other incentive programs and nontraditional approaches.

Program Coordination

The statute requires the coastal nonpoint program to be coordinated with existing CWA programs under sections 208, 303, 319, and 320. In addition, the statute requires the establishment of coordination mechanisms among state agencies and between state and local officials responsible for land use programs and permitting, water quality permitting and enforcement, habitat protection, and public health and safety.

NOAA and EPA expect Federal, state, and local coastal nonpoint programs to be well coordinated with all relevant programs including EPA, NOAA and USDA programs. In addition,

states should establish mechanisms to coordinate the relevant state and local programs through joint project reviews, memoranda of agreement, or other mechanisms.

Technical Assistance

The statute requires states to provide technical and other assistance to local governments and the public for implementing management measures.

NOAA and EPA expect states to identify those areas of the coastal nonpoint program requiring local implementation and any associated needs for technical and other assistance. States are also expected to provide technical and other assistance to the public. A program for such assistance will need to be included in the coastal nonpoint program.

Public Participation

The statute requires states to provide opportunities for public participation in all aspects of the coastal nonpoint program.

NOAA and EPA expect that the public will be involved early in the process of developing the coastal nonpoint program, that the state will provide for long-term public involvement, and that there will be an opportunity for public comment on the final coastal nonpoint program prior to submittal to EPA and NOAA.

I. PURPOSE AND INTRODUCTION

Water quality impairment remains one of the most important environmental problems facing the United States. In coastal areas, impaired water quality is evidenced in prohibitions on harvesting shellfish, beach closures, and biological productivity loss in coastal habitats. While great strides in controlling point sources of pollution have been made since the passage of the Federal Water Pollution Control Act in 1972, nonpoint source pollution remains a major problem in some coastal areas. Current best estimates are that for the approximately 75 percent of estuarine waters which have been assessed, 10 percent are threatened and 35 percent are impaired. Nonpoint pollution is an important component of those threats and impairments. The leading nonpoint contributors to estuarine waters are urban runoff (including construction) and agriculture.

To help address the problem of nonpoint source pollution in coastal waters, the Congress passed section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) in November 1990. This section requires that coastal states with federally approved coastal management programs develop Coastal Nonpoint Source Control Programs.² The legislative history indicates that the central purpose of section 6217 is to strengthen the links between Federal and state coastal zone management and water quality programs in order to enhance state and local efforts to manage land use activities that degrade coastal waters and coastal habitats. This section amends neither section 319 of the Clean Water Act (CWA) nor the Coastal Zone Management Act (CZMA), but rather contains independent provisions.

This document, developed by the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA), contains proposed guidance for developing and implementing coastal nonpoint programs. The document first provides an overview of the legislative goals and requirements of section 6217. It then describes the scope of the coastal nonpoint program. Next, it sets forth NOAA's and EPA's expectations regarding minimum criteria for state program approval. Finally, it discusses the program approval process established by NOAA and EPA. This guidance will be the basis for NOAA and EPA approval or disapproval of state coastal nonpoint programs.

The statute requires NOAA to review each existing state inland coastal zone boundary established under the CZMA and determine whether the state coastal zone is adequate to encompass the land and water uses that, individually or cumulatively, significantly impact coastal waters. The review will determine the geographic area that will be necessary to protect and restore coastal waters and that will be included in the coastal nonpoint programs. If the existing coastal zone boundary is found to be inadequate, NOAA will recommend to the state how the boundary should be changed to meet the legislation's water quality goals. The state coastal nonpoint program must then include a proposal to modify the existing coastal zone boundary to respond to NOAA's recommendation as the state determines is necessary.

Within the geographic area discussed above, the statute requires state coastal nonpoint programs to implement a two-tiered approach to the management of nonpoint sources of pollution. The first tier is based on the implementation of management measures for categories of

² For purposes of this document, these programs will be referred to as "coastal nonpoint programs." These programs will need to address the contribution of pollution through runoff from the land as well as the infiltration of pollutants into ground water with subsequent pollution of surface waters.

sources that EPA, NOAA, and other agencies have determined are major sources of coastal nonpoint pollution. The purpose of the first tier is to protect coastal waters generally, and therefore, is unrelated to specific water quality problems. The state must implement these management measures in conformity with guidance developed under section 6217(g) by EPA in consultation with NOAA and other Federal agencies. The availability of the proposed (g) guidance was announced in the Federal Register on June 14, 1991 (56 FR 27618). The draft (g) guidance includes management measures for the following categories of nonpoint pollution sources: agricultural runoff; urban runoff; silvicultural runoff; hydromodification, shoreline erosion, and dams and levees; and marinas. In addition, the draft guidance includes management measures for wetlands protection, riparian areas, and vegetated filter strips, which are effective for a number of sources.

If the general level of protection provided by the first management tier is insufficient to enable coastal waters to meet water quality standards and protect designated uses, then the state must implement a second tier of management measures. Under the second tier, the state would be required to implement additional management measures that would apply to (1) land uses that individually or cumulatively are found to cause or contribute significantly to the impairment of coastal water quality or threaten such water quality, and (2) critical areas wherein new or expanded land uses would be managed, not only to improve existing water quality, but to protect against future pollution problems.

The development and implementation of the coastal nonpoint program must be closely coordinated with existing water quality programs and will involve the public at each stage. The proposed program will be submitted to NOAA and EPA for Federal approval. Failure of a state to develop an approvable program will result in a loss of funding under both section 319 of the CWA and under section 306 of the CZMA beginning in FY 1996.

NOAA and EPA seek general comments on the criteria and procedures described in this guidance as well as specific comments on certain issues noted in the text.

II. OVERVIEW OF LEGISLATIVE GOALS AND REQUIREMENTS

Congress enacted CZARA section 6217, entitled “Protecting Coastal Waters,” to address the impacts of nonpoint source pollution on coastal water quality. Section 6217(a) requires that each state with a federally approved coastal zone management program under section 306 of the CZMA must develop and submit to NOAA and EPA for approval a Coastal Nonpoint Pollution Control Program. (These programs are referred to as “coastal nonpoint programs” throughout this guidance.) The legislation states that the purpose of this new program “shall be to develop and implement management measures for nonpoint source pollution to restore and protect coastal waters, working in close conjunction with other State and local authorities.”

The statute requires that coastal nonpoint programs be coordinated closely with existing state and local water quality plans and programs and with state coastal zone management programs. According to the statute, the new program will serve as an update and expansion of the state nonpoint source management program developed under section 319 of the CWA. NOAA and EPA do not expect states to develop stand-alone coastal nonpoint programs, but rather expect that implementation of the coastal nonpoint program will be accomplished through changes to the approved state nonpoint source management program and to the state coastal zone management program developed under section 306 of the CZMA.

All states and territories have EPA-approved nonpoint source management programs or portions of programs and are currently receiving section 319 grants to assist them in implementing the approved programs. There are currently 29 federally approved state and territorial coastal zone management programs developed and approved pursuant to the CZMA (see Appendix A).

II.A. Statutory Requirements

Under section 6217, coastal nonpoint programs must contain a number of elements in order to be approvable by NOAA and EPA. The state programs must:

1. be closely coordinated with other existing state and local water quality plans and programs developed pursuant to sections 208, 303, 319, and 320 of the CWA, and with state coastal zone management programs. (These and other programs of importance in addressing nonpoint source pollution, such as the ground water protection and pesticides programs and the USDA Conservation Reserve Program, are briefly described in Appendix B.)
2. provide for the implementation, at a minimum, of management measures in conformity with the guidance published under section 6217(g) to protect coastal waters generally (discussed in section II.B).
3. provide for the implementation and continuing revision from time to time of additional management measures that are necessary to attain and maintain applicable water quality standards and protect designated uses with respect to:
 - a. land uses that, individually or cumulatively, may cause or contribute significantly to a degradation of (a) coastal waters not presently attaining or maintaining applicable water quality standards or protecting designated uses,

- or (b) coastal waters that are threatened by reasonably foreseeable increases in pollution loadings from new or expanding sources; and
 - b. critical coastal areas adjacent to coastal waters that are failing to attain or maintain water quality standards or which are threatened by reasonably foreseeable increases in pollution loadings.
4. provide for technical and other assistance to local governments and the public to implement management measures.
 5. provide opportunities for public participation in all aspects of the program.
 6. establish mechanisms to improve coordination among state agencies and between state and local officials responsible for land use programs and permitting, water quality permitting and enforcement, habitat protection, and public health and safety.
 7. propose to modify state coastal zone boundaries as the state determines is necessary to implement NOAA recommendations under section 6217(e), which are based on findings that modifications to the inland boundary of a state coastal zone are necessary to more effectively manage land and water uses to protect coastal waters.

In addition to the provisions of section 6217, CZARA amended section 306 of the CZMA to require that before approving a coastal zone management program submitted by a coastal state, NOAA shall find that “. . .the management program contains enforceable policies and mechanisms to implement the applicable requirements of the Coastal Nonpoint Pollution Control Program of the state required by section 6217. . . .” (section 306(d)(16)). States with coastal management programs approved before enactment of CZARA must demonstrate compliance with section 306(d)(16) within 30 months following publication of the final section 6217(g) management measures guidance.

II.B. Section 6217(g) Management Measures Guidance

Section 6217(g) requires that EPA, in consultation with NOAA, the U.S. Fish and Wildlife Service, and other Federal agencies publish “guidance for specifying management measures for sources of nonpoint pollution in coastal waters.” For simplicity, this will be referred to as the “(g) guidance” in this document. Management measures are defined in section 6217(g)(5) as:

“economically achievable measures for the control of the addition of pollutants from existing and new categories and classes of nonpoint sources of pollution, which reflect the greatest degree of pollutant reduction achievable through the application of the best available nonpoint pollution control practices, technologies, processes, siting criteria, operating methods, or other alternatives.”

The management measures guidance is to include at a minimum six elements set forth in section 6217(g)(2):

- (A)** “a description of a range of methods, measures, or practices, including structural or nonstructural controls and operation and maintenance procedures, that constitute each measure;

(B) a description of the categories and subcategories of activities and locations for which each measure may be suitable;

(C) an identification of the individual pollutants or categories or classes of pollutants that may be controlled by the measures and the water quality effects of the measures;

(D) quantitative estimates of the pollution reduction effects and costs of the measures;

(E) a description of the factors which should be taken into account in adapting the measures to specific sites or locations; and

(F) any necessary monitoring techniques to accompany the measures to assess over time the success of the measures in reducing pollution loads and improving water quality.”

The statute requires proposed guidance to be issued by May 1991, with final guidance due in May 1992. A Federal Register notice announcing availability of the proposed management measures guidance for public review and comment was issued on June 14, 1991 (56 FR 27618). This guidance provides a basis for the state coastal nonpoint programs that must, in addition to other statutory requirements, provide for the implementation of, at a minimum, first tier management measures in conformity with the section 6217(g) guidance to protect coastal waters generally.

II.C. Requirements for Program Development and Approval

NOAA and EPA have developed this draft program development and approval guidance to assist states in developing approvable coastal nonpoint programs. It also provides a description of the criteria that NOAA and EPA will use when reviewing coastal nonpoint programs for approval. A summary of the requirements for the state coastal nonpoint programs is included as Appendix C. After a public comment period, NOAA and EPA will develop final program development guidance. Publication of final guidance is scheduled for May 1992. NOAA's proposed regulations implementing section 6217 are scheduled to be issued in November 1992.

NOAA is authorized under section 6217(f) of the CZARA to provide funds to the designated state coastal management agency to develop their coastal nonpoint programs. The Federal funds may not exceed 50 percent of the cost of developing the programs, and the state share of costs must be paid from non-Federal sources. NOAA will publish guidance on application procedures and allocations separately. Since funds will be limited, states are encouraged to work closely with state nonpoint source agencies and other appropriate Federal, state, and local agencies to develop their coastal nonpoint programs.

States must submit their coastal nonpoint programs to NOAA and EPA for approval within 30 months of the publication of final management measures guidance.³ The states are encouraged to consult with NOAA and EPA during the development of specific program elements. NOAA and EPA will jointly review the program and, within six months after submission of a complete state program, will notify the state whether the program is approved or whether modifications to the program are necessary. NOAA will determine, with EPA's concurrence, that the portions of the coastal nonpoint program that are under its authority comply with section 6217, and EPA will determine, with NOAA's concurrence, that the portions of the coastal nonpoint program under its authority comply with section 6217. Because of the inseparable nature of the water quality and land use portions of the coastal nonpoint programs in achieving the goal of reducing the contribution of nonpoint source pollution to the degradation of coastal water quality, NOAA and EPA have determined as a matter of policy that neither agency will approve a state's program until the state program meets all the Federal approval requirements as determined by both agencies.

If a coastal state fails to submit an approvable program within 30 months after publication of the management measures guidance, a reduction of Federal grant dollars to the state under the coastal zone management and nonpoint source management programs is required by section 6217(c)(3) and (4). The penalty provisions begin in fiscal year 1996 with a 10 percent reduction in funding under both programs, increasing to 15 percent in FY 1997, 20 percent in FY 1998, and 30 percent in FY 1999 and each fiscal year thereafter. In the case of the coastal zone management program, the penalty is based upon the grants otherwise available to a state in the current fiscal year. In the case of the section 319 nonpoint source management program, the penalty is based on the grant amount awarded to the state for the preceding fiscal year.

³ Section 6127(g)(3) requires that final management measures guidance be published by May 5, 1992. Assuming this date is met, coastal nonpoint programs must be submitted to NOAA and EPA by November 5, 1994.

III. PURPOSE AND SCOPE OF THE STATE COASTAL NONPOINT PROGRAM

The legislative history of section 6217 stresses that the central purpose of the provision “. . . is to strengthen the links between Federal and state coastal zone management and water quality programs and to enhance state and local efforts to manage land use activities which degrade coastal waters and coastal habitats.”

Section 6217 envisions a two-tiered management approach for the control of nonpoint sources of pollution. To receive Federal approval, the state coastal nonpoint program must ensure: (1) the implementation, at a minimum, of management measures in conformity with the guidance under section 6217(g) to protect coastal waters generally, and (2) the implementation of additional management measures applicable to land and water uses and critical areas identified by the state pursuant to section 6217(b)(1) and (2) so as to attain and maintain applicable water quality standards under section 303 of the CWA, including protecting designated uses. The state coastal zone management agency and designated nonpoint source management agency will have a dual and co-equal role and responsibility in developing and implementing the coastal nonpoint program.

III.A. Geographic Scope of the Coastal Nonpoint Program

The statute requires that coastal nonpoint programs provide for the protection and restoration of coastal waters. To meet the legislative goal, the coastal nonpoint programs will need to provide for the control of land and water uses that have a significant impact on the coastal waters of the state. A significant impact can occur from both the individual and cumulative effect of land and water uses. To determine the geographic area that will be included in the coastal nonpoint program, i.e., the 6217 management area, the legislation requires NOAA, in consultation with EPA, to review the existing state coastal zone boundary established under the CZMA to determine whether that area is adequate to meet the requirements of section 6217.

Using generally available information, NOAA will evaluate the impact of land use activities throughout coastal watersheds draining into the state's coastal waters. If the existing coastal zone boundary is found to be inadequate, NOAA will recommend to the state how the inland boundary should be changed to meet the water quality goals of the legislation. The state coastal nonpoint program must then include a proposal to modify the existing boundary to respond to NOAA's recommendation as the state determines is necessary.

To respond to NOAA's recommendation, states will need to undertake their own analyses of their coastal watersheds. Ultimately, the geographic scope of the coastal nonpoint program — the 6217 management area — must be based on the impact of land and water uses on coastal water quality and should encompass the area necessary to capture sources of nonpoint pollution causing significant impacts, either individually or cumulatively.

For further discussion of the scope of the 6217 management area and the requirements for approval of state coastal nonpoint programs, see section IV.B.

III.B. Pollutant Sources to be Addressed in the Coastal Nonpoint Program

Coastal waters are affected by both point and nonpoint sources of pollution, with the latter a significant and, in many cases, the dominant form of pollution in a given waterbody. The state coastal nonpoint programs under section 6217 are required only to address nonpoint source pollution. The legislative history says “the new program will not and ought not bear the full burden of restoring and maintaining coastal water quality, but will operate instead in conjunction with controls on point sources established under the Clean Water Act and associated programs.”

Historically, distinctions between programs to address nonpoint and point sources of pollution have been unclear. Some of these distinctions, such as with the storm water permit program (under section 402(p) of the CWA), are discussed under those program headings in Appendix B. The coastal nonpoint programs to be developed by states apply only to pollution sources that are not required to apply for point source discharge permits. The management measures similarly apply only to sources that are not subject to CWA point source permitting requirements. For example, the management measures guidance for marinas does not address pollution from vessels, including marine sanitation devices, that are regulated separately under the CWA. States should avoid including activities that are clearly regulated point source discharges in their coastal nonpoint programs.

Many categories and subcategories of nonpoint sources could affect coastal waters and thus could be addressed in a state coastal nonpoint program. States should focus implementation of their programs on the categories and subcategories that are significant contributors to their particular coastal water quality problems or pose an unacceptable risk and for which EPA has specified management measures in the (g) guidance. In addition, states should implement additional management measures for nonpoint sources and areas that, individually or cumulatively, may cause or contribute to the impairment of or threaten their coastal waters.

III.C. Relationship of Coastal Nonpoint Program to Existing Authorities and Programs

As required under the statute and highlighted in the legislative history, the state coastal nonpoint program should build and expand on existing nonpoint source management programs developed under section 319 of the CWA and existing coastal zone management programs approved under section 306 of the CZMA. To the extent the state can demonstrate that activities within the existing programs meet the minimum requirements of CZARA and the elements set forth in this guidance, as supported by the management measures guidance required by section 6217(g), these activities should be incorporated into the coastal nonpoint program.

IV. SPECIFIC COASTAL NONPOINT PROGRAM REQUIREMENTS

State coastal nonpoint pollution programs must contain a number of components mandated by section 6217. The following section discusses these statutory requirements and the minimum criteria that the state coastal nonpoint program needs to meet to obtain Federal approval.

IV.A. Coordination with Existing State Programs

Section 6217(a) requires that coastal nonpoint programs be closely coordinated with other existing state and local water quality plans and programs developed pursuant to sections 208, 303, 319, and 320 of the CWA (see Appendix B). During the program development process, NOAA and EPA expect state coastal zone management and nonpoint sources agencies to contact and involve the relevant state and local programs. In addition, the development and implementation of the coastal nonpoint program should be closely coordinated with other Federal and state programs and plans that deal with land and water uses identified in a state's coastal nonpoint program (e.g., U. S. Department of Agriculture (USDA) programs).

IV.B. Coastal Zone Boundary Review and Modification

This section is closely related to the overall geographic scope of the coastal nonpoint program discussed in section III.A.

IV.B.1. NOAA review of state coastal zone boundaries

Section 6217(e) requires that NOAA, in consultation with EPA, review each state's existing state coastal zone boundary established under the CZMA and recommend any modifications to that boundary needed to support the goal of protecting coastal water quality. Specifically, the statute states that:

a. "The Secretary, in consultation with the Administrator of the Environmental Protection Agency, shall, within 18 months after the effective date of this title, review the inland coastal zone boundary of each coastal State program which has been approved or is proposed for approval under section 306 of the Coastal Zone Management Act of 1972, and evaluate whether the State's coastal zone boundary extends inland to the extent necessary to control the land and water uses that have a significant impact on coastal waters of the State."

b. "If the Secretary, in consultation with the Administrator, finds that modifications to the inland boundaries of a State's coastal zone are necessary for that State to more effectively manage land and water uses to protect coastal waters, the Secretary, in consultation with the Administrator, shall recommend appropriate modifications in writing to the affected State."

The statute directs NOAA, in consultation with EPA, to review states' inland coastal zone boundaries and evaluate whether those boundaries extend inland to the extent necessary to control nonpoint source pollution from land and water uses that have a significant impact on coastal waters. If a boundary is found to be inadequate for this purpose, then NOAA, in con-

sultation with EPA, will recommend appropriate modifications in writing to the affected state. It should be noted that there is a distinction between land and water uses that individually or cumulatively have significant impacts on coastal waters, and those that have any impact, either individually or cumulatively, on coastal waters. Section 6217 directs NOAA and the states to address significant impacts on coastal waters.

The intent of the coastal zone boundary review is to ensure that state coastal nonpoint programs more effectively manage land and water uses within a geographic region that encompasses the nonpoint sources that significantly affect coastal waters. To accomplish this, section 6206(d)(16) of the CZARA requires that state coastal zone management programs contain enforceable policies and mechanisms to implement the applicable requirements of section 6217. (See discussion of enforceable policies and mechanisms in section IV.H.)

The Federal review of the coastal zone boundary must be completed within eighteen months of enactment, i.e., by May 5, 1992. NOAA intends to conduct a general review of states' boundaries and provide each state with an analysis of its boundary. States will be given the opportunity to comment on this analysis prior to NOAA making a final recommendation on the boundary. NOAA, in consultation with EPA, will begin this broad review by comparing existing coastal zone boundaries with those of coastal watersheds, since watersheds provide a logical hydrologic unit when dealing with nonpoint source pollution.

Initially, NOAA will use the smallest U.S. Geological Survey mapping unit (i.e., Cataloging Unit) as a starting point to look at coastal watersheds, although NOAA solicits comments on whether the next larger mapping unit (Accounting Unit) would be more appropriate. Based on available data, NOAA will determine for each state whether significant coastal nonpoint source pollution is generated within coastal Cataloging Units or inland of those Cataloging Units. Where significant coastal nonpoint source pollution originates outside the coastal Cataloging Units adjacent to coastal waters, NOAA will determine whether areas further inland should be included in the coastal zone boundary recommendation.

In cases where the Cataloging Unit appears to capture most of the significant sources of coastal nonpoint pollution, NOAA will examine these coastal Cataloging Unit watersheds further to determine if land and water uses within the watershed, but inland of the current coastal zone, are unlikely to have significant nonpoint pollution impacts on coastal waters. Several factors will be considered in making this determination, including land use, ownership and degree of current protection; topography; soil types; hydrology; and proximity to coastal waters. These determinations may be made on a categorical basis (e.g., designated wilderness areas) or, where possible, on a site-specific basis.

Once this review is completed, NOAA, in consultation with EPA, will provide a preliminary recommendation to each state on suggested coastal zone boundary modifications. NOAA will recommend that the coastal boundary for each state be modified to encompass, at a minimum, those areas within the coastal watersheds that were not excluded under the above analysis. States will be given the opportunity to respond to this preliminary recommendation. The area finally recommended by NOAA for inclusion within the modified coastal boundary will constitute the 6217 management area.

IV.B.2. State coastal zone boundary modification

Section 6217(b)(7) requires that each coastal nonpoint program contain the following:

"[a] proposal to modify the boundaries of the State coastal zone as the coastal management agency determines is necessary to implement the recommendations made pursuant to subsection (e). If the coastal management agency does not have the authority to modify such boundaries, the program shall include recommendations for such modifications to the appropriate state authority."

The first part of section 6217(b)(7) indicates that Congress intended states to have some discretion in determining how to meet NOAA's recommendation pursuant to section 6217(e). The second part provides that where the state coastal zone management agency cannot accomplish changes to the coastal zone boundary under its own authority, the coastal nonpoint program must contain recommendations to the appropriate state authority for changes to the coastal zone boundary. Although changing the boundary to address NOAA's recommendation may be preferable because it would provide a clear delineation of geographic scope of the coastal nonpoint program, the legislation does not make this a prerequisite for Federal approval. Nevertheless, in order to obtain approval, a state must still be able to demonstrate that it has the necessary authorities, including enforceable policies and mechanisms, to protect and restore coastal waters by implementing the coastal nonpoint program within the 6217 management area. (See discussion of geographic scope in section III.A).

IV.C. Implementation of Management Measures In Conformity with Section 6217(g) Guidance

Section 6217(b) requires each coastal nonpoint program to "provide for the implementation, at a minimum, of management measures in conformity with the guidance published under subsection (g), to protect coastal waters generally...." As described in section II.B, the management measures are to be economically achievable measures that reflect the greatest degree of pollutant reduction achievable through application of the best technology and processes currently available. In developing the proposed management measures guidance, EPA focused on the significant categories and sources of nonpoint pollution identified in state section 319 nonpoint source assessments. The categories of nonpoint sources addressed in the current proposal are agricultural runoff; urban runoff (including developing and developed areas); silvicultural (forestry) runoff; hydromodification, shoreline erosion, and dams and levees; and marinas. In addition, the proposed (g) guidance includes management measures for wetlands protection, riparian areas, and vegetated filter strips that apply to a number of sources. A number of specific source subcategories are discussed in detail in the (g) guidance.

The management measures specified in the (g) guidance must be implemented to meet the statutory objective of section 6217, that is, to "protect and restore coastal waters generally." In order to receive approval, state programs must:

1. Identify and target categories or subcategories of sources;
2. Identify management measures to be implemented; and
3. Describe the implementation process.

These elements are discussed in more detail in the following sections.

IV.C.1. Identification and targeting of sources to be addressed

The first tier management of nonpoint source pollution is based on the implementation of management measures for categories of sources that EPA, NOAA, and other agencies have determined are major sources of coastal nonpoint pollution. States must implement management measures for each of the categories (e.g., agriculture) and subcategories of sources (e.g., cropland) identified in the final (g) guidance to protect coastal waters generally. States must also implement management measures in conformity with those specified for wetlands protection. A state may include management measures for additional sources not specified in the (g) guidance if the state determines such inclusion is necessary to protect coastal waters generally. The states may use a two-stage process for identifying those categories and subcategories of sources which will be subject to the management measures as well as sources within those categories and subcategories that may be eliminated because they individually or cumulatively do not contribute significantly to coastal nonpoint pollution or pose an unacceptable risk.

First, a state may be able to eliminate some categories or subcategories of sources in coastal watersheds or parts of watersheds from the requirements of the coastal nonpoint program. If a state can clearly demonstrate that one or more of those categories or subcategories of sources are not present or anticipated, the state need not develop and implement measures for those source categories or subcategories. For example, if a state does not have animal feeding operations in the 6217 management area, it need not develop a program to control such sources. States should submit existing, readily available water quality assessments or land use information to document that these categories or subcategories are not impacting coastal waters and, therefore, do not need to be addressed. This documentation may include assessments developed under sections 305(b) and 319 of the CWA or other water quality assessments. EPA and NOAA will review the states' submissions, including the adequacy of the assessments, to determine whether the category or subcategory needs to be addressed by the coastal nonpoint program.

Second, states may exclude certain sources within retained categories and subcategories if those sources, individually and cumulatively, do not and are not reasonably expected to contribute significantly to coastal water pollution or do not or are not reasonably expected to pose an unacceptable risk. Factors that may be considered to eliminate such sources include, but are not limited to:

- pollutant loadings from the sources;
- pollutant transport characteristics (e.g., slope, soils, and distance from water) affecting delivery of pollutants to coastal waters;
- intensity of land use; and,
- ecological and human health risk associated with the source.

In general, this second level of exclusions is designed to eliminate sources that are present in the 6217 management area but are not significant or do not pose unacceptable risks. Examples

of sources that may be excluded under this approach, provided that they do not cumulatively cause impacts in the watershed, would include but are not limited to:

- small animal feeding operations (e.g., less than 100 animal units);
- croplands with loading and transport characteristics that will result in less than significant quantities of pollutants to coastal waters or that do not pose unacceptable risks; and,
- small plots of non-commercially-held land from which timber is cut for primarily non-commercial uses.

States proposing to exclude certain sources from implementation requirements have the burden of demonstrating that those sources do not and are not expected to significantly impact coastal waters or pose unacceptable risks. States should submit a description and documentation of the data and rationale relied upon for excluding the sources. The documentation should include information contained in state water quality assessments (including those developed under sections 305(b) and 319 and other information sources listed herein), and data (or modelling results) that would indicate the significance of the loadings or hydromodification or level of risk caused by sources that the state proposes to exclude.

The overriding factor to be considered by states in identifying sources that may be excluded from program implementation is the goal of section 6217—to protect coastal waters from non-point source pollution generally. States should assure that their programs address all sources that, individually or cumulatively, significantly contribute to adverse effects upon coastal waters. The management measure implementation should be designed to expeditiously achieve the goal of making the most significant reduction in nonpoint source pollution economically achievable.

In addition to identifying categories and subcategories of nonpoint sources, states should also identify those wetland and riparian areas that are providing important water quality improvement functions (e.g., filtering sediments and pollutants from runoff, attenuating peak runoff flows and flooding, and minimizing shoreline erosion of those areas). For purposes of program approval, states will need to include management measures in conformity with those in the final (g) guidance to protect and maintain existing functions of these natural systems including their water quality improvement functions.

The use of vegetated filter strips and other biofiltration measures also have been shown to have beneficial water quality impacts across a wide spectrum of categories and subcategories of sources of nonpoint source pollution. Accordingly, states will need to identify those subcategories of sources for which biofiltration (vegetated filter strips, etc.) can be reasonably used as an effective management measure. For these identified sources, states should implement biofiltration measures in conformity with the (g) guidance.

IV.C.2. Identification of management measures to be implemented

States must identify the management measures they will implement to address each category or subcategory of sources identified in section IV.C.1 of this guidance document. Section 6217(b) requires state management measures to be in conformity with those measures

specified in the final (g) guidance. State programs that identify the (g) guidance measures as the measures the state will implement will automatically meet the Federal requirements for coastal nonpoint program approval for that portion of the state program.

The existence of EPA's section 6217(g) management measures guidance does not preclude states from identifying alternative management measures that are as effective as those specified in EPA's guidance. However, the use of alternative management measures should be limited to those situations in which (1) states have conditions that render the 6217(g) measures inapplicable or less cost effective, or (2) other new or already existing measures that are equal to or exceed the effectiveness of the 6217(g) measures. It is important to note that, under the statute, states are only required to implement the 6217(g) management measures or measures that are as effective and that they have flexibility in choosing the specific practices associated with each measure. EPA and NOAA welcome comments and suggestions regarding promising innovative alternative approaches including market-based approaches, such as trading of pollution credits, and how to ensure their effectiveness.

If a state elects to implement alternative management measures, the state will need to demonstrate that its alternatives are at least as effective as the (g) guidance management measures in order to receive Federal approval. Furthermore, these alternative measures should carefully consider and take into account possible adverse impacts on other coastal resources (e.g., ground water, wetlands). States must provide specific supporting information on the performance of any alternative management measures in order to justify their selection of those measures.

In order for states to demonstrate that an alternative measure is as effective as the appropriate measure specified in the section 6217(g) guidance, states will need to identify the procedures used to evaluate the measure, address specified factors in the technical evaluation process, and provide specific technical documentation of the evaluation as part of their coastal nonpoint program. The following are guidelines states need to follow in order to have the alternative management measures approved by NOAA and EPA.

IV.C.2.a. Evaluation procedures for alternative management measures

States should use the best available information to demonstrate that proposed alternative measures are as effective as those in the management measure guidance. Management measure effectiveness can be evaluated or described in many ways: pollutant loading, pollutant loading reductions, pollutant concentration in discharge, peak concentration reductions, mean concentration reductions, habitat impacts (including flow), impacts to fisheries, impacts to macroinvertebrates, wildlife impacts, effects on support of designated uses (see Table 1), direct impacts to the water resource of concern, extent to which the source is actively managed, or other options. States should draw on a combination of the information listed above to provide complete documentation regarding the effectiveness of alternative management measures.

Impacts can be measured on an annual, seasonal, weekly, daily, or other temporal basis. They can also be measured over various sampling intervals, including point-in-time samples, time-integrated samples, and flow-integrated samples. They also can be measured for different hydrologic and meteorologic regimes, including base flow conditions, storm events, and snowmelt.

In order to receive Federal approval of the coastal nonpoint program, states will need to clearly describe the approach used in their evaluation of alternative management measure effectiveness. (NOAA and EPA are considering the development of further information explaining criteria and processes for possible inclusion as an appendix to this guidance. We welcome comments on such criteria and processes.)

IV.C.2.b. Factors to be addressed in evaluating effectiveness of alternative management measures

The effectiveness of a management measure can be a function of the design specifications, the materials used in construction, the level and quality of human activity, soils, geography, site-specific attributes of the sources, climate, slope and slope lengths, initial conditions (prior to implementation of controls), and other factors. To demonstrate that an alternative management measure (or a combination of measures or a series of measures applied over time) is as effective as the (g) guidance measure, states will need to demonstrate that for the state or region in which the management measure will be applied:

i. The alternative provides pollution reduction or control that is as effective as the (g) measures as measured by loads, load reductions, concentrations, concentration reductions, or other relevant parameters for selected runoff or storm conditions across the design range. For example, management measures in the final (g) guidance may specify certain runoff or storm conditions and, in those situations, the alternative management measures must specify similar runoff or storm conditions.

ii. Operation and maintenance procedures designed to reduce pollution loading and protect habitat as proposed for the alternative are feasible and adequate to maintain a similar level of pollution control over the lifetime of the measure.

iii. The alternative provides a level of pollution control that is equivalent to that provided by the (g) guidance measure over the same period of time as the (g) guidance measure.

iv. The alternative can be applied in all situations where the guidance management measure can be applied or provisions have been made to use the (g) measure in those situations where the alternative cannot be applied.

IV.C.2.c. Technical documentation for selection of alternative management measures

States must support the evaluation of alternative management measures with appropriate technical documentation. Information on the effectiveness of alternative management measures should be derived from reliable, peer-reviewed sources. Sources such as refereed technical journal publications are preferred. Other publications may also be acceptable, such as Federal technical guides and state technical guides for which an adequate technical review was performed prior to publication. Unpublished research findings may be acceptable if adequate peer review of findings is documented. Fliers, fact sheets, and other general public materials are generally not adequate sources of information.

In general, information used to document that alternative management measures are as effective as those found in (g) guidance should be comparable in scope and depth to that provided in EPA's (g) guidance for the specified management measure and should address the factors described above. States will be expected to document and cite all information they have used in their evaluation and submit hard copies of appropriate information to NOAA and EPA. In addition, the state may wish to convene a technical review group consisting of experts knowledgeable in the subject area under which the management measure falls. This may be especially useful where the state is interested in pursuing innovative approaches.

In this case, the technical review group should provide written documentation that the evidence they have reviewed indicates that the alternative management measure is as effective in controlling nonpoint sources as the corresponding (g) guidance management measure. Any caveats associated with this statement should also be provided, and the documentation provided to EPA and NOAA for review. EPA and NOAA are willing to review the documentation from the technical group and provide a preliminary decision within 60 days as to whether the state's replacement of the (g) guidance management measure with its proposed alternative management measure meets the criteria for Federal approval.

IV.C.3. Description of the implementation process

States will need to provide detailed information on how they will implement state management measures in conformity with the (g) guidance for NOAA and EPA to approve the state's coastal nonpoint program. This information is to be provided for each category or subcategory of sources that, either individually or cumulatively, significantly impact coastal water quality and, therefore, must be included in the coastal nonpoint program.

At a minimum, for each category and subcategory, the state coastal nonpoint program will:

- a.** Describe the scope, structure, and coverage of the state implementation program.
- b.** Describe the organization, structure and authorities of the state agency or state and local agencies that will have responsibility for administering the implementation program including:
 - i.** a designated lead agency for the program addressing each category or subcategory. If the designated lead agency is not the section 319 or coastal zone management agency, the description must specify how the lead agency and its authorities have been incorporated into the section 319 and/or coastal zone management program.
 - ii.** a demonstration that the lead agency has adequate financial and personnel resources to implement the program by describing, for example, the number and general duties of relevant state agency staff; a list of the estimated costs of establishing and administering the program during the first two years of approval, including costs of administrative and technical support; and the source of state or Federal funds to support the program.

c. Include a schedule for each category or subcategory of sources with milestones for achieving full implementation within, at most, three years of approval of the state's coastal nonpoint program. Thus, beginning with publication of this proposed guidance in fall 1991, states will have approximately six years to develop and implement these measures.

NOAA and EPA solicit comments on the schedule for implementing (g) guidance management measures and on the three year time limitation. NOAA and EPA expect that new sources within each identified category or subcategory of sources would be subject to the management measures (e.g., new construction activities) at the time of program approval. Implementation of management measures for existing sources (e.g., existing agricultural operations or retrofit of urban storm water systems) will need to include a schedule for full implementation within three years of program approval. Milestones should be established at appropriate intervals, by which progress toward implementation can be assessed in terms of management measures in place and water quality protection achieved. This schedule will need to first address sources having the most significant impact on coastal waters. NOAA and EPA will monitor progress of state implementation as part of program and grant reporting requirements under section 319 of the CWA, section 306 of the CZMA, and regular program evaluations under section 312 of the CZMA.

d. Identify enforceable policies and mechanisms to ensure that management measures identified in the coastal nonpoint program are implemented. For management measures to be implemented through the coastal zone management programs, the enforceable policies are defined in section 6204(b) of the CZARA as "[s]tate policies which are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or administrative decisions, by which a State exerts control over private and public land and water uses and natural resources in the coastal zone." Enforceable policies and mechanisms are discussed in more detail in section IV.H of this guidance document.

States must submit copies of legislative and administrative authority to document that authorities exist to support implementation of the management measures. Furthermore, if the enforcement authority will not be directly exercised by the state coastal zone management or section 319 agency, the state coastal nonpoint program must include provisions to ensure that the governmental body with the statutory authority exercises that authority in conformance with the implementation activities detailed in the coastal nonpoint program. States can demonstrate this conformance by a memorandum of understanding, executive orders, or an administrative directive. These authorities must be incorporated into the coastal management or section 319 program.

e. Describe mechanisms to improve coordination among state agencies and among state and local officials responsible for land use programs and permitting, water quality permitting and enforcement, habitat protection, and public health and safety as required by section 6217(b)(6). States will need to include copies of any provisions for joint project review or memoranda of agreement.

f. Identify practices to ensure proper operation and maintenance of management measures as specified in the (g) guidance. States must follow the operation and maintenance programs specified in the (g) guidance or, where the state has developed its own measures, describe the operation and maintenance requirements for the alternative measures.

g. Describe activities to ensure continuing performance of the measures including a discussion of inspection procedures to determine whether the measures are being implemented in conformity with the (g) guidance. Such a description should include a program for the comprehensive survey of sources to ensure that measures are being implemented, and a program for periodic inspections of sources.

h. Describe the activities the state will undertake to comply with the monitoring provisions specified in the (g) guidance.

States may meet any of these requirements by identifying existing program activities currently being implemented effectively under state coastal zone management programs, state nonpoint source management programs, or by other state programs that have been incorporated into the section 319 and coastal zone management programs; providing the information discussed above for the existing programs; and incorporating these programs into the new coastal nonpoint program.

These information requirements will be submitted for approval to the Office of Management and Budget under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq.

IV.D. Requirements for Implementation of Additional Management Measures

Section 6217(b) requires that states implement "additional management measures" where the core management measures specified in the (g) guidance are inadequate to protect water quality. In these circumstances, states must also implement additional management measures to attain or maintain water quality standards and to address threats to coastal water quality standards by reasonably foreseeable increases in pollution loadings from new or expanding sources. These additional measures apply to land uses that are found to cause or threaten water quality impairment and also apply to critical coastal areas adjacent to threatened or impaired coastal waters. Specifically, sections 6217(b)(1), (2), and (3) require the following:

(1) "The identification of, and a continuing process for identifying, land uses, which, individually or cumulatively, may cause or contribute significantly to a degradation of: (A) those coastal waters where there is a failure to attain or maintain applicable water quality standards or protect designated uses, as determined by the State pursuant to its water quality planning processes; or (B) those coastal waters that are threatened by reasonably foreseeable increases in pollution loadings from new or expanding sources."⁴

⁴ For purposes of section 6217(b), the definitions for water quality standards and designated uses are those found in section 303 of the Clean Water Act and in 40 C.F.R. Part 131.

(2) “The identification of, and a continuing process for identifying critical coastal areas adjacent to coastal waters referred to in paragraph (1)(A) and (B), within which any new land uses or substantial expansion of existing land uses shall be subject to management measures in addition to those provided for in subsection (g).”

(3) “The implementation and continuing revision from time to time of additional management measures applicable to the land uses and areas identified pursuant to paragraphs (1) and (2) that are necessary to achieve and maintain applicable water quality standards under section 303 of the Federal Water Pollution Control Act (33 U.S.C. 1313) and protect designated uses.”

According to the floor statement made when the bill was pending before the House, the additional management measures provide a “second tier of pollution control efforts” and “are targeted to those coastal land uses that are recognized to cause or contribute to water quality problems generally.” In addition, the legislative history states that the provision requiring additional management measures in critical coastal areas “requires the identification of important areas — as contrasted to individual land uses under paragraph (1) — that need additional measures to protect against anticipated pollution problems. Unlike paragraph (1) (section 6217(b)), the imposition of additional measures are not contingent upon identified water quality problems, and are to be established as a preventative step to avoid water quality problems that might otherwise develop.”

To structure a coastal nonpoint program element for additional management measures, states will need to do the following:

1. identify coastal waters not maintaining or attaining applicable water quality standards;
2. develop a process for identifying the need for additional measures;
3. identify land uses that individually or cumulatively cause or threaten water quality impairments;
4. identify critical coastal areas;
5. describe the additional management measures the state will use for specified land uses and for critical coastal areas; and,
6. develop a program to implement the additional management measures.

These elements are discussed in greater detail in the following sections.

IV.D.1. Identification of coastal waters not maintaining or attaining water quality standards

Under section 6217(b), states, at a minimum, should identify the following as threatened or impaired waters:

- a.** Coastal waters identified in a state's most recent 305(b) report as "partially meeting" or "not meeting" designated uses or as "threatened";
- b.** Coastal waters identified in a state's section 303(d)(1)(a) list as requiring Total Maximum Daily Load (TMDL) calculations at least in part because of nonpoint sources;
- c.** Coastal waters identified in a state's section 304(l) list as impaired by non-point source pollution;
- d.** Coastal waters for which dilution calculations or predictive models indicate nonattainment of state water quality standards; and
- e.** Coastal waters identified by the state as impaired or threatened in a non-point assessment submitted to EPA under section 319 of the CWA or in any updates of the assessment. States are encouraged to complete water quality assessments for coastal waters and estuaries.

In addition, waters for which coastal water quality problems have been reported to the state by local, state, or Federal agencies, members of the public, or academic institutions should be examined. These organizations and groups should be actively solicited for research they may be conducting or reporting. For example, volunteer monitoring organizations, university researchers, the USDA, NOAA, the U.S. Geological Survey, and the U.S. Fish and Wildlife Service are good sources of field data.

States must describe the validity of the data used to determine threatened or impaired waters and should use the most current data available. States should consider the following in evaluating the validity of the data:

- a.** whether the assessments are based on monitored or evaluated data;
- b.** limits on the availability of water quality information for coastal wetlands, estuaries, and ground water resources that affect coastal waters; and,
- c.** the discrepancy between each coastal waterbody's existing or threatened condition with the condition needed to support the designated uses that the state has identified in its Water Quality Standards. (See Table 1 for a number of representative designated uses and support levels that may be applicable as the basis for this comparison.)

If EPA and NOAA are not satisfied with the water quality information the state provides, the state may be asked to develop reasonable additional information on water quality impair-

Table 1.—Designated uses and support levels.

DESIGNATED USES		SUPPORT LEVELS	
Wildlife	Fish and wildlife	Fully supported	= all uses supported
Fishery	Warmwater fishery Coldwater fishery	Partial support	= one use <u>not</u> supported
Shellfishery	Shellfish protection	Non-support	= two or more uses <u>not supported</u>
Drinking water	Domestic water supply	Threatened	= all uses supported, but one or more uses may not be fully supported in the future (unless additional management measures are implemented) because of anticipated new or expanded sources
Agriculture	Agriculture Irrigation Livestock watering		
Industry	Industrial		
Recreation	Recreation Primary contact Secondary contact Noncontact		
Navigation	Navigation		
High quality	High quality nondegradation		

ments. In addition, states are encouraged to adopt water quality standards for marine waters and for common nonpoint source pollutants, e.g., nutrients.

IV.D.2. Process to determine the need for additional management measures

To determine whether additional management measures are necessary, states should develop a continuing process for the initial implementation and continuing evaluation of additional measures. For approval, that process needs to contain the following steps:

a. Based on the identification of threatened and impaired waters discussed in section IV.D.1., determine the need for additional management measures through an evaluation of point and nonpoint source contributions and current status of pollution prevention activities at the source, including inspections and audits of implementation of 6217(g) measures. If existing information documents that (g) measures will not be adequate to attain and maintain coastal water quality standards and protect designated uses due to the contribution of nonpoint sources, then the state must adopt additional measures at the time of program approval. Furthermore, states must designate critical areas adjacent to impaired or threatened coastal waters and must be able to implement additional measures for these areas at the time of program approval.

b. Once the (g) guidance measures have been implemented and sufficient time has elapsed to establish controls and monitor their effectiveness, attainment or maintenance of water quality standards should be verified. If water quality standards are not met due to nonpoint source contributions, the state will need to implement addi-

tional management measures. Such additional management measures must be in place within six years after approval of the state coastal nonpoint program. The additional management measures must also be monitored to assess their effectiveness in attaining or maintaining water quality standards. Further refinements to the management measures or the use of other additional measures may be necessary if water quality goals are not met.

c. Select (see IV.D.5) and implement (see IV.D.6.) additional management measures, taking into consideration the characteristics of the water quality problem and contributing sources.

d. Once the additional management measures are in place, perform environmental (water quality, habitat, biota) monitoring to assess the effectiveness of the additional management measures and the attainment of water quality standards and designated uses.

e. Evaluate monitoring and implementation data to determine the need for additional nonpoint source control or enforcement action.

IV.D.3. Identification of land uses causing or threatening water quality impairments

Under section 6217(b)(1), states will need to, at a minimum, identify for each waterbody or waterbody segment within the 6217 management area that does not attain or maintain water quality standards or is threatened, those land uses that are sources of nonpoint pollution. The process for identifying these land uses should begin with reviewing the general categories and subcategories of land use that can be sources of runoff and infiltration to coastal waters such as those listed in Table 2.

Using the most current available land use information (local and state land use maps, Geographic Information System, etc.), states should preliminarily identify and map land uses to at least the level generally described in Table 2 for the land area within the watershed of the threatened or impaired waterbody or waterbody segment. The land use categories in Table 2 generally correspond to the USGS Land Classification Code, Level II.

To help determine whether current or future uses are likely to contribute to water quality impairments, states should identify generally the biological and physical impacts of these land uses within the watershed adjacent to the waterbody or segment not attaining or maintaining water quality standards. Physical characteristics to be analyzed include but are not limited to topography/slope; soil characteristics (erodability, etc.); shoreline erosion characteristics; hydrology, in particular ground water linkages to coastal waters and high water tables; and forest and other natural areas that may provide natural buffers or nutrient sinks.

Once categories and subcategories of land uses have been identified, the statute requires states to identify those land uses that "individually or cumulatively may cause or contribute significantly to a degradation of . . ." coastal waters. Initially, the state may want to identify from the literature, including information provided in the (g) guidance, (a) the characteristics of pollutant runoff and infiltration from the land uses, (b) the habitat impacts caused by the land uses, and (c) other water quality impacts caused by the land uses. The preferred source of in-

Table 2.—Land uses that may contribute to runoff or infiltration to coastal waters.***AGRICULTURE**

Non-irrigated cropland	Rangeland (grazing)
Irrigated crop production	Pastureland (grazing)
Specialty crop production (e.g., truck farming and orchards)	Aquaculture
Concentrated livestock areas (feedlots, holding pens, etc.)	

SILVICULTURE

Public and private foresting areas	Log storage, other support or staging area
Forest management areas	

URBAN (existing, redeveloped, and new areas of development)

Residential land uses	Shipyards and ports
Commercial land uses	Marinas
Industrial uses	

TRANSPORTATION

Bridges	Highways
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LAND DISPOSAL AREAS

Sludge, wastewater, or other effluent land disposal areas	Industrial land treatment
Landfills	Sewered and unsewered areas

HYDROLOGIC AND HABITAT MODIFICATION

Channelization	Flow regulation and modification
Dredging and spoil disposal areas	Shoreline erosion areas

* States should include other categories as needed.

formation is refereed technical journals, but other sources often will be needed to fill gaps caused by a shortage of information relating land use to nonpoint source impacts. Additional sources could include Federal and state publications, generally accepted models (i.e., loading coefficients), and similar sources. These sources must be reliable, proven, and cited.

Having identified the characteristics of pollutants and impacts of specific land uses, the states will need to determine which land uses require additional management measures. The states may use any one or a combination of screening procedures, modeling, and prediction by best professional judgment. A land use should be identified pursuant to section 6217(b)(1) where such land use involves (1) substantial disturbance to the land or water resource, (2) substantial treatment, introduction, or creation of a nonpoint source pollutant, or (3) a substantial temporary or permanent change to the hydrology or other natural characteristics of a land area or water resource. Additional management measures will then be necessary if such land uses also pose significant threat to coastal waters or to designated uses.

IV.D.4. Identification of critical coastal areas

Section 6217(b)(2) requires the identification of critical coastal areas — as contrasted to individual land uses under paragraph (1) (section 6217(b)(1)) — that need additional measures to protect against current and anticipated nonpoint pollution problems. As stated in the legislative history, “unlike paragraph (1), the imposition of additional management measures is not contingent upon identified water quality problems, and is to be established as a preventative

step to avoid water quality problems that might otherwise develop." Thus, the statute envisions application of additional measures in those critical areas adjacent to threatened or impaired coastal waters.

The establishment of critical coastal areas must focus on those areas with the greatest potential for causing or contributing to the impairment of or threat to coastal water quality from nonpoint source pollution. The implementation of additional management measures in these areas is required by the statute in order to protect against any increased contributions of pollutants which may result from any new or "substantial expansion of existing land uses."

The statute specifically requires that the critical coastal areas be adjacent to the waterbodies to be protected. Selecting these adjacent areas for implementation of additional management measures can have a significant effect in preventing water quality problems and protecting designated uses of the coastal waterbodies.

For program approval, state coastal nonpoint programs must establish critical coastal areas that are those areas where the quality of adjacent coastal water is threatened or impaired. NOAA and EPA interpret this statutory requirement as affording states flexibility in the approach to delineating critical coastal areas. To illustrate this flexibility, the following two approaches for the establishment of critical coastal areas are described.

The first approach gives states the option of establishing the critical coastal area as a strip of land along the relevant portions of the shoreline adjacent to threatened or impaired coastal waters. These shoreline areas are designated to the extent that adjacent lands and new or existing uses contribute to water quality impairment or are reasonably expected to threaten water quality. Some states have utilized requirements that specify an adjacent ribbon of land that extends along the waterbody within a uniform distance from the shoreline or landward boundaries of wetlands or heads of tides.

This approach would allow a state to establish a critical coastal area along the shoreline except where recent water quality assessments demonstrate that the coastal waterbody is currently neither impaired nor threatened and a state demonstrates that new land uses or expansions of existing land uses in the coastal area will not contribute to the future threat of impairment. For example, a state may demonstrate that its coastal area is predominantly in Federal or state conservancy, the use of which will not threaten coastal water quality, and that changing or expanding land uses are not a concern. Another example might be situations where existing ordinances for an adjacent area limit new or expanding land uses by controlling the extent of impervious surfaces and/or the density of development along the coastal waters.

In another example, a state ordinance includes a provision where the establishment of critical coastal areas is said to be "based on the rebuttable presumption that lands within the boundaries meet the designation criteria and that lands without do not." Site-specific boundaries for exceptions to this presumption may be determined based on field data that is developed for nonpoint sources of pollution.

The second approach for determining and establishing critical coastal areas relies on site-specific evaluations to determine the extent of a critical area. Critical coastal areas would be delineated to the extent that the adjacent lands and new or existing uses contribute to water quality threat or impairment and would be established on an ecosystem basis for those water-

bodies. Under this approach, states may include broader geographic areas in the critical area designation, starting with shoreline segments adjacent to threatened or impaired coastal waters and extending inland to encompass significant coastal features or resources farther inland. These broader areas may include entire watersheds or portions of watersheds adjacent to coastal waters and may encompass significant biological features such as wetlands.

For program approval, states should (1) designate critical coastal areas the use of which will have the greatest potential for impairing or threatening water quality through nonpoint source pollution; and (2) establish a program in these designated areas in which additional management measures will be implemented to protect water quality. Regardless of the approach the state chooses, states should consider the following factors:

- The nature of the coastal water quality problem(s) caused by nonpoint sources.
- The extent to which the nonpoint sources are located adjacent to the waterbodies vs. farther inland.
- The biophysical characteristics of the adjacent lands, similar to those described in the previous section on land use, that will affect the extent to which uses of these lands will cause nonpoint source pollution problems. These include topography/slope, soil characteristics (erodibility, etc.); shoreline erosion characteristics; hydrology, in particular ground water linkages to coastal waters and high water tables; and forest, wetlands, and other natural areas that may provide natural buffers or nutrient sinks.
- Important biological features that should be included as a whole in critical coastal areas.
- The type(s), density, and characteristics of the new or expanded land uses that are anticipated and their effect(s) on water quality.
- The extent to which the above effects can be prevented or reduced by implementation of (g) management measures and/or the additional management measures for land uses.
- The need for an understandable and mappable area.

In addition to the considerations described above, NOAA and EPA also encourage states to consider including other previously designated areas within the critical coastal areas under this program. Such areas may include areas of particular concern designated as part of state coastal zone management programs; National Estuarine Research Reserves; National Marine Sanctuaries; and significant watershed areas within National Estuaries designated by EPA under section 320 of the CWA. This approach will help to fully integrate and coordinate this new coastal nonpoint program with other existing programs.

IV.D.5. Selection of additional management measures

Once major land uses (either uses that result in current impairment of coastal waters or uses that are threatening water quality) and critical areas have been identified, states will have to specify additional management measures to address the sources of nonpoint pollution. These

additional measures are those measures needed to protect coastal waters that may remain impaired or threatened because of nonpoint sources of pollution even after the state implements measures in conformity with the (g) guidance.

Like the (g) management measures, these measures can include a broad range of structural and nonstructural nonpoint source controls. Unlike the (g) guidance management measures, the additional measures need not apply to all similar land uses throughout the 6217 management area. Rather, the additional management measures apply to identified land uses and critical areas where necessary to ensure that coastal water quality standards are attained or maintained.

For program approval, states are expected to provide the following information on the additional management measures that will be used:

- a.** A discussion of the measure and the land uses and pollutants it is designed to address;
- b.** Evidence of the effectiveness of the measure in reducing nonpoint source pollution; and
- c.** A process for evaluating the effectiveness of the measure and a schedule for revising such measures. (EPA and NOAA will establish a schedule for revision, which may be tied to 305(b) biennial water quality assessments. If these assessments indicate that water quality is not improving, the additional management measures will need to be revised.)

A number of alternatives are available to states in specifying the additional management measures.

- States could provide management measures not specified in the (g) guidance. Under this alternative, states or local governments would develop additional management measures including measures that were not included in the (g) guidance because they are more appropriately developed at the local level. Such measures could include buffer zones, low density zoning, cluster development ordinances, conservation zoning, or other land use classification systems.
- Measures specified in the (g) guidance could be applied to more uses. For example, if the (g) measures are targeted toward a larger class of uses (e.g., 50-acre farms), the additional management measures could be to apply the same measures to a class of smaller uses (e.g., 10-acre farms) in critical coastal areas.
- States could apply the measures specified in the (g) guidance more intensively (e.g., increase the size of a vegetative filter strip) or more stringently (design storm water retention for a 50-year storm instead of a 25-year storm).

Given the focused nature of additional management measures and the opportunity to tailor the measures to local conditions, the requirement provides an excellent opportunity to use

local land use measures to control nonpoint source pollution. Thus, states are encouraged to work closely with local governments to develop and implement these measures.

IV.D.6. Implementation of additional management measures

States will also be required to develop a program for implementing the additional management measures that will include activities to (1) fully implement the additional measures in place (either through structural design and construction or through enactment of state and local ordinances) within six years after Federal approval of the coastal nonpoint program; (2) operate and maintain the measures (if structural); and (3) ensure continuing operation of the measures (inspections, enforcement authorities). NOAA and EPA solicit comments regarding the schedule for full implementation of additional management measures and the proposed six-year time limitation. This program for implementing the additional management measures should include the elements discussed in section IV.C.3., regarding the implementation of management measures in conformity with the section 6217(g).

In addition to those elements, the schedule should include milestones for evaluating and revising additional management measures as required to meet water quality standards.

IV.E. Technical Assistance

Section 6217(b)(4) requires that state coastal nonpoint programs provide for technical and other assistance to local governments and the public for implementing the additional management measures for land uses and in critical coastal areas. This may include "assistance in developing ordinances and regulations, technical guidance, and modeling to predict and assess the effectiveness of such measures, training, financial incentives, demonstration projects, and other innovations to protect coastal water quality and designated uses."

In developing an approvable coastal nonpoint program, states should identify those areas of the program requiring implementation at the local level. States should also identify those aspects where localities may lack expertise and/or experience and use this information as the basis for the type and scale of a state technical assistance program. In designing the assistance program, NOAA and EPA expect that state programs will consult with local governments regarding its concerns about implementation and with the public about its needs and concerns.

The legislation states that technical and other assistance shall be provided to the public as well as to local governments. The technical assistance to the public should include help in solving individual problems and information on how citizen groups can facilitate the development and implementation of state programs (e.g., monitoring).

There are a variety of techniques appropriate for technical assistance. EPA has collected documentation and background papers for the draft management measures and is continuing to add to this collection. All of this information will be available to the states. For certain management measures, training sessions conducted by the state for local officials will be appropriate. For others, the financing of demonstration projects may be an effective means for enhancing implementation.

At a minimum, the state coastal nonpoint program should discuss the types of technical assistance that will be provided to support implementation of additional management measures

for each of the major land use categories identified. States should indicate which agency will provide the technical assistance, to whom the assistance will be provided, and a schedule of when such assistance will be available.

IV.F. Public Participation

Section 6217(b)(5) requires that states provide “[o]pportunities for public participation in all aspects of the program, including the use of public notices and opportunities for comments, nomination procedures, public hearings, technical and financial assistance, public education, and other means.” Congress intended the public to have the opportunity to be extensively involved in the development and implementation of the coastal nonpoint program, calling not only for public participation but also for public education.

As an integral part of the coastal nonpoint program, the goals of the public involvement and education program should be defined at the outset. The public will need to be involved as early as possible in the development and implementation of the coastal nonpoint program, and the process should seek to maintain a long-term commitment from the public. States should demonstrate that the final coastal nonpoint program has undergone public review and comment prior to submittal to NOAA and EPA.

The public involvement and education program should include a schedule for initial public contact and education activities and milestones for further involvement throughout the development and implementation of the coastal nonpoint program. These milestones will need to address public participation, particularly in the development phase, and public education, particularly in the implementation phase. The coastal nonpoint program should also specify how the public involvement and education programs will be funded for both program development and implementation activities (e.g., Federal funds, state and local funds, or the innovative use of private sector dollars).

Public education programs are expected to target several audiences, including those regulated or affected by the program (e.g., farmers, building contractors, and marina operators) and those that can assist with program implementation (e.g., conservation organizations and county extension agents).

As part of the public participation and education programs, states should describe how they will periodically evaluate the effectiveness of these programs. States will need to demonstrate that opportunities for public comment have been provided in determining which management measures will be used, what policies should be adopted to ensure implementation of the identified measures, the geographic scope of the coastal nonpoint program, the identification of land uses and critical areas, and the selection and implementation of additional management measures.

In the implementation phase of the coastal nonpoint program, volunteers may be a very valuable source of assistance. For example, Federal and state funds are often limited for monitoring and enforcement programs, but volunteers can help to fill the gap. Although costs will be incurred for training volunteers and supporting staff time to coordinate the volunteer efforts, studies and reports demonstrate that volunteers can effectively provide accurate, useful long-term water quality monitoring data. Well-trained volunteers are also an effective force for en-

surings long-term maintenance of pollution control projects and notifying appropriate officials when enforcement actions may be necessary.

IV.G. Administrative Coordination

Section 6217(b)(6) requires that the coastal nonpoint program include administrative coordination mechanisms. At a minimum, the coastal nonpoint program must include a list of state, regional, and local agencies that will play a role in developing and implementing the state nonpoint program. The list should describe the mission, structure, and operation of the agencies as they relate to nonpoint source pollution control and identify the specific role to be played by the agency in the coastal nonpoint program.

A variety of mechanisms can be used to improve coordination among the agencies involved in the coastal nonpoint program and to ensure that the various programs are fulfilling their responsibilities to implement the applicable provisions of the coastal nonpoint program. These mechanisms include, but are not limited to:

- Memoranda of Agreement/Understanding describing specific agency roles and points of coordination;
- Joint permitting processes;
- Formal interagency comments during other agencies' permitting process;
- Cross-training of staff in other agencies' programs;
- Temporary assignment of staff to other agencies, e.g., Intergovernmental Personnel Agreements;
- Interagency advisory committees;
- Regularly scheduled interagency staff meetings; and
- State legislation/regulation describing expectations for interagency cooperation and coordination.

The mechanisms selected to ensure coordination among participating agencies should be in place when the coastal nonpoint program is submitted to NOAA and EPA for review and approval. The coastal nonpoint program should also explain how the effectiveness of program coordination will be measured and provide a schedule for periodic evaluation and reporting of the results to NOAA and EPA.

IV.H. Enforceable Policies and Mechanisms

Section 306(d)(16) of the CZMA states that "[b]efore approving a management program submitted by a coastal state, the Secretary shall find that "... [t]he management program contains enforceable policies and mechanisms to implement the applicable requirements of the Coastal Nonpoint Pollution Control Program of the State required by section 6217 of the Coastal Zone Reauthorization Act Amendments of 1990." Further, "[e]ach State which submits a management program for approval under section 306 of the Coastal Zone Management Act of 1972, as

amended by this subtitle (including a State which submitted a program before the date of enactment of this Act), shall demonstrate to the Secretary—...that the program complies with section 306(d)(16) of that Act, by not later than 30 months after the date of publication of final guidance under section 6217(g) of this Act.”

The statute provides some guidance on the requirement for enforceable policies and mechanisms by including a definition of enforceable policies in section 304(a) of the CZMA: “[t]he term enforceable policy means State policies which are legally binding through constitutional provisions, laws, regulations, land use plans, ordinances, or judicial or administrative decisions, by which a State exerts control over private and public land and water uses and natural resources in the coastal zone.” Thus, in order to meet the requirements of section 306(d)(16), states must have enforceable policies, as defined above, and mechanisms to implement the applicable requirements of section 6217 within the coastal zone.

The statute does not describe what “applicable requirements” of section 6217 state coastal zone management programs must implement through enforceable policies and mechanisms. NOAA interprets applicable requirements to include providing for the implementation, at a minimum, of (1) management measures in conformity with the guidance developed under section 6217(g), and (2) any additional management measures a state includes to address land uses and/or critical areas identified in the program as necessary to maintain or restore coastal water quality.

One way to implement the requirement for enforceable policies and mechanisms under the CZM portion of the coastal nonpoint program is the traditional regulatory program approach. In this case, traditional enforcement powers can be used (e.g., cease and desist, administrative penalties). Enforcement is triggered when inspections or monitoring programs show that operators are out of compliance or are causing adverse water quality impacts.

To date, efforts to control some nonpoint sources have relied almost solely on non-regulatory programs. To allow flexibility in addressing these types of sources, states also may employ economic incentive or innovative approaches, for which states can ensure the necessary implementation of the (g) guidance management measures and additional management measures. For example, a state may require that agricultural operations implement specific management measures as a condition of receipt of state agricultural cost share funds or tax benefits. Such programs would be embodied in state law, regulation, or other legal mechanism but would not require operators to obtain a permit. In order to employ these types of approaches, states need to be able to demonstrate their effectiveness. Effective implementation of such management measures can be achieved, for example, through sunset provisions for incentive programs (e.g., if too few operators participate in a tax incentive program, the state can develop additional incentives or mandatory requirements to achieve the necessary effectiveness).

It would be appropriate for the coastal nonpoint programs to contain state and local regulatory approaches to nonpoint source pollution where those approaches have been employed successfully. Whatever enforceable policies and mechanisms a state offers, they must meet the threshold test in section 306(d)(16), ensuring implementation of the applicable requirements, as previously described. To enhance implementation of these enforceable policies and mechanisms, states also will need to provide technical assistance and public education, although these programs alone may not be used to fulfill the requirement for enfor-

ceable policies and mechanisms within the coastal zone. In addition, states are expected to demonstrate that they have the authority to take enforcement actions where incentive programs do not produce the desired environmental results or where significant harm to coastal waters is found or threatened. States will need to have the authority to enforce in those specific instances. NOAA solicits comments on other types of enforceable policies and mechanisms and ways to enhance enforcement of these policies and mechanisms that should be included in this guidance.

States with narrow coastal zone boundaries may need to extend their coastal zone boundary inland to provide the necessary geographic coverage and authority to implement the coastal nonpoint program. Another option would be for the state nonpoint source agency or other agency networked into the coastal nonpoint program to ensure implementation of management measures (including enforceable policies and mechanisms, where necessary) for areas inland of the coastal zone boundary. This may obviate the need to extend the coastal zone boundary while still providing needed geographic coverage and institutional capability to the coastal nonpoint program.

V. PROGRAM SUBMISSION, APPROVAL, AND IMPLEMENTATION

Section 6217(c)(2) of the statute requires that states implement the coastal nonpoint programs, including the management measures included in the program under section 6217(b), through changes to the state nonpoint source pollution program approved under section 319 of the CWA and through changes to the state coastal zone management program developed under section 306 of the CZMA. In addition to the requirements of section 6217, these changes will also be subject to the requirements of section 319 of the CWA and section 306 of the CZMA.

The legislative history states that "coastal nonpoint pollution control programs are not intended to supplant existing coastal zone management programs and nonpoint source management programs. Rather, they are to serve as an update and expansion of existing programs." The legislative history indicates that the central purpose of section 6217 is to strengthen the links between Federal and state coastal zone management and water quality programs and to enhance state and local efforts to manage land use activities that degrade coastal waters and coastal habitats. The legislative history makes it clear that the requirements for implementation of the coastal nonpoint program exist despite the fact that this section does not amend either section 319 of the CWA or the CZMA.

V.A. Program Submission and NOAA and EPA Review

Section 6217(c) requires that "[w]ithin 6 months after the date of submission by a State of a program pursuant to this section, the Secretary and the Administrator shall jointly review the program." The statute requires the Secretary of Commerce to make a determination whether the portions under the Secretary's authority meet the requirements of section 6217 (summarized in Appendix C), and likewise, the Administrator of the EPA must make a determination whether the portions under the Administrator's authority meet the requirements of section 6217. If both officials determine that the requirements of section 6217 have been met and each agency official concurs with the other's determination, then the program will be approved. As stated previously, NOAA and EPA have determined as a matter of policy that neither agency will approve a state's coastal nonpoint program until the program meets all the Federal approval requirements as determined by both agencies.

The statute envisions a program approval process in which EPA must concur in NOAA's approval and vice versa. Thus, the coastal nonpoint program must be acceptable in total; a state cannot receive partial approval for a program.

In order to meet this requirement, a state should submit a complete coastal nonpoint program to NOAA and EPA. NOAA and EPA expect that the submission will have been made available for public review and comment prior to submission. The six-month review period will begin only after a complete submission is received from the state. NOAA and EPA will coordinate their review of the coastal nonpoint program. EPA Headquarters will act to ensure full coordination with NOAA. Should a conflict arise between EPA and NOAA regarding the approval of any state coastal nonpoint program, the two agencies will enter into a conflict resolution process agreed to in advance by both agencies.

The information collection requirements associated with this proposed guidance will be submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. An Information Collection Request (ICR) is being

prepared by EPA and NOAA. The ICR document will estimate the information collection burdens that will be imposed on the Federal and state governments associated with the development, submission, and approval of the coastal nonpoint programs.

V.B. Program Approval Standards and Penalties

Both EPA and NOAA will base their review of a state's coastal nonpoint program on whether the state has met the program requirements as described in section 6217(b) of the statute and in this guidance. During the six-month review period above, NOAA and EPA will consult with the states. The states will have an opportunity to amend their submission, if necessary, subject to the public participation requirements and time constraints. The state coastal management program must also meet the requirements in section 306(d)(16) of the CZMA in order to have an approvable program.

If either NOAA or EPA determines that a state has failed to submit an approvable coastal nonpoint program, the relevant penalties will be levied both on section 306 coastal management grants and section 319 nonpoint source grants. The penalties start at 10 percent in fiscal year 1996 and increase to 15 percent in FY 1997, 20 percent in FY 1998, and 30 percent in FY 1999 and each fiscal year thereafter. In the case of the coastal zone management program, the penalty is based upon the grants otherwise available to a state in the current fiscal year. In the case of the section 319 nonpoint source management program, the penalty is based on the grant amount awarded to the state for the preceding fiscal year. Given the joint approval process, no state will experience penalties to only one program. Funds withheld by NOAA and EPA will be made available to states with approved coastal nonpoint programs.

APPENDIX A

STATES/TERRITORIES WITH APPROVED COASTAL ZONE MANAGEMENT PROGRAMS

Alabama

Alaska

American Samoa

California

Connecticut

Delaware

Florida

Guam

Hawaii

Louisiana

Maine

Maryland

Massachusetts

Michigan

Mississippi

New Hampshire

New Jersey

New York

North Carolina

Northern Mariana Islands

Oregon

Pennsylvania

Puerto Rico

Rhode Island

South Carolina

Virgin Islands

Virginia

Washington

Wisconsin

APPENDIX B

OVERVIEW OF EXISTING NATIONAL EFFORTS TO CONTROL NONPOINT POLLUTION

Nonpoint source pollution is the pollution of our nation's waters from diffuse sources. It is caused by rainfall or snowmelt moving over and through the ground and carrying natural and manmade substances into lakes, rivers, streams, wetlands, estuaries, other coastal waters, and ground water. When the presence of these substances results in degraded water quality, the substances can be characterized as pollutants. Major nonpoint source pollutants of coastal waters include nutrients, sediments, oil and grease, pathogens, and metals.

EPA Programs

1. Clean Water Act Section 319 — Nonpoint Source Program

A number of local, state, and Federal programs have been implemented over time to address nonpoint source pollution. However, the first national program to authorize Federal funding for the control of nonpoint sources began in 1987 when Congress passed the Water Quality Act of 1987, enacting section 319 of the Clean Water Act, which established a national program to control nonpoint sources of water pollution. Section 319 required that, in order to be eligible for Federal funding, states develop an assessment report detailing the extent of nonpoint pollution and a management program specifying nonpoint source controls. Section 319 authorizes EPA to issue grants to states to assist them in implementing their nonpoint source management programs or portions of management programs that have been approved by EPA.

As of June 1991, all states and territories had approved nonpoint source assessments and management programs or portions of management programs. Congress appropriated \$40 million in section 319 FY 1990 and \$51 million in FY 1991 funds to assist states in implementing their management program.

2. Clean Water Act Section 320 — National Estuary Program

EPA also administers the National Estuary Program under section 320 of the Clean Water Act. This program focuses on point and nonpoint pollution in geographically targeted, high-priority estuarine waters. Under this program, EPA assists state, regional, and local governments in developing comprehensive conservation and management plans that recommend corrective actions to restore estuarine water quality, fish populations, and other designated uses of these targeted waters. To date, 17 estuaries have been designated as part of the National Estuary Program.

3. Ground Water Protection Programs

EPA has a number of programs, in addition to section 319, to control nonpoint source pollution of ground water. Since 1984, ground water protection programs have provided technical and financial assistance to states for the development of state ground water strategies and, more recently, ground water protection programs. In addition, the 1986 amendments to the Safe Drinking Water Act established a wellhead protection program. This program was created to protect ground waters that supply wells and wellfields that contribute to public

drinking water supply systems. USDA and EPA are also cooperating under a program to assess private drinking water wells on farmsteads.

4. Pesticides Program

EPA's pesticides program under the Federal Insecticide, Fungicide, and Rodenticide Act addresses some forms of nonpoint pollution. Among other things, this statute authorizes EPA to control pesticides that may threaten ground and surface waters. This approach entails determining the pesticide's potential for leaching into ground and surface waters; if there is such potential, determining whether national-label restrictions or existing state or local measures will adequately address leaching concerns (included in these restrictions can be a classification of the pesticide as "restricted use," which requires training and certification of the pesticide user), and if not, determining whether providing states with the opportunity to develop State Management Plans for the chemical will effectively address the unreasonable risk from pesticide contamination. In the unlikely event that state plans would not sufficiently reduce the risks to human health and the environment (i.e., an unreasonable risk remains), then EPA would resort to national cancellation of the pesticide.

EPA's approach to state management is described in the recently released Pesticides and Ground Water Strategy. The strategy describes the policies and regulatory approaches that the Agency will use to protect the nation's ground water resources from the risk of contamination by pesticides.

5. National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES — section 402 of the Clean Water Act) requires permits for a wide range of point source dischargers. Historically, there have always been overlaps and ambiguity between programs designed to control nonpoint sources and point sources. EPA and NOAA intend that state coastal nonpoint pollution control programs only apply to sources that are not required to apply for and receive a NPDES permit. However, states should be aware of how point and nonpoint source program overlap and provide for coordination in developing the new coastal nonpoint programs.

The primary overlap occurs between the storm water permit program (under section 402(p) of the Clean Water Act) and traditional urban runoff programs. Often, runoff may begin as a nonpoint source but ultimately be channelized and become a point source. A further complication arises because the Clean Water Act currently requires a permit for some municipal storm water sources while postponing regulatory coverage of other (generally smaller) municipalities' storm water. Although the section 6217(g) management measures guidance does include urban runoff management measures, state coastal nonpoint pollution control programs will only be required to implement these measures for storm water discharges that are not required to apply for and receive storm water permits.

A second overlap occurs in connection with animal feeding operations. Concentrated animal feeding operations that meet particular size or other criteria are defined and regulated as point sources under the section 402 permit program. Other animal feeding operations are nonpoint sources and are not regulated under the NPDES program. State coastal nonpoint pollution control programs will only be required to implement the section 6217(g) guidance measures for confined animal production facilities for those facilities not currently subject to the NPDES permit program.

Other overlaps with nonpoint source control efforts may occur with respect to permitted aspects of mining operations, oil and gas extraction, land disposal, and other activities.

6. Wetlands Protection Program

EPA's wetlands program also has undertaken a number of projects to increase awareness of the relationship between the protection and restoration of wetlands and nonpoint source control. In 1990, the Agency developed guidance to encourage coordination of NPS and wetlands programs, both within EPA and the states, to attain water quality goals shared by the two programs. In addition, EPA has released guidance on how to ensure effective application of water quality standards to wetlands. The development of standards provides the foundation of a broad range of water quality management activities including, but not limited to, monitoring under section 305(b), permitting under sections 402 and 404, water quality certification under section 401, and control of NPS pollution under section 319.

NOAA Programs

Coastal Zone Management Program

The Coastal Zone Management Act of 1972 established a program for states and territories to voluntarily develop comprehensive programs to protect and manage coastal resources. In order to receive Federal approval and implementation funding, states and territories must demonstrate that they have programs, including enforceable policies that are sufficiently comprehensive and specific to regulate land uses, water uses, and coastal development and to resolve conflicts among competing uses. In addition, they must have the authority to implement the enforceable policies. The programs operate within a coastal zone boundary that includes coastal waters and those lands that have a direct and significant impact on coastal waters.

There are currently 29 federally approved state and territorial programs. Despite institutional differences, each program must protect and manage important coastal resources, including wetlands, estuaries, beaches, dunes, barrier islands, coral reefs, and fish and wildlife and their habitats. Resource management and protection is accomplished in a number of ways through state laws, regulations, permits, and local plans and zoning ordinances.

While water quality protection is integral to the management of many coastal resources, it was not specifically cited as a purpose or policy of the original statute. The Coastal Zone Act Reauthorization Amendments of 1990 specifically charged state coastal programs as well as state nonpoint source programs, with addressing nonpoint source pollution affecting coastal water quality.

USDA Programs

The U.S. Department of Agriculture's Agricultural Stabilization and Conservation Service (ASCS), Soil Conservation Service (SCS) and Extension Service administer a number of programs that contribute to reducing nonpoint pollution from agricultural production.

Agricultural Conservation Program

The Agricultural Conservation Program, administered by ASCS, provides cost-share funds to farmers and ranchers to install conservation practices. The program has several goals, including conserving soil and water, improving water quality, protecting and maintaining productive farm and ranch land, and preserving and developing wildlife habitat.

Farm Bill Conservation Provisions

The 1985 Food Security Act authorized several programs that provide economic incentives to protect highly erodible land or swampy acreage. Sodbuster and swampbuster provisions of the Farm Bill deny program benefits to the whole farm (e.g., price supports) if farmers cultivate certain highly erodible land or swampy acreage.

The Conservation Compliance Program requires conservation plans on all highly erodible lands to control soil losses. If these plans are not implemented by 1995, farmers will lose farm program benefits on all acreage. The conservation plans do not include technical standards for soil loss.

Under the Conservation Reserve Program, farmers are reimbursed for retiring highly erodible and environmentally sensitive croplands from production under 10-year contracts. Water quality improvements occur as lands are taken out of production because of lower pesticide and fertilizer applications and because reductions in soil erosion decrease sediment loadings to water. Land enrolled in the reserve program also provides habitat and other environmental benefits. Criteria for the conservation reserve program have been expanded to include environmentally sensitive lands such as filter strips, wetlands, and wellhead protection areas.

Nonpoint Source Hydrologic Unit Areas

In selected agricultural watersheds and aquifer recharge areas, SCS, Extension Service, and cooperating Federal, state and local agencies will provide technical assistance and conservation planning to help farmers and ranchers meet state water quality goals without undue economic hardship. These hydrologic units are selected based on significance of the agricultural sources of pollution; relative predominance of pollutants such as pesticides, nutrients, and animal wastes; and conformance with other water quality efforts. Findings on the water quality effects of selected conservation practices will provide a basis for expanding applications of such practices to other areas with similar water quality problems.

APPENDIX C

KEY ELEMENTS OF COASTAL NONPOINT POLLUTION CONTROL PROGRAM

Submission of coastal nonpoint program to NOAA and EPA within 30 months of publication of final management measures guidance will need to include the following:

In Conformity with (g) Guidance IV.C]

1. Identify categories and subcategories of sources to be covered, including a justification for any category, subcategory, or classes excluded. [IV.C(1)]
2. Describe management measures to be used for each selected NPS category and subcategory. [IV.C.(2)]
3. Provide technical documentation for any alternative management measures. [IV.C.(2)(a-c)]

Additional Management Measures

4. Identify coastal water not maintaining water quality standards. [IV.D.(1)]
5. Identify land uses. [IV.D.(3)]
6. Identify critical coastal area. [IV.D.(4)]
7. Describe state-developed additional management measures. [IV.D.(5)]
8. Provide for continuing revision from time to time of additional measures. [IV.D.(5)]
9. Develop and describe program for technical assistance to local governments and the public for additional management measures. [IV.E]

Implementation of All Management Measures [IV.C(3), IV.D.(6)]

10. Describe scope, structure, and coverage of state implementation program. [IV.C.(3)(a)]
11. Describe organization, structure, and authorities of lead agency(ies). [IV.C.(3)(b)]
 - a. Designate lead agency for each source category/subcategory and describe authorities for implementation. [IV.C.(3)(b)(i)]
 - b. Describe lead agency's resources for implementation. [IV.C.(3)(b)(ii)]
12. Provide a schedule for full implementation of management measures. [IV.C.(3)(c) & IV.D.(6)]
13. Submit copies of legislative and administrative authorities for implementation, including enforceable policies and mechanisms. [IV.C.(3)(d) and IV.H]

14. Describe mechanisms for coordination with state agencies and local governments. [IV.C.(3)(e)]
15. Provide for operation and maintenance of measures. [IV.C.(3)(f)]
16. Describe inspection procedures. [IV.C.(3)(g)]
17. Describe monitoring procedures. [IV.C.(3)(h)]

Coastal Zone Boundary

18. Modify coastal zone boundary or describe other authorities within § 6217 management area. [III.A & IV.B]

Other Requirements

19. Coordination with existing Clean Water Act programs (§208, §303, §319, and §320). [IV.A]
20. Describe provisions for public participation. [IV.F]

Schedule

May 1992	<i>NOAA provides boundary recommendations.</i>
May 1992	<i>Final (g) Management Measures Guidance published.</i>
May 1992	<i>Final Program Development and Approval Guidance published.</i>
Nov. 1994	<i>State Coastal Nonpoint Programs due to NOAA and EPA.</i>
April 1995	<i>NOAA and EPA will approve/disapprove programs (within six months of program submission).</i>
FY 1996	<i>First year a percentage of §319 nonpoint source and §306 coastal zone management funds withheld if no approvable program submitted.</i>

APPENDIX D

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