

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

FOREWORD

This document contains the basis for the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency's (EPA) decision to fully approve New York State's Coastal Nonpoint Pollution Control Program (coastal nonpoint program). It discusses how the State has met each of the conditions of approval placed on the coastal nonpoint program submitted by New York pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990.

The Findings for New York's coastal nonpoint program were issued on November 18, 1997. Since that time, New York has undertaken a number of actions to address conditions of approval on its coastal nonpoint program. Based on those actions and on materials the State has provided to document how the conditions have been met, NOAA and EPA find that New York has satisfied all conditions of approval.

This document is organized in the same fashion as the Findings for New York's coastal nonpoint program. Where the original Findings included a condition, this document repeats the condition, and discusses how the condition has been satisfied. 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); and *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990* (NOAA and EPA, October 1998).

FINAL APPROVAL DECISION

NOAA and EPA find that the State of New York has satisfied all conditions placed on approval of the New York coastal nonpoint pollution control program submitted to NOAA and EPA pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization of 1990. Therefore, New York's coastal nonpoint 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 New York coastal nonpoint program does not relieve the State of any requirements under the Endangered Species Act.

AGRICULTURE

CONDITIONS: Within two years, New York will modify its program to ensure the provision of storage and management of manure, facility wastewater, and facility runoff consistent with the management measures for large and small confined animal facilities. Also, within one year, New York will develop a strategy to implement the agricultural management measures throughout the Section 6217 management area (In accordance with Section XIV, page 13).

DECISION: New York has met these conditions.

RATIONALE: Since its original coastal nonpoint program submission, New York has adopted two programs that address confined animal facility operations: a State Pollutant Discharge Elimination System (SPDES) General Permit, and the Agricultural Environmental Management (AEM) Program. On July 1, 1999, the New York State Department of Environmental Conservation (NYSDEC) issued the Concentrated Animal Feeding Operation (CAFO) SPDES General Permit. Prior to issuing this permit, the State had relied entirely upon voluntary programs augmented by existing legal enforcement authority in more severe cases to address water quality issues. The new CAFO General Permit applies to (1) any animal feeding operation that exceeds 1,000 animal units; and (2) animal feeding operations greater than 300 animal units and less than 1,000 animal units with the potential to discharge via a man-made conveyance. All CAFOs covered by the General Permit are required to have a certified and qualified AEM Planner certify a site specific Agricultural Waste Management Plan that is developed in accordance with the Natural Resources Conservation Service (NRCS) Conservation Practice Standard (312—NY Waste Management System). In addition, the confinement area must be designed to prevent discharge of wastewater, except in the instance of the 25 year-24 hour storm (the EPA technology based standard). NOAA and EPA have reviewed the NRCS standards applied by New York, and find that they are in compliance with the Section 6217 management measures. Also, by applying for coverage under this General Permit, farmers are given a form of legal protection against water quality lawsuits.

Concurrent with the development of the General Permit, the Department of Agriculture and Markets and other State agencies developed a comprehensive, site specific, “tiered” process to evaluate environmental risks on farms and recommend Best Management Practices (BMPs) to protect water quality under the AEM Program. This tiered process is called the “Principles and Water Quality Protection Standards” and is specified in the *Agricultural Environmental Management Framework and Resource Guide*. If an Animal Feeding Operation (AFO) has less than 300 animal units, it cannot file for coverage under the General Permit, and NYSDEC strongly recommends that the farmer pursue the voluntary tiered evaluation process. The determination of whether CAFO operations between 300 and 999 animal units are potential discharge sites is left to the CAFO owner or operator. However, if a discharge incident occurs as a result of a 25 year-24 hour storm or less, or if a complaint is made that raises concern about compliance with the Environmental Conservation Law (ECL), then a claim of no potential to discharge would

be closely examined should the State conduct an investigation. Therefore, mid-size CAFO operators that do not wish to participate in the General Permit are also encouraged to utilize the AEM tiered evaluation process in order to demonstrate that they followed a state sanctioned approach for reaching this determination.

The AEM Program is a voluntary, statewide program of technical assistance, cost sharing and education for the development and implementation of agricultural plans that prevent nonpoint source pollution from entering New York's waterways. Essentially, it is a program that focuses on 'high risks,' working through a series of questionnaires and worksheets to determine which activities are likely to be the greatest risk of pollution. A state-certified AEM planner assists in developing either a BMP Implementation Plan or a Whole Farm Plan for an operation. While the program is voluntary, Governor Pataki signed the AEM Program into law on August 24, 2000, which demonstrates New York's commitment to this approach. In addition, the AEM Program includes a strong monitoring component. As part of developing the farm plans, farmers will document the current BMPs they have in place. Tier V of the AEM is plan and program evaluation. The farm planning team follow-up consists of monitoring the effectiveness and revisions to the plan, and providing continuing education. There is on-going evaluation of the watersheds statewide, documenting the number of farms participating in the AEM Program, the practices that are being implemented, and overall water quality improvement. The State has demonstrated strong financial backing for the AEM Program through its Environmental Protection Fund (EPF) grants, and previously, its Clean Water/Clean Air Bond Act grants. "Agricultural Nonpoint Source Abatement and Control" is a separate project funding category, and preference is given to projects located within priority waterbodies identified by the Commissioner of the NYSDEC.

These two programs provide excellent tools for addressing the management measures for facility wastewater and runoff from confined animal facility management. New York's SPDES permit only applies to confined animal facility operations that exceed 1,000 head or animal units, or between 300 and 1,000 head that qualify for a SPDES general permit due to their potential to discharge via a man-made conveyance. Based on the Section 6217 program guidance, these operations are exempt from the Section 6217 requirements, since they are permitted as "point sources" under SPDES. The AEM Program covers AFOs (those operations of 300-999 head not covered by a SPDES general permit, and farms of less than 300 head) and meets the technical aspects of the management measures. Therefore, NOAA and EPA find that the State has met the management measure element of the condition.

With respect to the enforceable policy element of this condition, New York provided a legal opinion demonstrating that NYSDEC possesses the authority to prevent agricultural sources of nonpoint pollution and require management measure implementation as necessary. New York provided case law demonstrating that the State has the ability, and has used its authority under Article 17 of the ECL to bring enforcement actions against farmers in cases of violation of water quality standards. The State also provided a Technical and Operation Guidance Series (5.1.3) on the Investigation of Agricultural Sources of Water Pollution, which establishes the State's objectives and procedures for

the investigation of agricultural sources of water pollution. In the guidance, both nonpoint and point sources are recognized. The overall objective is to obtain voluntary compliance from the farmer to abate the condition, including the implementation of current management measure practices, as listed in the *New York State Agricultural Management Practices Catalogue*. However, if voluntary compliance is not forthcoming, the guidance states that “formal enforcement actions...usually involve the use of consent orders that address corrective action schedules and penalty considerations.” Through the combination of the State’s adoption of the AEM Program, which is a strong program of technical and financial assistance, monitoring, the State’s legal opinion, and additional information provided clarifying the State’s use of the Environmental Conservation Law (ECL) as a backup enforceable policy, New York has met the enforcement element of the condition.

URBAN

NEW DEVELOPMENT, SITE DEVELOPMENT, CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL, AND CONSTRUCTION SITE CHEMICAL CONTROL

CONDITIONS: Within three years, New York will revise, as proposed, the State Uniform Fire Prevention and Building Code (UFP&BC) to include (1) performance standards that implement the 80 percent total suspended solids (TSS) reduction requirement of the new development management measure; (2) the specific elements of the site development management measure; (3) requirements for approved erosion and sediment control plans in conformity with the construction site erosion and sediment control management measure for all activities covered under the UFP&BC; and (4) construction site chemical control practices in conformity with the construction site chemical control management measure as a component of all building permits issued under UFP&BC authority. If the proposed revisions to the UFP&BC are not enacted, the State will implement an alternative approach resulting in inclusion in its program management measures in conformity with the Section 6217(g) guidance of enforceable policies, and mechanisms to ensure implementation of the new development, site development, construction site erosion and sediment control, and construction site chemical control management measures.

FINDING: New York has met these conditions.

RATIONALE: In the original findings for these management measures, it was determined that while New York has a number of well-crafted programs that address the new development and site development management measures, including the State’s Technical Operation Guidance Series (TOGS) under the State Environmental Quality Review Act (SEQRA), these programs are limited to specific areas or specific types of projects. Issues exist with the uniformity of coverage throughout the coastal nonpoint area, as well as the level of TSS that could be achieved under the existing program. Since the State was unable to obtain revisions to the State UFP&BC that may have addressed these conditions, New York has now provided a legal opinion that the

NYSDEC, through the Environmental Conservation Law and its regulations, has the ability to prevent, abate, and control urban activities that create or threaten to create nonpoint source pollution. Specifically, ECL Section 17-0501 and the regulations found in the New York Code, Rules, and Regulations (NYCRR) at 6 NYCRR Section 701.1 make it a violation for any person to discharge to the waters of the State, either directly or indirectly, any organic or inorganic matter that causes or contributes to a violation of water quality standards. This statute provides NYSDEC with the authority to use its back-up water quality laws and regulations to require polluters causing a contravention of water quality standards to take reasonable action to remedy such violations. The attorney for the NYSDEC has asserted that this authority further enables NYSDEC to require polluters to implement Section 6217(g) urban runoff measures and practices. ECL Section 17-0903(2) provides NYSDEC with the administrative jurisdiction to abate and prevent the pollution of the waters of the State, in the manner provided therein. This statute applies to both point and nonpoint source discharges. It provides NYSDEC with extensive back-up authority to regulate nonpoint source (NPS) pollution. ECL Section 71-1929 establishes the penalties for any violations of Article 17. ECL Section 3-0301(i) states “[i]t is the responsibility of the NYSDEC, and the Commissioner shall have the power to prevent and abate all water pollution.” The use of the word ‘all’ in this statute further provides the NYSDEC with the authority to enforce against both point and nonpoint sources of pollution.

The State has also instituted the use of the Section 6217(g) new development and site development management measures through distribution of State grants, which are administered by the New York State Department of State (NYSDOS) and NYSDEC. New York, through various funding sources, including the 1996 Clean Air/Clean Water Bond Act, the Environmental Protection Fund, the Great Lakes Watershed Restoration Fund, and the Clean Water State Revolving Fund, has provided more than \$9.6 billion for water quality improvement projects. As part of the Request for Proposals (RFP) language, eligible projects for municipal nonagricultural nonpoint source abatement and control projects “must incorporate management practices and measures” identified in the New York State DEC’s *Catalogue of Management Practices for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State* and/or the *New York State Stormwater Management Design Manual*, and/or the *New York State Standards and Specifications for Erosion and Sediment Control*, and/or *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*, issued by EPA. For its projects, the NYSDOS requires the contractor to prepare an implementation strategy and schedule for ongoing monitoring and maintenance, as well as receive NYSDOS approval of the type of practice to be installed. In terms of monitoring the project, photo documentation of each component of the project is required, along with completion of a Final Project Summary Report, which includes a Measurable Results Form. Periodic reports allow NYSDOS to monitor the project to ensure that the projects are meeting standards adequate for the purposes of Section 6217. Projects are administered on a reimbursement basis; therefore, projects not meeting requirements are not funded.

Implementation of the National Pollutant Discharge Elimination System (NPDES) Phase II Storm Water requirements has resulted in the implementation of management measures that are consistent with the Section 6217(g) guidance for the following two management measures in MS4 areas:

- Construction Site Erosion and Sediment Control; and
- Construction Site Chemical Control

Since these activities are subject to NPDES or SPDES requirements, EPA and NOAA will no longer independently review these two management measures for consistency with the Coastal Nonpoint Program requirements.

New York has implemented the SPDES Phase 2 Stormwater Program, including establishment of the General Permit for Stormwater Discharges from Construction Activity; and this will now also apply to activities addressed by the New Development and Site Development management measures. This permit applies to small construction activities involving soil disturbances of between one and five acres, as well as to construction activities involving soil disturbances of less than one acre, regardless of whether such a SPDES permit is required by NYSDEC. Permit conditions require that there be no increase in TSS, and that a Stormwater Pollution Prevention Plan (SWPPP) be developed for each site to be covered by the permit. The SWPPP will be required to compare post-development stormwater runoff conditions with pre-development conditions and describe the proposed structural and vegetative stormwater measures to ensure that the quantity, temporal distribution, and quality of stormwater runoff during and after development is not substantially altered from pre-development conditions.

WATERSHED PROTECTION AND EXISTING DEVELOPMENT

CONDITION: Within two years, New York will include in its program management measures for watershed protection and existing development in conformity with the Section 6217(g) guidance, and enforceable policies and mechanisms to ensure implementation throughout the 6217 management area.

DECISION: New York has met this condition.

RATIONALE: New York manages its watershed through interconnected planning and funding programs. The State's Nonpoint Source Coordinating Committee (NPSCC) includes 18 federal, state, and local agencies with key roles in the control of nonpoint source pollution in the State. The NPSCC facilitates communication, identifies cooperative activities, helps to coordinate programs to better utilize resources, and serves as a model for local decision makers involved in implementing the Nonpoint Source Program. NPSCC working groups have been established to address the highest priority source categories at a statewide level. The overall organization encourages the creation of Memorandums of Understanding (MOUs) and cooperative agreements with and between regional or local watershed management groups, particularly County Water Quality Coordinating Committees (CWQCC), and helps to prioritize basin or watershed

level activities. In addition to the NPSCC, New York has several other complementary programs which address watershed-based and existing development pollution management, including the State's Watershed Restoration and Protection Action Strategy (WRAPS) Program, and local and regional efforts.

In response to EPA's call for the development of Unified Watershed Assessments (UWAs), after prioritizing its watersheds according to water quality and natural resource factors, New York prepared a schedule for developing WRAPS in watersheds in need of restoration and for watersheds that need action to sustain water quality. Essentially, a WRAPS is a compilation of currently available information about the state of a watershed and ongoing assessment, outreach and implementation activities, and proposes environmental and natural resource priorities or goals and measurable objectives, taking into account ongoing activities for achieving those goals. In 21 of the 26 highest priority watersheds, protection and restoration efforts were already underway through such federal and state programs as the National Estuary Program (NEP), National Heritage Rivers, and development of Total Maximum Daily Loads (TMDLs). WRAPS identifies certain specific actions to be undertaken by stakeholders at the local, state and federal level that will address the priorities identified. The WRAPS assist in directing development away from areas particularly susceptible to erosion and sediment loss and promote the preservation of areas providing important water quality and habitat benefits, thus having the effect of siting development to minimize adverse impacts. Ultimately, the WRAPS serve as integrated watershed protection strategies, incorporating both prevention and remediation. New York has, in cooperation with partners, prepared watershed based plans for the majority of the major basins comprising the State, and anticipates completing the remaining major basins by 2010. The State plans to continue a focus on providing technical and financial assistance to municipalities to prepare watershed plans that provide a greater degree of specificity that is needed to implement actions at the local level. To that end in May 2003 the Departments of State and Environmental Conservation prepared an outline for local governments to use in the preparation of local watershed plans.

In terms of local and regional efforts, NYSDOS, the coastal management agency for the State of New York, anticipates continuing to incorporate comprehensive nonpoint pollution management assessments and strategies in all future Local Waterfront Revitalization Programs (LWRPs) and Intermunicipal Watershed Management Plans (IWMPs). NYSDOS has adapted and applied the assessment methodology that it developed for use in the South Shore Estuary Reserve Program in which the Section 6217(g) management measures were used as the basis for inventorying nonpoint management practices at the town level. The assessment included regulatory, incentive and education programs, as well as internal guidelines for use by government agencies, such as local highway departments. The nonpoint assessment methodology has been successfully applied in six towns, two counties, 31 villages and the City of Long Beach, in the reserve, as well as to watershed municipalities around Lake George and the municipalities surrounding three of the Finger Lakes; Lakes Cayuga, Conesus and Canandaigua. With funding from the Great Lakes Coastal Watershed Restoration Program, a draft manual to guide municipal nonpoint assessments has been prepared and

the final manual is expected to be completed by the end of June 2006. The manual highlights case studies and offers sample language for local laws and for improving routine practices to control nonpoint pollution at the local level. NYSDOS will require all future LWRPs and IWMPs to contain a comprehensive watershed characterization, including the identification of significant sources of nonpoint pollution and potential mitigation.

The State is providing funding for watershed-based activities that address the existing development management measures through the EPF, enacted in 1993. The EPF provides mechanisms for open space conservation and land acquisition. EPF monies allocated to NYSDOS and NYSDEC have been used to initiate and support watershed-based planning efforts in several Great Lakes and Finger Lakes watersheds, including the development of watershed management plans with retrofit. The State has also used Clean Water/Clean Air Bond Act funds for water quality improvement projects that will result in the improvement of water quality or aquatic habitat through the abatement of existing sources of pollution or disturbance in the Hudson River, Long Island Sound, Lake Champlain, Onondaga Lake, the New York-New Jersey Harbor Estuary, Great Lakes, Finger Lakes, Peconic Estuary Reserve, and the South Shore Estuary Reserve (SSER) management programs, plans or projects. A schedule for urban retrofits is identified in plans for each of these management areas. In addition, New York's 2005 Draft Open Space Conservation Plan, first adopted in 1992 and updated every three years, contains a list of priority sites for acquisition, conservation strategies for major resource areas, and evaluation and criteria used to determine EPF spending priorities. This Conservation Plan helps preserve natural conveyance systems. The availability of funds from the EPF allows the implementation of retrofits in a wide variety of circumstances, using the plans and programs to determine priorities.

The DEC and DOS have also partnered on a watershed planning and implementation multimedia informational project. Through consulting services, a "how to" watershed planning guidebook, complete with case studies specific to New York, will be prepared, as will a motivational video and detailed content, which will be posted on the Division of Coastal Resources website, www.nyswaterfronts.com. The audience for the materials will be primarily local governments and nongovernmental organizations. The material, due to be completed by the end of 2006, will foster increased interaction among agencies, organizations and academic institutions, with the goal of facilitating local watershed plans that advance local and broader goals for water quality protection and restoration.

NEW AND OPERATING ON-SITE DISPOSAL SYSTEMS (OSDS)

CONDITION: Within three years, the State will include in its program management measures in conformity with the 6217(g) guidance for (1) nitrogen-limited surface waters, and (2) the inspection of operating OSDS.

DECISION: New York has met this condition.

RATIONALE:

Nitrogen-Limited Surface Waters

In terms of addressing nitrogen-limited surface waters, the State has sufficiently documented that the only portion of State waters for which nitrogen pollution from groundwater contributions is potentially a significant factor is in the east end of Long Island Sound, the Peconic Estuary. A variety of sources contribute nutrients to the Estuary. Documented sources include sediments, groundwater, direct rainfall to surface waters, point source discharges, and stormwater runoff. For the Peconic River/Flanders Bay (western) component of the estuary, the NYSDEC has adopted a marine surface water total nitrogen guideline of 0.5 mg/l. The Comprehensive Conservation and Management Plan (CCMP) for the Peconic Estuary, a National Estuary Program (NEP), was approved by EPA in 2001 and includes a variety of recommendations to protect the existing high water quality in the Peconic Estuary and improve it where appropriate.

OSDS, domestic fertilizer, and agricultural lands are identified as responsible for degradation of groundwater. The Peconic Estuary Program will investigate feasible implementation mechanisms and develop a plan to prevent increases and encourage decreases in nitrogen in groundwater underflow due to OSDS. These mechanisms will include, but not be limited to: (1) mandatory system upgrades within defined districts on property transfer or on issuance of building permits for expansion; (2) use of innovative and alternative systems; (3) tax credits and other incentive programs; and (4) general sanitary system regulation review to evaluate possible areas for improvement. The approved Implementation Review reports that progress on this action is underway, with the Suffolk County Department of Health Services contracting a study on alternative OSDS. The Peconic Estuary Program Management Conference membership includes the local authorities with primary control over land use management who have the authority under State law to promulgate and enforce standards for OSDS more stringent than State law. The Conference provides an opportunity for these local governments to act in a coordinated fashion on restricting new OSDS should they so desire. Furthermore, if the results of the studies indicate that OSDS is the source of excess nitrogen in the Peconic Estuary, they could also enact retrofit requirements.

These actions are only part of a broader effort to address nonpoint sources that also includes ensuring that 6217(g) management measures are appropriately implemented in support of the overall nitrogen management plan for the Peconic Estuary. The Peconic Bay CCMP outlines a process which is being followed to determine the relative importance of a variety of risk factors and formulate responses. Should the process indicate that nitrogen from OSDS is a significant issue, management strategies are already identified, and because of the membership in the group, authority exists to implement any programs agreed upon, such as limits to new construction, performance requirements, mandatory upgrades for existing systems, etc. In addition, the broad backup enforcement authority of the NYSDEC is clearly applicable if water quality violations are detected. For now, the overall strategy is to continue refining existing knowledge. Should it become apparent that OSDS are in fact causing water quality

impairments or even pose any serious threat, the steps outlined in regional management plans such as the CCMP will be undertaken.

OSDS Inspection

With respect to inspecting OSDS at a frequency adequate to ascertain whether OSDS are failing, New York has put forth a combination of State and local authorities, grant programs, regulatory programs, training, and education and outreach programs. In New York, towns have legislative authority through “home rule legislation” and the New York State Uniform Fire Prevention and Building Code to enforce State standards for OSDS and to adopt sanitary codes which conform or exceed standards dictated in Appendix 75-A of the New York State Department of Health (NYSDOH) Administrative Rules and Regulations. In addition, counties that have created environmental health departments or divisions have both the responsibility to enforce provisions of Appendix 75-A and the authority to adopt provisions that are stricter than State rule for both new installations and as a standard for inspection, repair, and replacement. Several towns and counties in New York have used their authority to require regular inspection of OSDS. Sections 347 and 308 of NYS Public Health Law give counties, part counties, and local boards authority to enact ordinances and regulations for protection of “public health.” Public health is the main authority and legal basis for regulating OSDS.

Examples of septic inspection programs in New York State include the New York City Watershed Rules and Regulations, which apply to significant portions of the Catskills west of the Hudson River, and the Croton reservoir system east of the Hudson River. Cayuga County has a county-wide mandatory inspection system overseen by the county health department, but partially carried out by the towns. Systems on shoreline properties and in other sensitive areas must be inspected every two years. For the rest of the county, the goal was to inspect all systems at least once by the year 2000. Failing systems which are identified by inspection must be brought into conformance. Schuyler County requires inspections at the time of property transfer, with most homeowners now pumping every three to five years. An inter-municipal agreement was developed for municipalities around Keuka Lake requiring a zone of septic inspections and control. The Town of Cazenovia’s ordinance calls for inspections and dye tests of septic systems at regular intervals (every five years), and a list of qualified inspectors is maintained by the town. The Town of Montgomery in Orange County instituted annual inspections for 100 properties connected to a wastewater district sand filter which appeared to need more frequent pumping due to high volume use. Hamilton County instituted a mandatory inspection program for all wastewater systems, but found problems with only one percent or less of the inspected systems. They revised their policy to ensure that new systems meet required standards, respond to complaints about existing systems, and offer technical assistance upon request. The Village of Greenwood Lake in Orange County, which includes approximately 2000 onsite systems, passed a local ordinance that requires homeowners and business owners to submit proof that they have had their septic tank pumped within the previous three years. The Village sends follow-up letters, and conducts inspection and enforcement actions whenever there is a complaint or evidence of a problem.

Where county and town governments have not instituted regular inspection programs for septic systems, New York has provided a legal opinion stating that it has the authority and ability through implementation and enforcement of its water quality laws and regulations to require polluters to implement Section 6217 management measures and practices specific to all categories of nonpoint source pollution including, but not limited to, septic tank discharges. The NYSDOH's 1996 *Individual Residential Wastewater Treatment Systems Design Handbook* serves as the guidance document for implementing Appendix 75-A, and was prepared in order to address effective design, construction and maintenance of individual household sewage treatment systems for use by homeowners, design professionals, builders, contractors, local community officials and health department officials. Under "Operation and Maintenance of Individual Onsite Wastewater Treatment Systems," the Handbook states that, "[t]he contents of the septic tank should be pumped out every two to three years, or whenever the following conditions apply." The conditions are based on the relationship of the sludge or scum layer to the outlet baffle. Guidance requires inspection of septic tanks annually, semiannually, and periodically to determine that (1) the inlet and outlet baffles/tees are in place; (2) there is equal flow to all absorption lines in distribution boxes; (3) siphon and pressure distribution systems are operating properly; and (4) that the wastewater level in the dosing chamber is within the normal operating range. In addition, the State's *On-site Wastewater Treatment Systems Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State* (June 1994) contains the following management practices for operation and maintenance for septic tanks and standard absorption systems:

- Septic tanks and absorption systems should be inspected annually;
- New owners of homes should be given a map showing the location of the on-site system and information on how to maintain the system.

New York has also adopted the Property Condition Disclosure Act, which amends the State's real property law, "...in relation to disclosure of defects by owners of residential real property upon the sale thereof." The law requires that upon sale, owners of residential real property must complete a disclosure form and deliver it to the purchaser. With respect to septic systems, the disclosure form includes the following questions:

What is the type of sewage system (circle all that apply—public sewer, private sewer, septic or cesspool)? If septic or cesspool, Age? Date last pumped? Frequency of pumping? Any known material defects? Yes, No, Unknown, Not Applicable. (If yes, explain).

Increasing interest in public management of private OSDS in New York is being driven by activities of the New York State NPSCC's Onsite Wastewater Treatment System (OWTS) Workgroup. The Workgroup is composed of representatives from USDA's Natural Resource Conservation Service and Cooperative State Research Education and Extension Service, EPA, State agencies (NYSDOS, NYSDEC, NYSDOH), the New York State Environmental Facilities Corporation and New York State Soil and Water

Conservation Committee, the New York City Department of Environmental Protection, several county soil and water conservation districts and health departments, the Suffolk County Executive Office, the Association of Towns; Cornell University and State University of New York (SUNY) Delhi, the Aerobic Wastewater Treatment Association, and other industry representatives. Workgroup participants, either individually or as members of ad hoc committees, actively pursue a broad agenda of current and emerging projects that focus on management of septic systems. It is anticipated that members of the OWTS workgroup will participate in the process to update the DEC's 1988 *Design Standards for Wastewater Treatment Works, Intermediate-Sized Sewerage Facilities*. This document provides technical guidance on design and construction of onsite systems that service private, commercial and institutional facilities with design flows between 1000 and 10,000 gpd, and are usually covered by a SPDES general permit for discharge to groundwater.

The Information and Education (I&E) subcommittee of the NPS Coordinating Committee (NPSCC) was established in 1991 to guide the overall development and delivery of information, education and technical training for the statewide programs. The I&E subcommittee has produced a NPS Outreach Strategy and Outreach Plan, which identifies the principal audiences, the message they would like each audience to receive, and the method for delivering the message. The Plan includes a collection of the various activities, scheduled events, guidance documents, and training programs that each partner agency will conduct. One important use of the Strategy is to prioritize activities for use of resources, both staff and funding, in the next planning period. The Strategy has been used to focus Performance Partnership Grant (primarily CWA Section 319) funds for OSDS activities in development of a statewide training program, known as the New York Onsite Wastewater Treatment Training Network (OTN). Training is provided for engineers, local code enforcement officers, contractors, installers, suppliers, inspectors, and regulatory agency staff in the proper siting, design, installation, maintenance and inspection of OSDS. In this program, the NYSDEC has contracted with the SUNY College at Delhi to administer the training program and prepare a new curriculum. The OTN, in partnership with the College, has developed and refined a series of five training courses as follows: Foundations of Onsite Wastewater Treatment Systems; Soil Analysis for Onsite Wastewater Treatment Systems; Inspections of Existing Residential Wastewater Treatment Systems; Installation of Residential Onsite Wastewater Treatment Systems; and a special Two-Day Training in Foundations & Soil Analysis. All training courses are certified by the NYS Education Department for continuing education credits for Professional Engineers, Architects, and Land Surveyors; by the NYSDOS for Code Enforcement Officials; and by the NYSDEC for Wastewater Treatment Plant Operators.

The NPSCC has also developed a new initiative called the Community Environmental Management (CEM) Program. Modeled upon the State's successful AEM Program, CEM's objective is to provide the WQCCs and other service providers with useful assessment, planning and education tools to better assist communities in addressing environmental challenges they face. First, communities will complete a Tier 1 tool, called "Assessment of Natural Resource Concerns," a screening tool to identify possible water quality and natural resources impacted by various sources, including failing OSDS.

The Tier II, Assessment of Onsite Wastewater Treatment Systems assessment form, provides a more detailed diagnostic tool specific to OSDS. The CEM tools, which were developed in cooperation with the NPSCC workgroups, including the OSDS workgroup, are supported with Section 319 funds.

Finally, NYS is supporting development of local onsite management initiatives through the County Water Quality Coordinating Committee Mini-Grant program and the Water Quality Improvement Project program. The mini-grants support inspection of existing systems, including the training of inspectors, whereas the water quality improvement grants can support demonstration of onsite management systems, and demonstration of new technologies for removal of nutrients and pathogens. These incentive-based initiatives provide funding in areas of the State where water quality is impaired due to failing or inadequate onsite systems, and where there is strong local interest in restoring and protecting recreational waterbodies and drinking water sources. The State has proffered its commitment to annually fund this grant program to further OSDS inspections contingent upon ongoing federal grant support for NPS programs.

ROADS, HIGHWAYS, AND BRIDGES

CONDITIONS: Within two years, New York will include in its program management measures for runoff systems for State and local roads in conformity with the Section 6217(g) guidance. Also within two years, New York will develop a strategy to implement the roads, highways, and bridges management measures for local roads, throughout the 6217 management area (in accordance with Section XIV, page 13).

DECISION: New York has met these conditions.

RATIONALE:

Runoff Systems

New York has several programs which identify runoff systems as a priority for State and local roads, and develop and implement runoff management systems for existing roads, highways and bridges. Several completed WRAPS compile available information about the state of a watershed and propose environmental and natural resource priorities or goals and measurable objectives for achieving those goals. (For a full description of the WRAPS program, see the discussion under *Watershed Protection and Existing Development* above.) Controls over discharges and polluted runoff from roads are a major consideration in the WRAPS. The Upper Susquehanna and Chemung River Basin Strategies identify seven rivers and streams listed on the State's Priority Waterbodies List (PWL) as stressed primarily from urban and construction runoff. Priority actions listed in the strategy include providing information, training, and technical assistance to locally elected officials, municipal planners, zoning boards, municipal engineers, code enforcers, highway superintendents, and public works staff on roadbank stabilization, culvert maintenance, stormwater and other erosion/sedimentation control problems, and encouraging municipalities and construction site personnel to implement BMPs. Specific

recommendations for stormwater runoff include incorporation of erosion sediment control BMPs in NYSDOT, county, and town highway maintenance activities; assessment of awareness; and additional support and training on stormwater regulations and necessary practices.

The South Shore Estuary Reserve (SSER) Comprehensive Management Plan CMP identifies polluted stormwater runoff from urban areas, including new and existing development and roads, highways and bridges, as the primary pollutant responsible in nearly all of the 51 SSER waterbody segments listed with impaired uses in the 1996 PWL. A comprehensive, local implementation of retrofit projects is critical to the SSER CMP. Chapter seven of the SSER CMP lists implementation actions to reduce nonpoint source pollution, including: (1) construction of stormwater abatement projects in significant nonpoint source contributing areas associated with closed shellfish beds, impaired living resources, and bathing beaches that experience periodic closures due to water quality concerns; and (2) amending county and local government codes and regulations to include BMPs for roadway maintenance taken from NYSDOT procedural manuals and *The Environmental Handbook for Transportation Operators*, and from NYSDEC's *Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection*, to reduce contamination of stormwater runoff by pollutants from existing roads, highways, and bridges.

The Peconic Estuary Program CCMP identifies stormwater runoff from roads and open areas as its largest source of nonpoint pollution. The CCMP funded a regional stormwater management project to establish a comprehensive, coordinated, intergovernmental stormwater strategy to construct a framework for continuing management. The CCMP recommends remediation of stormwater runoff as a key strategy to reduce pathogen loads, and obtaining funding to address stormwater runoff as a priority. Several projects already have funding. NYSDOT has committed five million dollars for five towns to mitigate runoff from State roads. Several towns incorporate funds every year into their highway or public works department budgets specifically for the purpose of carrying out BMPs for stormwater runoff remediation. The CCMP recommends inclusion of an annual amount in the highway operating budget specifically for the correction of existing road runoff problems.

New York's Clean Water State Revolving Loan Fund (CWSRLF), EPF, and the Transportation Enhancement Program all allocate State and federal funds for municipal remediation efforts, targeting priority water quality issues identified at the local level by individual County Water Quality Coordinating Committees. Outreach and technical assistance by NYSDEC, NYSDOT and NYSDOS staff at the onset of each funding cycle assure that municipalities submitting proposals are aware of the selection criteria and that their rating process favors projects addressing high priority water quality problems identified in the WRAPS and other watershed initiatives. Typical projects include construction of stormwater wetlands; infiltration basins and trenches, vegetated swales, extended detention ponds, and innovative structures that control and abate storm water runoff. Several EPF grants have been awarded specifically to survey stormwater outfall systems that discharge runoff from local roads. Outcomes from these analyses will likely

lead to the design and construction of stormwater retrofits. Examples include the Towns of Oyster Bay, Islip and Babylon, where EPF grants were awarded to survey stormwater outfall systems and prepare mitigation plans. Analysis of field conditions included assessments of pretreatment facilities in the existing drainage systems and conditions which indicated deficiencies in routine maintenance of existing drainage structures. Sites where capital improvement projects are needed to reduce pollutant loading within each contributing area and the type of treatment recommended, such as retrofitting existing stormwater drainage systems with settling basins and siting new treatment systems, were identified. Each of these plans identify on maps stormwater discharge points, prioritize significant nonpoint source pollution problem areas within the coastal area, and identify appropriate mitigation for each location to minimize corresponding pollutant loading to the Great South Bay.

The Transportation Enhancement Program administered by NYSDOT provides federal reimbursement for projects that add value to the transportation system by relating to human and environmental aspects. Mitigation of water pollution due to highway runoff is one of the categories of projects eligible for funding. NYSDOT's Environmental Initiatives program provides funding for implementing environmental benefit projects suited to advance State environmental policies and objectives. NYSDOT retrofits existing highway drainage systems by designing and building created wetland and stormwater management structures, bioengineered streambanks, and specialized water quality inlet structures. Numerous NYSDOT water quality improvement projects have been designed and constructed on Long Island. Examples of completed projects include elimination of direct discharge to Bannister Creek by constructing a 1.8 acre retention basin including biofiltration engineering; elimination of direct discharge to Awixa Creek and the Great South Bay, and elimination of direct runoff via installation of a retention basin prior to discharge to Sampawams Creek. Dozens of specialized water quality inlet structures and retention basins were installed to remove pollutants prior to discharge to Peconic Bay and retention basins, swales, and specialized water quality inlet structures were installed to remove pollutants prior to discharge to the Carmans River, Great South Bay, and Long Island Sound.

NOAA and EPA find that through this combination of watershed strategies, local and regional programs, and the various funding mechanisms, New York has demonstrated that it has in place a program to identify priority watershed pollutant reduction opportunities, and has established a schedule for implementing appropriate controls for addressing runoff systems for roads, highways, and bridges.

Local Roads

NOAA and EPA found that where the State does not have direct oversight authority for local road projects through the ECL (specifically SEQRA and resource laws) or the statewide Subdivision Control Law to ensure that the local Departments of Public Works implemented the management measures in their local road construction and maintenance activities, the State does have the authority to enforce any violation of water quality standards. However, at the time of CNP submission, the State was not able to

demonstrate its ability to use the oversight authority to ensure implementation of the management measures for local roads throughout the 6217 management area. New York has since provided a legal opinion that the NYSDEC, through the ECL and its regulations, has the ability to prevent, abate, and control activities that create or threaten to create nonpoint source pollution. Furthermore, these authorities allow the NYSDEC to require implementation of the Section 6217(g) management measures and practices specific to all categories of nonpoint source pollution, including urban and road runoff. Specifically ECL Section 17-0501 and the regulations found at 6 NYCRR Section 701.1 make it a violation for any person to discharge to the waters of the State, either directly or indirectly, any organic or inorganic matter that causes or contributes to a violation of water quality standards. This statute provides NYSDEC with the authority to use its back-up water quality laws and regulations to require polluters causing a contravention of water quality standards to take reasonable action to remedy such violations, including requiring polluters to implement Section 6217(g) urban and road runoff measures and practices. NYS DOT manuals and NYSDEC Technical Operation Guidance Series contain the standards and BMPs for roads, highways, and bridges that would be implemented in any enforcement actions, and these have been found to meet the Section 6217(g) management measure requirements. ECL Section 17-0903(2) provides NYSDEC with the administrative jurisdiction to abate and prevent the pollution of the waters of the State, in the manner provided therein. This statute applies to both point and nonpoint source discharges. It provides DEC with extensive background authority to regulate NPS pollution. ECL Section 71-1929 sets for the penalties for any violations of Article 17. ECL Section 3-0301(i) states, “[i]t is the responsibility of the NYSDEC, and the Commissioner shall have the power to prevent and abate all water pollution.” The use of the word “all” in this statute further provides the NYSDEC with the authority to enforce against both point and nonpoint sources of pollution.

NOAA and EPA find that New York has met the local road conditions through submission of the legal opinion demonstrating the State’s ability to use Article 17 of the ECL to prevent and abate/control nonpoint source pollution and require implementation of the Section 6217(g) management measures specific to urban and road runoff.

MARINAS

CONDITION: Within two years, New York will include in its program management, measures in conformity with the stormwater runoff management measure.

DECISION: New York has met this condition.

RATIONALE: New York was found to meet most of the marina management measures through a combination of its existing permit requirements and marina operations manual. However, the manual did not specify the 80 percent removal of TSS from hull maintenance areas. As an alternative, the State submitted the regulations confirming that marinas with hull maintenance areas in the State are required to have SPDES permits. Based on Section 6217 program guidance, once a source is covered by a SPDES permit, it no longer falls under the purview of the Coastal Nonpoint Program. Therefore, in New

York, hull maintenance areas are subject to permitting under SPDES and are not included as part of the State's coastal nonpoint program.

HYDROMODIFICATION

CONDITIONS: Within three years, New York will include in its program a process to improve surface water quality and restore instream and riparian habitat through the operation and maintenance of existing modified channels. Also within three years, the State will eliminate or revise exemptions identified below (in the conditional approval document) that preclude the State from fully implementing the management measures for dams.

DECISION: New York has met these conditions.

Operation and Maintenance of Existing Modified Channels

New York's process for improving surface water quality and restoring instream and riparian habitat through the operation and maintenance of existing modified channels is through a series of interconnected planning and funding programs coordinated by the New York State NPSCC. Based on the *NYS Water Quality 2004 Report*, submitted pursuant to Section 305b of the CWA, in those cases where best uses are impacted to some degree by pollutants or disturbances, 14 percent of the PWL segments were listed because of hydrologic and habitat modification, including streambank erosion. Based on this percentage, this category was determined to be one of the four priority source categories for focus by the New York State Nonpoint Source Management Program.

The process for identifying restoration and protection projects for funding starts with the assessment of streams through the NYSDEC's Statewide Waters Monitoring Program. This program monitors State waters for impairments, and is the basis for updating information used to characterize the physical and chemical condition of waterbodies throughout the State as part of the Rotating Intensive Basin Survey (RIBS) process. This feeds into a subset of problem waters referred to in the PWL, which includes Habitat Modification and Hydrologic Modification and Streambank Erosion source categories. The PWL was updated to better accommodate natural resources concerns and includes a greater emphasis on physical parameters, including stream/wetland hydrology. This category captures impairments to a variety of water quantity parameters and flooding/flood plains, such as excessively low flows, increased peak flows, alterations to flow frequency, duration and timing of floods, and loss of flood storage. The PWL is used as a primary source of information for setting funding and action priorities, such as through the EPF and the CWSRLF.

The Hydrologic and Habitat Modification (HHM) Workgroup was formed to address programmatic issues and to advise the NPSCC on stream corridor restoration and protection, and how best to achieve water quality and natural resource goals. This interagency group includes representatives from several State and federal agencies, and other interested entities, including the NYSDOS, NYSDEC, NYSDOT, NYS Department

of Agriculture & Markets, the U.S. Fish and Wildlife Service, EPA, NRCS, the U.S. Geologic Survey, the U.S. Army Corps of Engineers, the New York Water Environment Association, Cornell Cooperative Extension, Trout Unlimited, Soil & Water Conservation Districts and the State Soil and Water Conservation Committee, and private sector consultants. The Workgroup has drafted a set of broad goals that underlies a statewide stream corridor protection program and recommends working closely with communities toward the completion of community assessments covering the evaluation of streams and stream corridor issues related to use and maintenance to achieve these goals. The underlying goals focus on protecting and enhancing stream corridors for the purposes of protecting and improving water quality and fish and wildlife habitats, as well as restoring physically degraded or impaired stream corridors. They are part of a larger framework developed by the Hydrologic and Habitat Modification program contained in the New York State Nonpoint Source Management Program. The goals are also tied to specific stream corridor restoration and watershed protection elements that support the Governor's Quality Communities Program initiative. In May 2005, the HHM Workgroup published a strategic plan to guide its future work. The *Plan to Restore and Protect New York Rivers and Streams* was prepared in response to the growing recognition that HHM is a priority nonpoint source contributor to water quality impacts and habitat degradation in the State's waterbodies. An example of a current initiative of the *Plan* is the focus on the barriers that dams, culverts and other structures present to the movement of fish and other aquatic organisms. A series of forums have been held to identify technical, regulatory and administrative obstacles to remove physical barriers for fish passage. Additionally, through a partnership with the NOAA Coastal Service Center, a Coastal Fellow has been working with the Division of Coastal Resources to prepare a Stream Protection and Restoration Guide for local governments. The guide is expected to be finalized in July 2006.

In addition, in 1998, EPA required States to prepare Unified Watershed Assessments (UWAs) to identify watersheds in need of restoration and develop a schedule for addressing them. New York's 1998 UWA built on the State's existing water program and natural resource initiatives, especially the RIBS studies. Each of the State's 54 watersheds was assigned to one of three categories in the EPA framework: Category I (watersheds in need of restoration); Category II (watersheds meeting goals including those needing action to sustain water quality); and Category IV (watersheds with insufficient data to make an assessment). None of the State's watersheds qualified for Category III, which are watersheds with pristine or sensitive aquatic system conditions on lands administered by federal, State, and tribal governments. After categorizing the watersheds, New York prepared a schedule for developing WRAPS in each Category I and Category II watershed, taking into consideration ongoing watershed-based planning efforts, local stakeholder involvement, and the availability of high quality water and natural resource information.

The purpose of WRAPS is to develop and/or compile and document a strategy for the watershed that brings together all appropriate agencies and stakeholders to focus support in the form of grant dollars, technical assistance and other resources to address the priority water and natural resource needs in that watershed. Federal guidance and New

York's UWA both encourage that Strategies be built upon existing strategies and plans, such as the NEP's CCMPs. The Long Island Sound CCMP and the New York-New Jersey Harbor Estuary CCMP have been accepted by EPA as New York's 1999 Strategies submissions. The Peconic Estuary Program CCMP was approved by EPA in December 2001, and the SSER CMP was finalized in April in 2001. In addition, NYSDEC and partners completed WRAPs for the Susquehanna and Chemung River Basins in 2001. The schedule for developing Strategies is based largely on the cycle for updating the State PWL, which allows the use of current information. Strategies have also been completed for Lake Champlain and the Lower and Middle Hudson basins.

The WRAPS prepared by the State specifically identify opportunities for improvements to surface water quality and restoring instream and riparian habitat through the operation and maintenance of existing modified channels. Each of the strategies and plans mentioned above addresses hydrologic modification, specifically channelization, as a source of impairment needing remedial action. For example, county activities in support of High Priority Watersheds under the Strategy for the Chemung River Basin include a specific commitment by Chemung County to target funds for "roadbank and streambank stabilization, stream channel maintenance, revegetation of eroding areas, wetland creation, and demonstration projects." Basin wide recommendations and commitments for both the Susquehanna and Chemung River Basins for hydrologic and habitat modification include a desired outcome that "designated best uses are restored for all waters where hydrologic or habitat modifications are currently the primary source of pollutants causing a precluded or impaired designation on the PWL." The Long Island Sound CCMP specifically identifies as an implementation action, adoption of hydromodification BMPs for municipal activities that involve channelization and channel modifications and potentially having negative impacts on the aquatic environment. The plan states that in order to reduce the scope of impacts, practices from the NYSDEC's *Management Practices Catalogue for Nonpoint Source Pollution Prevention and Water Quality Protection in New York State* need to be formally adopted and incorporated into any hydromodification activities. Due to shifting priorities and resources at EPA, including emphasis on TMDL development, the WRAPS process was temporarily discontinued in the middle of 2002. The State, however, continued to press forward in the area of watershed plan preparation making the best use of limited funds available through the coordination of complementary programs including the New York's Environmental Protection Fund.

Dams

New York provided additional technical information demonstrating that the minimum dam size to which the Section 6217 (g) management measures apply is of 4.8 million gallon capacity, while the exemptions allowed in New York's code could not exceed 1.5 million gallons. New York's dam permitting authorities exempt structures whose drainage is less than one square mile, certain farm ponds, and structures whose drainage area is less than one square mile unless the structure is more than ten feet in height, or the quantity of water exceeds one million gallons, or the structure is under the jurisdiction of the Department of Docks in a city or town with a population of over 175,000. Therefore,

anything greater than 1.5 million gallons would be captured under New York's regulations, which were found to meet the Section 6217(g) management measure requirements for dams.

ADDITIONAL MANAGEMENT MEASURES

CONDITION: Within one year, the State will provide a description of its process for implementation and continuing revision of additional management measures where coastal water quality is impaired or threatened even after the implementation of the Section 6217(g) management measures.

DECISION: New York has met this condition.

RATIONALE: NOAA and EPA find that the overall, ongoing process New York has described by which it will identify the need for Additional Management Measures (AMM), and how they might be implemented, meets the condition. Specifically, the State has proposed determining AMMs through updates to the PWL, which relies on the results of other monitoring programs such as RIBS, intermunicipal watershed management programs, NEPs, regional management programs, etc. The ongoing updates of the PWL are discussed by two standing committees, the Water Management Advisory Committee and the NPSCC. Both committees have the ability to provide input on the need for AMMs to the programs responsible for implementing the baseline management measures and programs. The State also plans to rely on regional and local efforts to identify and act on the need for additional management measures, and the TMDL process.

CRITICAL COASTAL AREAS

CONDITION: Within two years, the State will either adopt its proposed legislation to identify critical coastal areas, DOS #95-24, or take other appropriate steps necessary to identify and map critical coastal areas.

DECISION: New York has met this condition.

RATIONALE: New York has identified as its critical coastal areas (CCAs) the primary contributing areas of precluded, impaired, stressed, and threatened waterbody segments as listed in the NYSDEC's PWL that are also within the New York State Coastal Zone, and for which nonpoint source pollution is a source. This is consistent with the first approach identified in *NOAA and EPA's Coastal Nonpoint Pollution Control Program—Program Development and Approval Guidance*, which allows a State to establish their CCA as a strip of land along the portion(s) of the shoreline adjacent to threatened or impaired coastal waters, extending inland either from a uniform distance from the shoreline or from landward boundaries of wetlands or heads of tides. Identifying primary contributing areas as CCAs will focus management efforts on land areas immediately adjacent to the threatened, stressed, impaired and precluded segments, where the greatest immediate risk of impairing water quality exists. Periodic updates and amendments to

the PWL, as discussed above in the AMM section, may result in the identification and implementation of additional management measures for the CCAs, or revision to the list of CCAs.

MONITORING

CONDITION: Within one year, New York will develop a monitoring 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.

DECISION: New York has met this condition.

RATIONALE: New York has demonstrated its ability to meet the monitoring requirements through its statewide Water Quality Monitoring Strategy (WQMS). The WQMS approach includes five stages: (1) the assessment of water quality and its impact on the resources; (2) the determination of causes/pollutants; (3) identification of sources; (4) development and implementation of strategies (e.g., BMPs); and (5) reassessment of water quality. Tracking implementation of nonpoint source pollution control practices statewide will take place via these steps and is based on coordination between NYSDEC Department of Water staff, the Water Management Advisory Committee, and the Statewide NPSCC, as well as other groups and plans. New York also conducts nonpoint source monitoring through the State's Comprehensive Assessment Strategy (CAS). The CAS integrates a series of programs and activities that focus on specific drainage basins for a three-year period, on a rotating basis. This allows the State to review the scope of work for all division programs planning to conduct monitoring work in a given year and to point out efficiencies and improve cooperation and focus on the most important water quality issues in a basin and where monitoring activities should focus. It also links all the monitoring activities with the State's PWL. Every year, the NYSDEC Division of Water targets two or three major watersheds under the CAS, or approximately 20 percent of the State. As a result, every year, at least 60 percent of the State is participating in some aspect of the CAS, which includes planning and issue identification in year one, monitoring and data collection in year two, and evaluation and assessment in year three. The result is the development of corrective/management strategies, including nonpoint source control projects.

New York listed specific nonpoint source activities (special project water quality monitoring) that are taking place in five regional initiatives: New York City watershed program; management of phosphorus entering Lake Champlain; controlling stormwater runoff to Lake George, nonpoint source monitoring in the Long Island Sound watershed; and stormwater demonstration projects in the Rochester Embayment watershed. Many of these projects specifically address monitoring for the effectiveness of BMPs. For example, a study is being conducted in the New York City watershed to quantify the pollution-reducing effects of extensive BMP implementation on a dairy farm. A project on Lake George is monitoring the ability of urban BMP retrofits to handle and treat runoff along a highly developed transportation corridor in Lake George Village adjacent to sensitive waters in a pristine recreational setting.

Based on the monitoring program description provided by the State and examples of ongoing activities to measure the effectiveness of BMPs in addressing nonpoint source pollution, NOAA and EPA are satisfied that the State has in place a plan to assess over time the success of the management measures in reducing pollution loads and improving water quality.