

**VIRGINIA COASTAL NONPOINT PROGRAM
NOAA/EPA DECISIONS ON CONDITIONS OF APPROVAL**

FOREWORD

This document contains decisions on conditions of approval placed on the coastal nonpoint pollution control program submitted by the Commonwealth of Virginia pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA). The Findings for Virginia's coastal nonpoint program were issued on February 28, 1998. Since that time, Virginia has undertaken a number of actions to address conditions of approval on the coastal nonpoint program. Based on those actions and on materials Virginia has provided to document how the conditions have been met, the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) have reached a decision that Virginia has satisfied conditions of approval.

This document is organized in the same fashion as the Findings for Virginia's coastal nonpoint pollution control program. Where the original Findings included a condition, this document repeats the Finding and condition, includes the decision that the condition has been satisfied, and provides a rationale for the decision. For further understanding of terms in this document and the basis for these decisions, 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)

Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) (NOAA and EPA, October, 1998)

FINAL APPROVAL DECISION

NOAA and EPA find that the Commonwealth of Virginia has satisfied all conditions placed on approval of the Virginia coastal nonpoint pollution control program submitted to NOAA and EPA pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990. Therefore, Virginia's coastal nonpoint pollution control program meets all program requirements and is hereby fully approved, constituting a final approval decision for the program.

Please note that the approval decision made for the Virginia coastal nonpoint program does not relieve the Commonwealth of any requirements under the Endangered Species Act.

AGRICULTURE

CONDITIONS: Within two years, Virginia will include in its program a management measure in conformity with the 6217(g) management measure for irrigation water management. Within one year, Virginia will develop a strategy (in accordance with Section XIV, page 17 of the program findings) to ensure implementation of the agricultural management measures on: (1) areas within Tidewater, Virginia that are not included in Chesapeake Bay Preservation Areas; and (2) cases within the Chesapeake Bay Preservation Area where an agricultural producer is not required to implement an approved soil and water quality conservation plan.

DECISION: Virginia has satisfied these conditions.

RATIONALE: Virginia has addressed the irrigation water management condition by updating an irrigation best management practices (BMP) manual and conducting an outreach effort to affected and interested parties. More specifically, Virginia revised and updated a 1983 manual (the Virginia Cooperative Extension's *BMPs For Irrigation*) to be consistent with the (g) measures. The new BMP brochure defines irrigation management issues and explains BMP implementation. Virginia also developed a detailed, site-specific evaluation procedure, which was published in the Farmstead Assessment System (Farm*A*Syst) format (i.e., fact sheet/worksheet), and a new self-assessment version is in progress. In further support of the effort, the state developed an irrigation management educational initiative, which included a training notebook and workshop. A series of one-day workshops were held throughout the 6217 management area. Virginia is continuing outreach and education activities with informational booths at state events like the Ag-Expo, as well as "Phase II" field demonstrations.

With regard to the implementation of the agricultural management measure throughout the 6217 management area, Virginia has now had four years to demonstrate implementation of its Agricultural Stewardship Act (ASA). The Commonwealth has also developed additional authorities for erosion and sediment control, confined animal feeding operations, nutrient management, pesticide management, and grazing management, which fill the gaps in the coverage of the Chesapeake Bay Preservation Act (CBPA) noted in the condition. Supplemental materials provided by Virginia to NOAA and EPA document this progress.

Over the last four years NOAA and EPA have assessed the implementation of the ASA and have found it to be an adequate back-up authority. As noted in the original Findings, the ASA established a complaint-driven "Bad Actor" system to ensure implementation of management plans and BMPs consistent with the (g) measures. Any persons (including third party state agency officials such as Department of Environmental Quality (DEQ) field officers) can file a complaint with the Virginia Department of Agriculture and Consumer Services (VDACS). VDACS is required to investigate the complaints, and if they find that an agricultural activity is creating or will create pollution, they will notify the owner or operator that they have 60 days to submit an agricultural stewardship plan. The plan must include measures that reflect the pollutant reduction achievable through the application of the best available nonpoint pollution control methods, and include measures described in the Virginia Agricultural BMP manual and the Natural Resource Conservation Services's *Field Office Technical Guide*, which are

consistent with the (g) measures. A 1999 VDACS report on the implementation of the ASA indicates that complaints have been submitted; complaints have been investigated; investigations have uncovered situations causing pollution; agricultural stewardship plans have been developed; and complaints “have been resolved or are progressing to the satisfaction of VDACS” (only one case has been contested by an operator).

Virginia has also issued regulations (62.1-44.15 and 62.1-44.17:1) that amend the Pollution Abatement Permit Program, and establish a general permit program for confined animal feeding operations (CAFOs). CAFOs are defined as confined feeding operations with more than 300 animal units. As part of the general permit DEQ inspects all CAFOs annually; inspectors must be certified under nutrient management training and certification programs established in 9 VAC 10.1-104.2. Under the permit a CAFO shall: have a liquid manure collection system designed and operated to prevent any discharge to state waters from a 25-year 24-hour storm or less; provide adequate waste storage capacity; implement an approved nutrient management plan; maintain adequate buffer zones; be monitored appropriately; require that new earthen storage facilities include a properly designed liner; prohibit waste storage facilities in floodplains; maintain one foot of freeboard on all facilities; and maintain equipment in good working order.

In January 1999, Virginia passed legislation for a Poultry Waste Management Program (through an amendment to the CAFO regulations) for poultry operations and processors (any person owning or operating a confined poultry feeding operation). The program requires the development and implementation of nutrient management plans that require proper storage, treatment and management of poultry wastes, including dry litter; and limit accumulation of excess nutrients in soils and leaching or discharge of nutrients into state waters. The program also provides for waste tracking and accounting; ensures proper storage and handling of waste consistent with the nutrient management plans; provides for general permits for confined poultry operations; required the State water control board to develop regulations, which took effect December 1, 2000; and gives operators until October 1, 2001 to be in full compliance with this section. In addition; the program required poultry processor operators (major companies) to file a plan by January 1, 2000 to: provide technical assistance to poultry growers with whom it contracts on proper management and storage of poultry waste in compliance with BMPs; provide educational programs on poultry waste nutrient management; provide a toll-free hotline and advertising program to assist poultry growers with excess poultry waste to identify areas in need of excess waste; participate in the development of a poultry waste transportation and alternative use grant program; and conduct research on reduction of phosphorous in poultry waste.

Finally, Virginia has adopted programs to provide direct funding or tax breaks to agricultural operators to provide further incentives to implement management measures and BMPs. Since 1997 the Virginia Water Quality Improvement Act, §10.1-2128, has provided funds for the acquisition of conservation easements related to the protection of water quality and stream buffers; conservation planning and design assistance to develop nutrient management plans for agricultural operations; and implementation of cost-effective nutrient reduction practices. The Agricultural BMP Tax Credit Program establishes a program to provide tax relief for the implementation of BMPs for any individual or corporation who has in place a soil conservation plan approved by a local Soil and Water Conservation District. The Virginia Nutrient and

Pesticide Application Equipment Tax Credit allows for a 25% tax credit to be applied to qualifying purchases of nutrient and pesticide application equipment.

FORESTRY

CONDITIONS: Within three years, Virginia will demonstrate its ability to achieve implementation of the forestry management measures using the approach described in its coastal nonpoint program. Within one year, Virginia will identify measurable results to be achieved during this three year time frame.

DECISION: Virginia has satisfied these conditions.

RATIONALE: Virginia has identified measurable results for implementation of the forestry management measures and has submitted additional information on the implementation of the Silvicultural Water Quality Law, which have demonstrated Virginia's ability to fully implement the (g) measures.

The Silvicultural Water Quality Law was adopted shortly before Virginia submitted its program to NOAA and EPA in 1995. Since then, Virginia has submitted the *Forestry Best Management Practices For Water Quality Technical Guide*; the *Department of Forestry Harvest Inspection and Law Enforcement Procedures*; and copies of amendments to the Silvicultural Act at §10.1-1181.2 (H); all of which provide more detail on the implementation of the Silvicultural Act.

The amendments to the Code of Virginia (§10.1-1181.2(H)) now include appropriate notification requirements. Both pre-harvest and post-harvest inspections are conducted for each forestry operation in the 6217 management area greater than 10 acres, as well as other known harvest operations on lands less than 10 acres. For each operation, inspectors are required to complete a Harvest Inspection Form, which includes information on pre-harvest planning; presence of a stream, ditch or channel on or adjacent to the property; designation and maintenance of a streamside management zone; and other specifications in the *Technical Guide*. Inspectors indicate on the form whether the appropriate BMPs for haul roads, skid trails, improper streamside management zones (SMZs), landings, and stream crossings as specified in the *Technical Guide* are in place and if there are any deficiencies noted regarding those BMPs. In addition, inspectors are required to evaluate whether haul roads, skid trails, improper SMZs, landings, stream crossings, or any other site specific condition, are causing or may cause pollution by sediment deposition. These new specific enforcement criteria appear as questions 16-21 on Form 30. Under section 10.1-1181.2(B) of this law, the State Forester has the authority to issue special orders (e.g., stop-work orders, corrective actions, and assessment of civil penalties for non-compliance) against any owner or operator conducting or allowing the conduct of any silvicultural activity in a manner which is causing or likely to cause pollution. The order will require operators to cease harvesting operations and implement specified corrective measures within a stated period of time.

Using information from the inspection forms, the Virginia Department of Forestry (DOF) has determined BMP implementation and effectiveness rates for forestry operations. The compliance rates indicate what percentage of operations are implementing acceptable levels of

BMPs and are implementing them correctly. DOF also assesses water quality impacts from sites, regardless of what level of BMPs are in place. In this case, “compliance” is the overall percentage of sites with no water quality impact (as defined by state law). The target standard for each of these measures is 90% compliance. In general, for the last few years compliance rates have been at 90% or above for BMP implementation and slightly below 90% for the number of sites with no impacts.

NEW DEVELOPMENT

CONDITION: Within three years, Virginia will include in its program management measures and enforceable policies and mechanisms to reduce total suspended solids in conformity with the 6217(g) guidance outside of Chesapeake Bay Preservation Areas but within the 6217 management area.

DECISION: Virginia has satisfied this condition.

RATIONALE: As noted in Virginia’ 1995 Program submittal, the land area in Tidewater, Virginia included within Chesapeake Bay Preservation Areas represents approximately 80% of the total 6217 management area. The remaining 20% of land area referred to in the condition above is comprised of portions of the cities of Virginia Beach, Chesapeake, and Suffolk; and the counties of Accomack, Isle of Wight, Surry, Prince George and Northampton. Based on supplemental information provided by Virginia, of the 46 jurisdictions statutorily defined as Tidewater, Virginia, 42 are subject to permitting under Phase I and/or Phase II of the National Pollutant Discharge Elimination System (NPDES) stormwater permitting program, or are subject to watershed/jurisdiction-wide stormwater performance criteria under the CBPA. According to the Commonwealth, the remaining 4 jurisdictions account for only 12 percent of the total land area within Tidewater. In accordance with the Administrative Changes issued by NOAA and EPA in October 1998, Virginia has provided existing and newly developed information to demonstrate that runoff from new development outside of areas not addressed by NPDES and/or the CBPA is not, and is not reasonably expected to become, significant.

In addition to providing a rationale for showing that there are very few areas within Tidewater not subject to existing regulatory programs, Virginia has also provided information on other programs that are working with local communities (including the eight mentioned above) to ensure they have the tools necessary to address new development. Virginia’s Stormwater Management Regulations, described in the original Findings, continue to provide a basis for adoption of local stormwater management programs in accordance with state criteria. Virginia Beach has adopted an ordinance in accordance with the State regulations. Further, there is currently a regional effort underway to address stormwater that includes Virginia Beach, Chesapeake, Isle of Wight, Surry and Suffolk. In addition, as part of the Chesapeake Bay Program, Virginia has developed strategies for tributaries to the Chesapeake Bay, including targets for reduction of nutrients and suspended solids. BMPs identified in the tributary strategies reflect best available economically achievable technology. Finally, though not part of watersheds that drain to the coastal waters of Virginia, the Commonwealth has initiated efforts in the Albemarle-Pamlico Sound watersheds to improve water quality as part of the Albemarle-Pamlico National Estuary Program.

EXISTING DEVELOPMENT

CONDITION: Within three years, Virginia will include in its program management measures in conformity with the 6217(g) guidance for existing development by identifying priority watershed pollutant reduction opportunities and a schedule for implementing appropriate controls.

DECISION: Virginia has satisfied this condition.

RATIONALE: Virginia submitted additional information regarding the Commonwealth's approach to addressing stormwater runoff from existing development, including information on the Nonpoint Source Pollution Watershed Assessment reporting process and information on the Tributary Strategy Program. These documents identify a process to identify pollutant reduction opportunities for existing urban sources and identify a schedule for implementation of measures tied to new, dedicated sources of funding for implementing nonpoint source (NPS) measures. Virginia assesses all watersheds (approximately 100) in the 6217 management area every two years through the Nonpoint Source Pollution Water Quality Assessment reporting process, conducted pursuant to Section 319 of the Clean Water Act as well as Virginia's Water Quality Improvement Act. This process incorporates information on NPS loadings from urban sources, among others, and gives each watershed a ranking (H-M-L) based on pollution potential.

To promote implementation of management measures within identified high priority watersheds, the Department of Conservation and Recreation (DCR) has incorporated geographic priorities into the competitive grant process when making available Water Quality Improvement Fund (WQIF) monies for nonpoint source pollution control projects. Projects that are located in high or medium priority watersheds or address a known impairment, among other factors, receive greater consideration for funding. Goals for BMP implementation, and corresponding targets for nutrient reduction are established as part of Tributary Strategy development. Although 2010 is usually the only date given by when reductions should be achieved, however, the Strategies do call for interim evaluations (2002, 2005) to assess progress. DEQ and DCR anticipate that if expected reductions are not being achieved, that steps would be taken to ensure that additional BMPs or other measures are implemented.

In addition to these assessments, the Tributary Strategy process has identified specific activities that can be undertaken to meet the Chesapeake Bay Program's pollutant reduction goals for nutrients and sediment. These would include local or regional urban stormwater pollution reduction actions.

CONSTRUCTION SITE CHEMICAL CONTROL

CONDITION: Within three years, Virginia will include in its program management measures in conformity with the 6217(g) guidance for construction site chemical control.

DECISION: Virginia has satisfied this condition

RATIONALE: The DCR completed and submitted a brochure describing preferred construction site chemical control BMPs for limiting the application, generation and migration of toxic substances on site and ensuring proper storage and disposal of toxic materials and application of nutrients at appropriate rates, which are consistent with the (g) measures. In addition, Virginia has undertaken an outreach effort to broaden distribution of the brochure. It is noteworthy that Virginia's brochure has been distributed nationally and has become a model for a number of other states' efforts to meet this measure.

NEW AND OPERATING OSDS

CONDITIONS: Within three years, Virginia will include in its program management measures for [1] adequate separation distance between new on-site sewage disposal systems (OSDS) and ground water closely hydrologically connected to surface water; and [2] limiting nitrogen loadings from new and operating OSDS near nitrogen limited surface waters in conformity with the 6217(g) guidance.

DECISION: Virginia has satisfied these conditions.

RATIONALE: On July 1, 2000, revisions to the Virginia Department of Health's (VDH) Sewage Handling and Disposal Regulations became effective. The new regulations require an 18" separation distance between the bottom of an OSDS drain field and the water table. Previously, there was no established separation distance. This new regulation is a significant improvement from the previous regulations and represents an adequate separation distance for the 6217 management area, consistent with the (g) guidance.

With regard to abating nitrogen loadings to surface waters from OSDS where nitrogen is a cause of surface water degradation, Virginia intends to target efforts, based on the results of ongoing studies, to identify economically achievable options in high priority watersheds where there are nonpoint source pollution impairments from nitrogen. For example, the Tributary Strategy documents target nonpoint source pollution reductions throughout the coastal zone for nutrients and sediment. The BMPs identified in these documents are based on water quality modeling efforts of the Chesapeake Bay Program and reflect the limit of technology and economic feasibility of BMP implementation. The final versions of these documents were made available in February 2000. These documents identify potential impacts from septic systems. For example, the York River Tributary Strategy targets the pumpout of more than 6,000 systems for a reduction of approximately 2,000 pounds of nitrogen and the connection of 450 systems for a reduction of approximately 1,800 pounds of nitrogen.

To further reduce the potential for pollutants to enter a waterway, the VDH requires detailed site and septic system information as part of the permit process. Specifically, VDH requires detailed plans of the septic system to be constructed and physical features including, marshes and swamps, seasonal water table, slope, drainage ways, fill material, sink holes, floodplains, alluvial and colluvial deposits, and soil type. Each of these site characteristics place restrictions on the type of septic system that can be placed on the site. Certain areas, such as wetlands, prohibit the placement of septic systems. The CBPA also prohibits the placement of new OSDS within the

100 foot buffer. As a result, development of certain properties that require installation of a septic system will only receive a permit when the effluent is subject to pretreatment.

Additional pollutant reductions are achieved by the repair and replacement of failing systems. In the past few years, the DCR has used a portion of available NPS grant funds to address septic system repair and replacement issues. These available funds are provided through a competitive grant process.

Through its inspection and enforcement authority VDH can also require the repair or replacement of a failing system. Recent changes to 12VAC5-610-817 are intended to facilitate conducting inspections:

“In order to encourage proper maintenance and reduce the likelihood of solids being discharged to an absorption field, all septic tanks constructed after July 1, 2000, shall be designed to allow for routine inspection without being uncovered (i.e., have an inspection port as provided for in subsection B of this section) or have an effluent filter as provided for in subsection C of this section, or be designed for reduced maintenance as provided for in subsection D of this section.”

The enforcement violation order can require the acquisition or use of additional land, equipment, supplies or personnel to assure the violation does not recur, or any other corrective action deemed necessary to comply with the regulations. If necessary and appropriate, VDH can require pretreatment.

ROADS, HIGHWAYS, AND BRIDGES

CONDITION: Within three years, Virginia will include in its program management measures for road, highway and bridge runoff systems in conformity with the 6217(g) guidance and enforceable policies and mechanisms for roads that are not within the Chesapeake Bay Preservation Areas.

DECISION: Virginia has satisfied these conditions.

RATIONALE: Virginia has identified a process to seek out opportunities to address runoff from roads, highways, and bridges, in conformity with the (g) guidance. Since the original program submittal in 1995, Virginia has improved its process for addressing stormwater runoff problems. The Virginia Department of Transportation (VDOT) submits to DCR an annual stormwater plan (Annual Plan), which identifies how VDOT will comply with the state Stormwater Management Law (SML) and Regulations. All VDOT projects must comply with the SML and Regulations unless all three of the following criteria are met: 1. less than one acre of land will be disturbed per outfall or watershed, 2. increases in peak flow will be insignificant, and 3. there are no existing or anticipated flooding or erosion problems downstream of the discharge point. If these three criteria are not met, then the project must comply with the Annual Plan. Thus, during the design phase for road projects, VDOT and/or the consultant evaluates whether installation of runoff system BMPs are required. If required BMPs are selected and

implemented consistent with the practices described in the Stormwater Management Handbook and the Annual Plan.

DCR has enhanced their ability to address stormwater issues through the establishment of nine watershed offices. Each office houses Urban Program staff specifically dedicated to erosion and sediment control (ESC) and stormwater management (SWM) programs. Watershed office Urban Program staff conduct random audits of VDOT projects to ensure compliance with the SML and regulations and the Annual Plan. In addition, staff respond to citizen or local government complaints related to VDOT (and non-VDOT) projects. This typically includes site visits and corrective action agreements coordinated between DCR staff, VDOT Environmental Monitors, and the contractor(s).

Virginia has taken other steps to enhance their ability to address stormwater runoff from roads. All contractors working within VDOT right-of-way are required by VDOT to have a representative on-site at all times who has successfully completed the DCR Contractor Training course. Additionally, VDOT Environmental Monitors are required by VDOT to successfully complete the DCR Training and Certification course for Inspectors program. Finally, VDOT and DCR staff participate in quarterly meetings to enhance the level of compliance and implementation of the ESC and SWM programs.

With regard to local roads (i.e., municipal or private roads not under the control of VDOT) outside of the Chesapeake Bay Preservation Area, the explanation of the area and the extent of management coverage is quite similar to that given for the condition for New Development, above, and represents only about 12 percent of the total land area. CBPA performance standards, state erosion and sediment control requirements, NPDES Phase I and Phase II, and voluntary local stormwater management, can all apply in this area. Moreover, the number of new roads being constructed that are not subject to VDOT requirements are very few, and in fact many developers construct new subdivision roads pursuant to VDOT standards in anticipation of their being accepted into the state system.

MARINAS AND RECREATIONAL BOATING

CONDITION: Within three years, Virginia will include in its program management measures in conformity with the 6217(g) guidance for stormwater runoff, fish waste, and boat operation.

DECISION: Virginia has satisfied these conditions.

RATIONALE: DCR, together with the Virginia Coastal Program, Virginia Sea Grant, and other state agency and industry partners, has developed a “Clean Marina Guidebook” that includes, among others practices in conformity with the stormwater runoff and fish waste management measures, consistent with the (g) guidance. This comprehensive manual, developed for marina owners and operators as well as recreational boaters, discusses specific practices needed to meet the measures. To help promote the distribution of the Guidebook and implementation of its practices, Virginia has developed a complementary Clean Marina Program. Concurrent with outreach at boat shows and similar events, Virginia plans to conduct technical workshops to introduce marina owners and operators to the Guidebook and the Clean

Marina Program. Marina owners and operators will be encouraged to voluntarily adopt the measures in the Guidebook at their facilities; those that implement a significant number can receive, after a satisfactory site evaluation, a state-designated certification as a Virginia Clean Marina. In tandem, the Guidebook and Program serve to satisfy the condition.

Virginia has included several other state program elements into the Clean Marina effort, including pollution prevention, environmental education and environmental compliance cost-share funding. In addition, Virginia is coordinating this effort with other Chesapeake Bay state efforts to address marina and recreational boating issues.

With respect to boat operation, Virginia has submitted revisions to §29.1-744 of the Code of Virginia, which establish authority and criteria for “no-wake zones.” The modifications authorize counties and municipalities to “establish no-wake zones to protect public safety, and prevent erosion to adjacent properties” (emphasis added). The original Findings indicated that the previously existing no-wake zones were established for public safety and not habitat protection purposes. Because the new provision addresses erosion to adjacent properties, which would include fringe marsh and riparian habitat areas, NOAA and EPA have determined that the revised regulations meet the measure.

HYDROMODIFICATION

CONDITION: Within three years, Virginia will include in its program management measures in conformity with the 6217(g) guidance for [1] surface water quality and instream and riparian habitat (through operation and maintenance of existing modified channels), [2] the operation of dams, [3] chemical control at dams, and [4] streambank or shoreline erosion. Within one year, Virginia will develop a strategy (in accordance with Section XIV, page 17) to ensure implementation of the management measures to protect surface water quality and instream and riparian habitat from the effects of dams.

DECISION: Virginia has satisfied these conditions.

RATIONALE: Virginia has undertaken a 3-phase process to identify opportunities to improve surface water quality and instream and riparian habitat through operation and maintenance of existing modified channels. The state is using this process to evaluate impacts to water quality and instream and riparian habitat from dams and other types of channelization projects. Phase I developed a comprehensive database of dams in the 6217 management area; analyzed a statistically representative sample to identify and assess impacts to habitat from dams; and presented recommendations for resolving these problems through the riparian buffer initiative, the Conservation Reserve Enhancement Program, and Water Quality Improvement Act cost share funding. Phases II and III will utilize a similar process to Phase I to study the effects of other types of channelization besides dams as well as dredging projects. [1, 2]

With regard to chemical control at dams, as discussed in the Construction Site Chemical Control condition above, Virginia has developed a BMP brochure consistent with the (g) guidance and is conducting outreach. [3]

Virginia will rely on the periodic review of local comprehensive plans by the Chesapeake Bay Local Assistance Department (CBLAD), in which localities are required to include information regarding shoreline erosion problems and the location of erosion control structures, to address streambank and shoreline erosion. Among other issues addressed by the plans, localities are supposed to consider potential nonpoint source impacts associated with erosion. Where problems are identified (during plan review, or through citizen requests) technical assistance is provided by the CBLAD. The Local Technical Assistance Manual contains an entire chapter on erosion control. In addition, state law mandated the establishment of a Shoreline Erosion Advisory Service (SEAS). The objective of this program is to develop Shoreline Situation Reports that identify the physical features of a given shoreline. Contingent on funding, inventories are conducted at regular intervals, concurrent with requirements for updating of local comprehensive plans. SEAS also provides technical assistance to landowners to achieve environmentally sound erosion control. [4]

TECHNICAL ASSISTANCE

CONDITION: Within two years, the Commonwealth will include in its program technical assistance activities to address marina development and operation.

DECISION: Virginia has satisfied this condition.

RATIONALE: As noted in the conditions for marinas and recreational boating, above, Virginia has developed a Clean Marina Guidebook. To help promote the distribution of the Guidebook and implementation of its practices, Virginia has developed a complementary Clean Marina Program that was initiated in 1999. Following outreach at boat shows and similar events, Virginia plans to conduct workshops to introduce marina owners and operators to the Guidebook and the Clean Marina Program. Marina owners and operators will be encouraged to voluntarily adopt the measures in the Guidebook at their facilities; those that implement a significant number can receive, after a satisfactory site inspection, a state-designated certification as a Virginia Clean Marina.

As part of the Clean Marina Program, the Virginia Coastal NPS Program and the Virginia Coastal Program have partnered with the Virginia Sea Grant to develop a marina technical advisory service. This service will function as the primary source of interaction with marina operators and recreational boaters to address and implement the management measures in accordance with the (g) guidance.

MONITORING

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

DECISION: Virginia has satisfied this condition.

RATIONALE: Since Virginia's conditional approval, several new laws and programs have been put into place for monitoring water quality and tracking BMP implementation. DCR and DEQ share responsibility for monitoring water quality and the tracking of implementation activities.

In 1997, the Virginia legislature passed the Water Quality Improvement Act and the Water Quality Monitoring, Information, and Restoration Act (WQMIRA). These two laws mandated that the Commonwealth assess and report on the impacts of NPS, and the implementation and effectiveness of state NPS programs in leading to improvements in water quality. In particular, WQMIRA established state monitoring and reporting requirements.

BMP implementation is tracked by the administering agencies, in accordance with the goals and objectives of the specific programs. For example: DCR's Agriculture Cost-Share program tracks the implementation of agriculture BMPs; DOF tracks implementation of forestry BMPs through its site inspection and BMP implementation program; and the Marina Technical Advisory Service will track marina BMPs as the Clean Marina Program is implemented. DCR also tracks BMP implementation that occurs through projects funded by the WQIF and Section 319 programs. The conditions of state water bodies will be determined through monitoring results collected by the DEQ and presented in the biennial 305(b) report and the Nonpoint Source Pollution Watershed Assessment Report.