From: Waye, Don
To: Sweeney, Stephen
CC: allison.castellan@noaa.gov; Carlin, Jayne
Sent: 12/2/2014 1:41:51 PM
Subject: 1998 Findings Document for Oregon

Steve,

Here's the entire text of the 1998 findings document from http://coast.noaa.gov/czm/pollutioncontrol/media/findor.txt

Don

FINDINGS FOR THE
OREGON COASTAL NONPOINT PROGRAM

FOREWORD

This document contains the findings for the coastal nonpoint pollution control program submitted by the State of Oregon pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA). The findings are based on a review of the Pollution Prevention and Control Program for Oregon's Coastal Waters, Final Program Submittal, July 1995. The National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) reviewed this information and evaluated the extent to which it conforms with the requirements of CZARA.

NOAA and EPA commend the State of Oregon on the substantial time and effort put into developing this program and appreciate the commitment the State has shown to complete an ambitious task with limited resources. NOAA and EPA will continue to work with coastal states and territories to ensure that these findings represent an accurate assessment of current state and territorial abilities and efforts to address coastal nonpoint source pollution. NOAA and EPA recognize that further administrative changes that will affect these findings may be made to the coastal nonpoint program and, once such changes are finalized, will review these findings in light of the changes and make any necessary adjustments.

APPROVAL DECISION

NOAA and EPA approve the coastal nonpoint pollution control program submitted by the State of Oregon pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990, subject to certain conditions.

This document provides the specific findings used by EPA and NOAA as the basis for the decision to approve the State's program. It also provides the rationale for the findings and includes the conditions that will need to be met for Oregon to receive final approval of its program. We recognize that Oregon has already proposed some changes for its program that would, if finalized, ensure the implementation of the management measures in conformity with the Section 6217(g) guidance. In those cases, the conditions are based on the State's proposed changes. The timeframes associated with conditions become effective upon the date of the approval letter for these findings.

INTRODUCTION

This document is organized by the major nonpoint source categories and subcategories identified in the Section 6217(g)

guidance and the administrative elements identified in the program guidance (including the boundary for the 6217 management area). Where appropriate, NOAA and EPA have grouped categories and subcategories of management measures into a single finding. The structure of each finding follows a standard format. Generally, the finding is that the State program includes or does not include management measures in conformity with the (g) guidance and includes or does not include enforceable policies and mechanisms to ensure implementation. In some cases, the finding reflects that the State has identified a back-up enforceable policy but has not demonstrated the ability of the authority to ensure implementation. For further understanding of terms used in this document, the reader is referred to the following:

Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (EPA, January 1993)
Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance (NOAA and EPA, January 1993)
Flexibility for State Coastal Nonpoint Programs (NOAA and EPA, March 1995)

The references in this document refer to the Pollution Prevention and Control Program for Oregon's Coastal Waters, Final Program Submittal, July 1995 ("program submittal"). NOAA and EPA have written this document as succinctly as possible. We have relied upon, but do not repeat here, the extensive information that the State included in the program submittal. Further information and analysis is contained in the administrative record for this approval decision and may be reviewed by interested parties at the following locations:

EPA/Office of Wetlands, Oceans and Watersheds
Assessment & Watershed Protection Division
Nonpoint Source Control Branch
401 M St., SW (4503-F)
Washington, DC 20460
Contact: Kristen Martin (202/260-7108)

NOAA/Office of Ocean and Coastal Resource Management
Coastal Programs Division
SSMC-4, N/ORM3
1305 East-West Highway
Silver Spring, MD 20910
Contact: Patty Dornbusch (301/713-3121, ext. 182)

U.S. EPA Region X/Office of Ecosystems and Communities
Geographical Implementation Unit
1200 6th Avenue
Seattle, WA 98101
Contact: Teena Reichgott (206/553-1601)

I. BOUNDARY

FINDING: Oregon's proposed 6217 management area excludes existing land and water uses in the Umpqua, Rogue, and Columbia River basins that reasonably can be expected to have a significant impact on the coastal waters of the State.

CONDITION: Within one year, the Oregon Department of Land Conservation and Development (DLCD), Oregon Department of Environmental Quality (DEQ), U.S EPA, NOAA, and other relevant State, local, and federal agencies will participate in a cooperative process to review relevant information and determine an appropriate 6217 management area boundary consistent with established national guidance for the 6217 program.

RATIONALE: Oregon's proposed boundary is based primarily on criteria established for the Oregon Coastal Management Program in 1977 and the Oregon DEQ's 1988 Nonpoint Source Assessment Report. State, local, and federal agencies have consolidated more recent nonpoint source information for the Umpqua and Rogue Basins. Analysis of that information indicates that existing nonpoint sources landward of the State-proposed 6217 management area boundary reasonably can be expected to have significant adverse impacts on the State's coastal waters. Available information for the Columbia River basin similarly indicates that Oregon's 6217 management area excludes nonpoint sources that reasonably can be expected to have significant adverse impacts on the State's coastal waters.

Since the time of its program submittal in July 1995, the State has engaged in meetings with the Governor's office and other State officials, and developed a program of information development and community outreach to local governments affected by the boundary decision. Information gathered during this effort will be used in making the final boundary determination.

II. AGRICULTURE

A. CONFINED ANIMAL FACILITIES (Large and Small Units)

FINDING: Oregon's program for confined animal facilities includes management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation throughout the 6217 management area for confined animal facilities where animals are confined for four months or more and where waste water control facilities are present. The State does not have management measures for facilities where animals are confined for less than four months and that do not have prepared surfaces or waste water control facilities. For these latter facilities, the State has identified a backup enforceable authority, but has not demonstrated the ability of the authority to ensure implementation throughout the 6217 management area.

CONDITION: Within two years, Oregon will include in its program management measures in conformity with the 6217 (g) guidance for facilities where animals are confined for less than four months and that do not have prepared surfaces or waste water control facilities. Also within two years, Oregon will provide a strategy (in accordance with section XII, pages 19-20) for use of the State's water quality law (ORS 468B) as a back-up enforceable mechanism to ensure implementation of the management measures for confined animal facilities as proposed on pages 48-50 of the State's program submittal.

RATIONALE: Existing State authorities to regulate confined animal facilities provide for practices that implement the management measures for most facilities. The existing program is enforceable through permits and other procedures, including civil penalties for violations.

The existing permit process, however, excludes facilities of four months or less duration and facilities without a prepared surface and without waste water treatment works. The State has proposed that its general water quality law (ORS 468B) could be used to address these exempted facilities (ORS 468B.050(1)(a) prohibits discharge of waste into state waters from any industrial or commercial establishment or activity without a permit); however, the State has not explained how it will use this general authority to ensure implementation of the management measure for such facilities. In discussions with NOAA and EPA, the State has also proposed addressing such facilities in AWQMAPs developed under SB1010. NOAA and EPA encourage the State to pursue this effort.

B. EROSION and SEDIMENT CONTROL, NUTRIENT, PESTICIDE, GRAZING, and IRRIGATION WATER MANAGEMENT

FINDING: The State's program for these agricultural subcategories does not include management measures in conformity with the 6217(g) guidance. Oregon has identified an enforceable authority for these management measures, but has not demonstrated the ability of the authority to ensure implementation throughout the 6217 management area.

CONDITIONS: Within one year, Oregon will (1) designate agricultural water quality management areas (AWQMAs) that encompass agricultural lands within the 6217 management area, and (2) complete the wording of the alternative management measure for grazing, consistent with the 6217(g) guidance. Agricultural water quality management area plans (AWQMAPs) will include management measures in conformity with the 6217(g) guidance, including written plans and equipment calibration as required practices for the nutrient management measure, and a process for identifying practices that will be used to achieve the pesticide management measure. The State will develop a process to incorporate the irrigation water management measure into the overall AWQMAPs. Within five years, AWQMAPs will be in place.

RATIONALE: The Oregon Department of Agriculture (ODA) has the authority, under SB 1010, enacted in 1993, to establish boundaries of AWQMAs and develop AWQMAPs when such plans are required by a provision of State or federal law. Individual landowners are required to comply with the provisions of the AWQMAPs. This program appears promising, and implementation of AWQMAPs has the potential to ensure implementation of the management measures. The content of the AWQMAPs, their linkage to the 6217 management measures, and their effectiveness, are not yet known. AWQMAPs need to be in place by the year 2001, when the time period for conditional approval ends, and should be fully implemented by 2004, in accordance with the timeframe for implementation described in Flexibility for State Coastal Nonpoint Programs (NOAA and EPA, March 1995).

To achieve the goals of the nutrient management and pesticide management measures, AWQMAP elements related to nutrient management and pesticides must contain the components specified in the above condition. For the irrigation water management measure, NOAA and EPA encourage the ODA to pursue its plan to coordinate with the Oregon Water Resources

Department to facilitate the development of subbasin water conservation plans, including measurements of water needed and applied, and to incorporate the conservation plans into the overall AWQMAP to achieve the irrigation management measure. Conservation planning will result in important water quality responses that should be addressed to the extent practicable through the AWQMAPS. Finally, the State proposed an alternative management measure for grazing that is as effective as the 6217(g) guidance measure, but the State has not completed the wording of the component of this measure for upland erosion on privately owned lands.

III. FORESTRY

FINDING: Oregon's program includes management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation throughout the 6217 management area. However, additional management measures are necessary to attain and maintain water quality standards and fully protect beneficial uses (see section X, pages 16-18).

RATIONALE: The existing State authority to regulate forestry (the Oregon Forest Practices Act, or FPA) is a comprehensive, enforceable program that includes management measures in conformity with the 6217(g) guidance. Any operator conducting a forest operation must comply with the FPA and implementing rules (Forest Practices Rules, or FPR).

Although Oregon has the basic legal and programmatic tools to implement a forestry program in conformity with Section 6217, these tools are inadequate to ensure that water quality standards are attained and maintained and beneficial uses protected. This conclusion is based on best available information, including the most recent 303(d) listings for Oregon waters, which indicate water quality impairments from forestry. Related to these water quality impairments, Oregon has a number of aquatic species, in particular anadromous salmonids, that are endangered, threatened, or otherwise seriously at risk, due in part to forestry activities that impair coastal water quality and beneficial uses, including salmon spawning, rearing, and migration habitat. For further discussion, see section X, pages 16-18, below.

Section 6217 recognizes that implementation of the (g) measures alone may not always be adequate to protect coastal waters from nonpoint sources of pollution. In these cases, Section 6217 requires the identification and implementation of additional management measures. Thus, Oregon will need to adopt additional management measures for forestry in areas adjacent to coastal waters not attaining or maintaining applicable water quality standards or protecting beneficial uses, or that are threatened by reasonably foreseeable increases in pollutant loadings from new or expanding forestry operations (see section X, pages 16-18, below).

The National Marine Fisheries Service (NMFS), in reviewing the Oregon FPA and implementing rules and the Oregon 6217 program submittal as part of the State's Coastal Salmon Recovery Initiative (CSRI), raised a number of issues related to Oregon's existing forestry program. The State has entered into a Memorandum of Agreement (MOA) with NMFS regarding implementation of the CSRI. That MOA includes a process for NMFS and ODF to develop adjustments to Oregon forest practices to provide a high probability of protecting and restoring aquatic habitat (including water quality) on Oregon forestlands that are important for Oregon coastal coho. Riparian buffers on medium, small, and non-fish bearing streams; risks to aquatic functions from activities in landslide prone areas; and management of cumulative effects were specifically identified in the MOA as among those issues to be addressed. NOAA and EPA share these concerns with

regard to the ability of the FPA and FPR to attain water quality standards and fully support beneficial uses, and have asked the state to review these as priority issues in developing additional management measures. See the additional discussion at section X, "Critical Coastal Areas, Additional Management Measures, and Technical Assistance," pages 16-18, below.

The State has the authority, under OAR 629-635-120, to develop and adopt watershed specific rules for forestry in watersheds that have been designated as water quality limited or for watersheds containing threatened or endangered aquatic species. This authority would be useful in developing appropriate additional management measures for forestry; however, the State has not indicated whether or how it intends to implement this process.

IV. URBAN

A. NEW DEVELOPMENT, SITE DEVELOPMENT, CONSTRUCTION SITE EROSION AND SEDIMENT, and CHEMICAL CONTROL

FINDING: Oregon's program does not include management measures in conformity with the 6217(g) guidance or enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.
CONDITION: Within two years, Oregon will include in its program management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.

RATIONALE: Oregon proposes to develop recommendations for local governments on the practices necessary to meet these measures and then to bring about amendment of local plans to conform with those recommendations. The State proposes to use authorities under the statewide land use planning program and/or regulations developed by the Environmental Quality Commission (EQC). The options the State is considering have the potential to meet these measures. The State, however, has not demonstrated that its existing authorities can be used to require suitable changes to local comprehensive plans, nor has it adequately described the process it will use to effect those changes, the guidance it will provide to local governments, and how it will require updating of local plans. Where the State plans to use the statewide planning goals or some other mechanism to provide requirements and guidance for local implementation of the measures, the State will need to clarify what authority it will use to require amendment and oversight of local plans to implement the management measures.

The State proposes to modify the applicability of these management measures. It proposes to apply the new development management measure inside urban growth boundaries (UGBs the areas where municipal sewage treatment systems and development at urban densities is allowed under Oregon's statewide land use planning program) and their equivalent; to development outside UGBs where a subdivision or partition will result in a density of one dwelling or more per acre on any portion of the site; to all commercial and industrial development outside UGBs; and to improvements in platted but undeveloped subdivisions. Application of the measure to these areas will fulfill the intent of the measure. The site development measure, however, should be applied throughout the entire 6217 management area, as proposed on page 119 of the program submittal. The State proposes applying the construction activities management measures to all activities that require a building permit or an equivalent permit for land grading, land clearing, or road building. Application of the measures to those activities will cover the activities addressed under the applicability statement in the 6217(g) guidance.

B. WATERSHED PROTECTION and EXISTING DEVELOPMENT

FINDING: Oregon's program does not include management measures in conformity with the 6217(g) guidance but includes enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.

CONDITION: Within three years, Oregon will further develop its program to implement the management measures for watershed protection and existing development in conformity with the 6217(g) guidance throughout the 6217 management area.

RATIONALE: The State intends to implement the watershed protection measure primarily through local comprehensive plans developed pursuant to the statewide planning goals. Some aspects of the measure are also implemented through the removal-fill law. The State Technical Advisory Group (TAG) for urban management measures suggested that Oregon develop methods to integrate a watershed perspective in the development and implementation of local comprehensive plans and development ordinances. Although the State has not fully developed a plan to implement this management measure, the TAG suggestions appear promising for ensuring a comprehensive watershed perspective in implementation of the statewide land use planning program within the 6217 management area.

As described in the State's program submittal on page 136, components 3 and 4 of the existing development management measures can be implemented through the removal-fill law and local ordinances established in accordance with the statewide planning goals. The State should explore how components 1 and 2 of the existing development management measure may be implemented through revised DEQ or DLCD rules or guidance, as well as through integration of the measure with the Governor's Watershed Enhancement Board (GWEB) and promotion throughout the 6217 management area of watershed health programs that identify and implement urban best management practices and retrofit opportunities.

The State proposes implementing the existing development management measure inside a jurisdiction's UGB, and outside UGBs to the extent that the jurisdiction finds that development outside the UGB will affect pollutant loads or peak runoff rates inside the UGB. This degree of coverage is acceptable as long as a process exists by which a jurisdiction can ascertain whether existing development outside a UGB is contributing to pollutant loads or peak runoff rates inside the UGB or is resulting in significant impacts to coastal waters.

C. NEW and OPERATING ONSITE DISPOSAL SYSTEMS

FINDING: Oregon's program includes management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation throughout the 6217 management area, except that it lacks a program to inspect operating onsite disposal systems (OSDS).

CONDITION: Within two years, Oregon will finalize its proposal to inspect operating OSDS, as proposed on page 143 of its program submittal.

RATIONALE: Oregon has a comprehensive regulatory program for OSDS, administered by DEQ, that is generally consistent with the OSDS management measures. The State, however, lacks requirements for the periodic inspection of operating OSDS,

although it does have a program for inspection of alternative systems. The State has proposed an inspection program to require OSDS inspections at the time of property transfer. This program would fulfill the requirements for inspection of operating OSDS. The State is also encouraged to develop, as proposed, an outreach and education program to increase awareness of proper use and operation of OSDS.

D. POLLUTION PREVENTION

FINDING: Oregon has outlined activities and programs, on pages 143 through 145 of its program submittal, that constitute an acceptable proposal for education and outreach on nonpoint source pollution throughout the 6217 management area.

RATIONALE: The State's program submittal describes a strategy that includes the Oregon DEQ developing programs, projects, information, and technical assistance for local officials to use and distribute (one such product, a "Nonpoint Source Pollution Control Guidebook for Local Government," was produced in June 1994), and a public education program that links all possible outlets for information.

E. ROADS, HIGHWAYS, AND BRIDGES

FINDING: For State and federal roads, Oregon's program includes management measures in conformity with the 6217(g) guidance, except the program does not include management measures in conformity with the construction site chemical control measure, and it does not include enforceable policies and mechanisms. For local roads, highways, and bridges, Oregon's program does not include management measures in conformity with the 6217(g) guidance or enforceable policies and mechanisms to ensure implementation throughout the 6217 management area. The State has identified a backup enforceable authority for the operation and maintenance and runoff management measures but has not demonstrated the ability of the authority to ensure implementation throughout the 6217 management area.

CONDITION: Within two years, Oregon will (1) develop management measures in conformity with the 6217 (g) guidance for construction site chemical control; (2) develop enforceable policies and mechanisms to implement the roads, highways and bridges measures on all federal and State highways throughout the 6217 management area; (3) develop management measures in conformity with the 6217 (g) guidance and enforceable policies and mechanisms for local roads, highways, and bridges throughout the 6217 management area; and (4) provide a strategy (in accordance with section XII, pages 19-20) for use of the State's water quality law (ORS 468B) as a back-up enforceable mechanism to ensure implementation of the management measures for operation and maintenance and for runoff systems, as proposed on pages 155 and 157 of the State's program submittal.

RATIONALE: Oregon's strategy for implementing the management measures for planning, siting, developing, and for construction projects on, State and federal roads, highways, and bridges is to adopt as policy the requirements of NPDES permit 1200-CA. The provisions of permit 1200-CA are consistent with the management measures, except that the NPDES practices for construction site chemical control do not include practices for controlling hazardous substances such as solvents, grease, oil, and gasoline. The State has proposed the use of ORS 468B as a back-up authority for the operations and maintenance and runoff systems measures, but it has not adequately explained how it will use ORS 468B to ensure implementation of these measures.

To implement the management measures at the local level,

the State has proposed an inventory and assessment of existing local practices and recommendations for adoption of new measures where needed. This strategy, as described on page 147 of the State's program submittal, appears promising, but the State has not adequately identified management measures in conformity with the 6217(g) guidance, nor has it demonstrated enforceable policies and mechanisms to ensure implementation of the measures.

V. MARINAS AND RECREATIONAL BOATING

A. MARINA FLUSHING, WATER QUALITY, and HABITAT ASSESSMENT

FINDING: Oregon's program includes management measures in conformity with the 6217(g) guidance for marina flushing, water quality, and habitat assessment, but it does not include enforceable policies and mechanisms to ensure implementation of the marina flushing and habitat assessment management measures.

CONDITION: Within three years, Oregon will include in its program enforceable policies and mechanisms to implement the marina flushing and habitat assessment management measures throughout the 6217 management area.

RATIONALE: Marina siting issues relating to habitat protection and the proper use of coastal resources in Oregon are reviewed by the following agencies: the Division of State Lands (DSL), which leases State lands and administers the removal-fill permit program; DLCD and local governments, which implement the statewide planning process including goals and procedures to protect estuaries; and the Oregon Department of Fish and Wildlife (ODFW), the lead State agency for protecting fish and wildlife and their habitat. DEQ, pursuant to a memorandum of agreement with DSL, determines if a proposed marina will cause a violation of water quality standards. ODFW also reviews marina permit applications under the removal-fill law, and for such reviews uses informal Waterway Habitat Alteration Policies for Structures. The State needs to include in its program enforceable policies and mechanisms to implement the marina flushing and habitat assessment management measures throughout the 6217 management area.

B. SHORELINE STABILIZATION, STORMWATER RUNOFF, FUELING STATION DESIGN, SOLID WASTE MANAGEMENT, LIQUID MATERIAL MANAGEMENT, and PETROLEUM CONTROL

FINDING: Oregon's program does not include management measures in conformity with the 6217(g) guidance or enforceable policies and mechanisms to ensure implementation.

CONDITION: Within three years, Oregon will develop management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation of these management measures throughout the 6217 management area.

RATIONALE: The State has not identified enforceable policies and mechanisms to implement these management measures. The State has identified management practices which could be used to address some of the management measures, but has not identified management practices for the shoreline stabilization, stormwater runoff, or fueling station design management measures. In finalizing its plans for implementing these measures, the State intends to focus on revisions to DSL permits for shoreline stabilization; possible expansion of existing NPDES permits to address stormwater runoff; Marine Board efforts to develop standard plans for marine fueling stations; and amendments to

ORS 480.340 to require automatic shut-off nozzles on all fuel pumps.

C. SEWAGE FACILITY MANAGEMENT and MAINTENANCE

FINDING: Oregon's program includes management measures in conformity with the 6217(g) guidance but does not include enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.

CONDITION: Within three years, Oregon will include in its program enforceable policies and mechanisms to ensure implementation of these management measures throughout the 6217 management area.

RATIONALE: The Oregon Marine Board Facilities Grant Program is a voluntary program that funds construction and maintenance of marina pumpouts and dump stations. However, the State has not identified an enforceable policy and mechanism to ensure implementation of these measures in cases where marina operators choose not to participate in the program. The DEQ may be able to ensure the installation or maintenance of sewage facilities in cases where water quality standards are being violated, but the State has not described how such a process would function.

D. FISH WASTE and BOAT CLEANING

FINDING: The State proposes to issue an NPDES general permit for fish waste management. When this permit is issued, this activity will be excluded from the State's coastal nonpoint program. Oregon has also provided adequate information to demonstrate that existing NPDES general permits address the boat cleaning management measure; these activities are therefore not subject to the State's coastal nonpoint program.

CONDITION: Within three years, Oregon will issue an NPDES general permit for fish waste management, which will apply to all facilities identified in the 6217(g) guidance.

RATIONALE: DEQ is developing an NPDES general permit for fish waste management that will apply to all facilities and activities covered by the fish waste management measure. Existing NPDES general permit 1700-J, Washwater Discharge Permit, applies to all facilities and activities covered by the boat cleaning management measure, and the Oregon 6217 nonpoint source program does not need to duplicate this coverage.

E. BOAT OPERATION

FINDING: Oregon's program does not include in its program management measures in conformity with the 6217(g) guidance but does include enforceable policies and mechanisms that can be used to ensure implementation.

CONDITION: Within three years, Oregon will include management measures in conformity with the 6217(g) guidance.

RATIONALE: Although the Marine Board does not currently implement this measure, the board is authorized to adopt regulations for the operation of boats in any waters of the State. These regulations may be directed toward a variety of purposes and include speed limits, no-wake zones, motor restrictions, and water skiing limits. Regulations have been enacted to protect the Columbia Slough and the Three Arches areas of the State. The State's program submittal describes plans to inventory eel grass beds and other important estuarine habitats and to assess potential for damage to these areas from boating activities. NOAA and EPA encourage the State to proceed with this plan to determine where boat operation is causing nonpoint source problems, and to enact appropriate restrictions if required.

F. PUBLIC EDUCATION

FINDING: Oregon's program submittal, at pages 181 through 183, contains a comprehensive set of public education management measures in conformity with the 6217 (g) guidance.

VI. HYDROMODIFICATION

FINDING: Oregon's program includes management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation of the first two elements of both the channelization/channel modification management measures, the second and third elements of the eroding streambanks and shorelines management measures, and the dams management measure for erosion and sediment control. The program does not include (1) a process to improve surface water quality and restore instream and riparian habitat through the operation and maintenance of existing modified channels; (2) a process to address existing nonpoint source pollution problems caused by eroding streambanks and shorelines; and (3) the dams management measures for chemical and pollutant control and

protection of surface water quality and instream and riparian habitat. In addition, exemptions in Oregon's removal-fill program may preclude the State from fully implementing the channelization, channel modification, and dams management measures.

CONDITION: Within two years, Oregon will develop processes to identify and implement opportunities to (1) improve the physical and chemical characteristics of surface waters and instream and riparian habitat in existing modified channels and (2) stabilize eroding streambanks or shorelines causing nonpoint problems that are not reviewed under existing authorities. Also within two years, Oregon will include in its program the dam management measures for chemical and pollutant control and protection of surface water quality and instream and riparian habitat in conformity with the (g) guidance. Within three years, Oregon will also either modify the exemptions to the removal-fill program or demonstrate that the exemptions do not preclude the State from fully implementing the management measures.

RATIONALE: The Oregon removal-fill law and statewide planning goal 17, and attendant administrative rules, along with several other State programs, implement most aspects of the channelization and channel modification management measures. Oregon requires permits for both new channelization and modification of existing channels, and the State has adopted specific practices benefitting water quality and habitat. Existing programs, however, do not include identification and implementation of opportunities to improve the physical and chemical characteristics of surface waters and restoration of instream and riparian habitat.

The Oregon removal-fill law and statewide planning goal 17, and their attendant administrative rules, address the second and third elements of the eroding streambanks and shorelines management measure. Projects to stabilize eroding streambanks and shorelines must give preference to nonstructural methods, and riparian vegetation must be maintained or restored. Local plans address the use and management of coastal shorelands and must inventory sedimentation sources and riparian vegetation resources that protect water quality. The State, however, does not have a process to address existing nonpoint source problems caused by streambank and shoreline erosion that do not arise for review under existing permit authorities.

The Oregon Water Resources Department partially implements the management measures for protecting water quality and habitat from the adverse effect of dams through the review and approval of applications to store and appropriate water. Current Oregon programs do not, however, address erosion and sediment control, chemical and pollutant control, and the effects of dam operation on surface water quality.

In addition, certain exemptions in the removal-fill program may preclude the State from fully implementing the hydromodification management measures. The State has recently amended the removal-fill program to revise exemptions for fills of 50 cubic yards or less. Although the new rules eliminate the 50 cubic yard exemption for "essential" salmonid habitat (defined as "habitat necessary to prevent the depletion of indigenous anadromous salmonid species during their life history stages of spawning and rearing" OAR-141-102-000, but limited to no more than 20 percent of the linear stream miles within a basin), they still exempt maintenance of existing agricultural activities and do not address the impact of fills in "non-essential" habitat areas. Other exemptions of concern include diversions permitted under other Oregon statutes; maintenance or reconstruction of dikes, dams, levees, tidegates, and drainage and irrigation ditches; and reservoirs and appropriations of water for dams less than ten feet in

height.

Oregon needs to examine the effects of these exemptions on surface water quality and the ability of coastal waters to support beneficial uses. Particular attention should be given to agricultural drainage activities. The State is encouraged to examine how such activities could be addressed under AWQMAPs developed under SB1010, discussed above in the section II, Agriculture pages 4-5.

VII. WETLANDS, RIPARIAN AREAS, AND VEGETATED TREATMENT SYSTEMS

FINDING: Oregon's program includes management measures in conformity with the 6217(g) guidance and enforceable policies and mechanisms to ensure implementation, except Oregon's program does not include management measures to provide for the protection of riparian areas or a means of promoting the restoration of riparian areas that provide nonpoint source abatement functions.

CONDITION: Within two years, Oregon will include in its program management measures in conformity with the 6217 (g) guidance to assure the protection of riparian areas. The State will also develop a process to promote the restoration of riparian areas in conformity with the 6217 (g) guidance.

RATIONALE: Oregon has several programs that provide for the protection and restoration of wetland areas. These include the Oregon removal-fill law and administrative rules; the 1989 Wetland Conservation Planning Law, which provides for a statewide wetlands inventory; ORS 196.678, which authorizes local jurisdictions to develop Wetland Conservation Plans (WCPs) (although few WCPs have been undertaken in coastal jurisdictions); statewide planning goal 16; and the development of narrative water quality standards for wetlands. These programs, however, are limited in the extent to which they address the protection and restoration of riparian areas. Vegetative treatment systems are considered by DEQ as an option for projects that require pretreatment.

The State's submittal describes other programs that have potential to address the protection and restoration of riparian areas. Oregon's Wetlands Conservation Strategy, currently under development, has potential to further strengthen Oregon restoration efforts by adopting procedural mitigation standards, and identifying wetland and riparian area restoration and creation opportunities.

Revisions to statewide planning goal 5 and the development of AWQMAPs under SB1010 also provide opportunities to address the protection and restoration of riparian areas; however, gaps exist in the potential coverage of these programs. Goal 5 contains a number of exemptions and limitations of concern (e.g., removal of riparian vegetation in areas zoned for farm or forest uses is not restricted under goal 5; roads are allowed in riparian areas under certain circumstances; non-fish bearing lakes and streams are not protected under the safe harbor provisions; and local jurisdictions not following the safe harbor provisions appear to have considerable leeway in determining "significant" resource areas and allowable conflicting uses); further, the State has not clearly outlined how SB1010 will address protection of riparian areas. Furthermore, riparian areas of forest lands being converted to other uses are not protected under existing programs. The State should address these issues as goal 5 and SB1010 are implemented.

VIII. ADMINISTRATIVE COORDINATION

FINDING: Oregon's program does not include mechanisms to improve coordination among State agencies and State and local officials in implementing the coastal nonpoint program.

CONDITION: Within one year, Oregon will establish a process for ensuring coordination among State and local agencies with a role in the implementation of the coastal nonpoint program.

RATIONALE: Section IV.J of the program submittal describes several existing mechanisms that could be used to coordinate State and local efforts to address nonpoint pollution of coastal waters. However, the submittal does not describe how these mechanisms will be used to coordinate efforts specifically to address the impact of nonpoint sources on coastal waters. In addition, the submittal indicates gaps in the program structure that will need to be addressed to better coordinate program implementation. For example, the State will need to clearly identify the lead agency for implementation of each management measures and establish procedures for coordination among State and local agencies having joint responsibility for a management measure (e.g., urban management measures for site development and road management). In addition, although not specifically identified in the State's program submission, GWEB is placing a high priority on the coordination of watershed based programs and may be an effective hub for coordinating certain interagency elements of Oregon's coastal nonpoint program.

IX. PUBLIC PARTICIPATION

FINDING: Oregon's program provides opportunities for public participation in the development and implementation of the coastal nonpoint program.

RATIONALE: Section IV.I of the State's program submittal describes activities that provide opportunities for public participation in the coastal nonpoint program. The State established three technical advisory groups to assist in the development of the agriculture, urban, and marina portions of the program. The State has also held public workshops and information meetings to describe the requirements of Section 6217 and to solicit public input regarding the program. The State intends to continue these activities as part of its efforts to modify or expand programs to address fully Section 6217 program requirements.

X. CRITICAL COASTAL AREAS, ADDITIONAL MANAGEMENT MEASURES AND TECHNICAL ASSISTANCE

FINDING: Oregon's program does not include processes for the identification of critical coastal areas or for the development and continuing revision of management measures applicable to critical coastal areas and cases where the 6217 (g) measures are fully implemented but water quality threats or impairments persist. The program does not describe efforts to provide technical assistance to local governments and the public for implementing additional management measures.

CONDITION: Within two years, Oregon will identify and begin applying additional management measures where water quality impairments and degradation of beneficial uses attributable to forestry exist despite implementation of the (g) measures. Within two years, Oregon will develop a process for the identification of critical coastal areas and a process for developing and revising management measures to be applied in critical coastal areas and in areas where necessary to attain and maintain water quality standards. Also within two years, the State will develop a program to provide technical assistance in the implementation of additional management measures.

RATIONALE: The State had not begun development of these

three programmatic elements at the time of program submission. The program submittal stated that Oregon intended to review the designation of special coastal areas under other programs and initiatives to assess whether such designations are also appropriate for the purposes of Section 6217. In addition, the State intends to develop a list of impaired waters potentially subject to additional management measures. The State submittal indicates that a program to provide technical assistance will be developed after the additional management measures have been identified. Technical assistance may be provided through the ongoing efforts under the 319 program. NOAA and EPA encourage the State to pursue these efforts.

The State recently engaged with NMFS in developing the Coastal Salmon Restoration Initiative (CSRI) to stabilize and restore native coastal salmon populations and prevent the need for a listing of coho salmon as threatened or endangered under the federal Endangered Species Act (ESA). NMFS worked closely with State agencies throughout this process, and has identified a number of concerns with existing state programs that relate to the ability of those programs to protect and maintain essential features of habitat for proposed or listed anadromous salmonids. In developing a process for the identification of critical coastal areas and for developing and revising additional management measures to be applied in critical coastal areas and in areas where necessary to attain and maintain water quality standards, the State needs to consider the issues raised by NMFS and how the additional management measures and critical coastal areas provisions of the coastal nonpoint program can interface with and enhance the CSRI.

As NMFS has described to the State in other documents, such areas might include (1) key spawning, rearing, and migratory habitats of listed anadromous salmonids; (2) existing highly productive, or potentially highly productive, subareas within watersheds; and (3) basins, subbasins, or watersheds that support multiple anadromous salmonid species or Evolutionarily Significant Units, and where restoration actions have a high potential to substantially improve productivity. Core areas for salmonid protection designated under the CSRI, important shellfish harvesting areas, or Natural and Conservation units of estuaries as designated under the Oregon Estuary Plan are examples of areas that might be considered critical coastal areas.

Within two years, Oregon will identify and begin applying additional management measures for forestry. As discussed in section III, above, Oregon's program includes management measures for forestry in conformity with the (g) guidance. Best available information, however, indicates existing water quality impairments attributable to forestry in certain areas, and that the existing FPRs are inadequate to restore water quality and fully support designated beneficial uses. The State has the authority, under OAR 629-635-120, to develop and adopt watershed specific rules for forestry in watersheds that have been designated as water quality limited or for watersheds containing threatened or endangered aquatic species. This authority would be useful in developing appropriate additional management measures for forestry; however, the State has not indicated whether or how it intends to implement this process.

EPA and NOAA have identified areas where existing practices under the FPA and FPR should be strengthened to attain water quality standards and fully support beneficial uses. These areas include protection of medium, small, and non-fish bearing streams, including intermittent streams; protection of areas at high risk for landslides; the ability of forest practices to address cumulative impacts of forestry activities; road density and maintenance, particularly on so-called "legacy" roads; and the

adequacy of stream buffers for application of certain chemicals.

Under existing State forest practices, medium, small, and non-fish bearing streams may be subject to loss of sediment retention capacity, increases in delivery of fine sediments, and increases in temperature due to loss of riparian vegetation. Another concern is provision of adequate long-term supplies of large woody debris in medium, small, and non-fish bearing streams, a shortage of which can result in decreased sediment storage in upstream tributaries, increased transport and deposition downstream, and overall adverse impacts to beneficial uses.

"Legacy forest roads" (that is, roads constructed and used prior to adoption of the FPA and not used and maintained since then) were not required to be treated and stabilized before closure. In some locations, this has resulted in significantly altered surface drainage, diversion of water from natural channels, and serious erosion or landslides. The ODF has proposed an expedited voluntary program to inventory and prioritize the upgrading of roads built prior to 1974 on industrial forest lands.

Regarding concerns with harvest activities in high risk landslide areas, evidence indicates that timber harvests on unstable, steep terrain can result in increases in landslide rates of approximately 200 to 400 percent. There are also indications that a relatively small proportion of potentially unstable ground in the Oregon Coast Range is responsible for the majority of landslides in Oregon.

Forest practice rules in effect at the time the Oregon 6217 program was submitted for approval did not require buffers for aerial application of herbicides or fertilizers for type N (non-fishbearing) streams. Such streams comprise significant portions of total stream length in the coastal zone. In January 1997, the ODF revised its rules governing application of chemicals. The new rules require a 60 foot buffer on type N streams for direct aerial application of fungicides and nonbiological insecticides except as approved by the State forester. The rules do not contain restrictions for aerial application of herbicides, which would appear to leave type N streams still at risk.

Cumulative effects of increased water temperature, sediment transport, road density, hydrological modification, and other factors can manifest themselves at a larger system scale and have adverse effects over an entire watershed or basin, rather than at a particular site or stream reach. The scope and pattern of these types of effects have recently become much more apparent through the use of watershed and landscape analysis. Cumulative effects are a concern not only within the forestry sector but across all land use or management measure categories within a watershed.

XI. MONITORING

FINDING: Oregon's program does not include a plan to assess over time the success of the management measures in reducing pollution loads and improving water quality as specified in Section 6217(g)(2)(F).

CONDITION: Within one year, Oregon will include in its program a plan that enables the State to assess over time the extent to which implementation of management measures is reducing pollution loads and improving water quality.

RATIONALE: In the program submittal, Oregon states that both implementation and effectiveness monitoring are needed. The State has also written that it will build on existing water quality monitoring efforts for Section 6217. Further, Oregon has stated that monitoring programs for tracking management measure implementation will be designed as implementation plans are developed by the various agencies. Oregon has not, however, indicated how it will use these programs to assess over time whether the management measures are reducing pollutant loads and improving water quality. Oregon is encouraged to coordinate appropriate aspects of its 6217 monitoring program with the State CSRI.

Oregon should include in its monitoring plan information regarding the number and location of monitoring stations, the types and frequency of water quality data being collected, and the analytic approaches that will be employed in conjunction with existing monitoring efforts to assess the success of management measures in achieving water quality objectives. The State should include some inexpensive tracking of management measure implementation in conjunction with water quality monitoring, as such information is needed to assess the success of management measures in achieving water quality objectives.

XII. STRATEGY AND EVALUATION FOR BACKUP AUTHORITIES

Within two years, Oregon will develop a strategy to implement the management measures for confined animal facilities exempt for the State definition of CAFOs throughout the 6217 management area. Within one year, the State will develop a strategy to implement the roads, highways, and bridges management measures throughout the 6217 management area. These strategies will include a description and schedule for the specific steps the State will take to ensure implementation of the management measures; describe how existing or new authorities can be used to ensure implementation where voluntary efforts are unsuccessful; and identify measurable results which, if achieved, will demonstrate the State's ability to achieve implementation of the management measures using the described approach.

Oregon will also develop and apply credible survey tools to demonstrate the ability of the State's approach to achieve implementation for these management measures. The use of credible assessment techniques is necessary in order for NOAA and EPA to evaluate, at the end of the three year period described in the March 16, 1995 guidance issued by NOAA and EPA entitled Flexibility for State Coastal Nonpoint Programs, whether the State's approach has been successful or whether new, more specific authorities will be needed.