

Comprehensive Conservation and Management Plan Actions Rainfall-Induced Discharges

CSO-1. Implement the Nine Minimum measures of the National CSO Control Policy

Key Elements: The national CSO Control Policy includes nine minimum measures. The CSO abatement programs in the Harbor region have been assessed and recommendations have been made to ensure that the requirements are fully met. The States' environmental programs (NYSDEC and NJDEP) will require that dischargers implement HEP's recommendations and achieve full compliance of the nine minimum measures.

Description of Activities to Date

The NJDEP, through the Bureau of Engineering North, Division of Watershed Management and Division of Water Compliance and Enforcement have prepared a report assessing NJ's CSO abatement programs in the Harbor Estuary Area in relation to the nine minimum measures. NJ has 212 CSOs in the Harbor Estuary Area and is in the processes of recommending and implementing the necessary steps. Currently, approximately 83% of the 212 CSOs in the Harbor Estuary Area have implemented the required modifications (NJDEP 2004).

The NJPDES General Permit—which regulates CSOs—was reissued in August 2004 with new requirements; among others, the development and implementation of technology-based control measures, including the Nine Minimum Control Measures from the National CSO Control Policy (HEP Office 2009). Of these 9 measures, 5 or 6 of them have been implemented and the planning aspects are completed. The permit is in the process of being renewed. (NJDEP—Dan Zeppenfeld 2009)

Planned Activities: Once TMDLs are developed and the level of control required is identify, proceed to the planning, design and construction phases for other needed measures and modify NJPDES permit if needed. (NJDEP—Dan Zeppenfeld 2009)

A report summarizing the implementation of CSO BMPs as required by the SPDES Permit for the Yonkers Joint Wastewater Treatment Plant was prepared for the calendar year 2008. The report noted 61 discharge events, but 98.8 % of combined sewage in the Yonkers CSO area was being captured and treated. (NYSDEC, Region 3, 2009). (NYSDEC Region 3 2009)

NYSDEC requires submission of an annual CSO report on implementation of BMPs (Nine Minimum Controls (NMCs) (NYSDEC 2004). NYCDEP submits an annual CSO BMP report (NYCDEP—Dorothy Chao 2009).

NYCDEP has fully implemented the Nine Minimum Control requirements of the National CSO Control Policy to reduce the impacts of rainfall-induced discharges. However a Notice of Violation was issued in December 2007 regarding BMP implementation; resolution remains under negotiation. The City's program is fully described in a January 1997 report. (NYCDEP 2004, NYSDEC—Jeff Myers 2009)

SPDES permits for the 14 NYC WPCPs were public noticed in April 2003; however they have yet to be issued due to court delays. These permits included BMPs (equivalent to NMCs) for the plants and required an annual report. A Public Hearing was held in September 2004 on the renegotiated CSO Consent Order. (NYSDEC—Jeff Myers 2009)

In 1998, NY and NJ reported that enforcement requirements are in place. (NYSDEC 2004)

CSO-2. Implement additional CSO controls to meet water quality standards and restore beneficial uses.

Key Elements: The nine minimum measures of the National CSO Policy establish a basic level of CSO controls. However, these controls will not necessarily achieve the reductions necessary to meet water quality standards, restore beneficial uses, and eliminate adverse ecosystem impacts. The National CSO Control Policy therefore recommends that additional steps be taken to eliminate adverse impacts due to CSOs.

Description of Activities to Date

The NJDEP has developed a long term CSO abatement plan that will prevent violations of water quality standards, restore and/or maintain beneficial uses, and eliminate adverse ecosystem impacts due to CSOs and is currently implementing this plan. NJ has 212 CSOs in the Harbor Estuary Area and is in the processes of recommending and implementing the necessary steps. Currently, 118 of the total 212 CSOs in the Harbor Estuary Area have implemented the required modifications. (NJDEP 2004)

NJ municipalities have submitted their cost-benefit analyses of CSO alternatives (e.g., separating the sewer systems, stormwater storage, CSO disinfection) to NJDEP for review. Reports were submitted to EPA Region 2 and shared with HEP. EPA, NJ and NY are working together to evaluate the feasibility of these alternatives (NJDEP—Dan Zeppenfeld 2009).

Planned Activities: Next steps are linked to TMDL development and establishing waste load allocations for CSOs. (NJDEP—Dan Zeppenfeld 2009)

New York City, as per a 1992 consent order with NYSDEC, is implementing a comprehensive CSO abatement program. New York State and the City have executed a revised CSO Consent Order in 2005 (modified in 2008). Work on CSO projects is ongoing. (NYSDEC—Jeff Myers 2009)

NYCDEP has developed a comprehensive CSO abatement program to improve water uses throughout the City. The program outlined in the 2005 consent order divides the City into 18 CSO drainage basins, which together cover all the City's waterbodies. (NYCDEP 2009)

The NY City Mayor's Office of Long Term Planning and Sustainability launched a stormwater planning effort in 2007 as part of its sustainability initiative (plaNYC). The goal is to reduce CSOs by controlling stormwater. The recently released final Stormwater Management Plan (issued in December 2008) sets forth an analytical framework for assessing alternatives (i.e., source control, green infrastructure, low impact development, best management practices) for controlling stormwater. Preliminary findings are that some source control strategies have the potential to reduce CSOs substantially and could be used in conjunction with conventional hard infrastructure. (plaNYC website, HEP Office 2009, NYSDEC—Jeff Myers 2009)

NYCDEP is in the construction phase for Paerdegat Basin Alley Creek CSO facilities. NYCDEP certified construction completion of the Flushing Bay CSO Facility in May 2007. (NYCDEP—Dorothy Chao 2009)

Planned Activities: Paerdegat Basin is expected to go online in 2010 and Alley Creek in late 2010 or early 2011. (NYSDEC—Jeff Myers 2009)

NYCDEP is preparing 18 Long-Term Control Plans for individual drainage basins. These plans are to be consistent with long-term planning requirements of the National CSO Policy and the fishable/swimmable goal of the Clean Water Act. These 18 LTCPs will be combined into a city-wide LTCP by December 2017, as per the 2005 consent order. (NYSDEC 2009).

Planned Activities: NYCDEP has an approved Paerdegat Basin CSO Long Term Control Plan. In addition, NYCDEP's CSO Long Term Control Plan project has developed Waterbody/Watershed Facility Plans and will continue to develop CSO Long Term Control Plans subsequent to the approval of the Waterbody/Watershed Plans. (NYCDEP—Dorothy Chao 2009)

NYCDEP has completed testing of Vortex centrifugal separators at Corona Avenue to reduce CSO impacts in Flushing Bay. The testing program was performed to assess applicability of this technology to other sites throughout the City. The final report shows that Vortex is not compatible with NYC's system. (NYCDEP 2004, NYCDEP—Dorothy Chao 2009)

HEP's Toxics, Pathogens, and Nutrients Workgroups are currently working on several TMDLs for the Estuary and their corresponding implementation plans. Implementation plans might include additional requirements for CSO controls and/or source control measures for stormwater management. (HEP Office, 2009)

SW-1. Implement measures to control municipal and industrial stormwater discharges

Key Elements: Stormwater permits should be issued by the states to control municipal and industrial stormwater discharges. These permits will establish requirements for the state's stormwater management programs. These permits will address reduction of pollutants, such as toxics, floatables, and pathogens in stormwater discharges.

Description of Activities to Date

The Bureau of Nonpoint Pollution Control through NJ's new Stormwater Regulations have implemented a plan that every municipality must get a municipal stormwater permit in the Harbor Estuary Area and all its tributaries within one year of the Stormwater adoption. (NJDEP 2004, NJDEP—Barry Chalofsky 2009)

NJDEP issued final stormwater rules on February 2, 2004 and NJPDES general permits authorizing stormwater discharges from Tier A and Tier B municipalities, public complexes, and highway agencies that discharge stormwater from municipal separate storm sewers (MS4s). These permits were readopted on February 28, 2009. Municipalities have made significant progress in complying with stormwater requirements. Progress is tracked in annual reports posted on NJDEP's website: <http://www.nj.gov/dep/dwq/msrp-report.htm> (NJDEP—Barry Chalofsky 2009, HEP Office, 2009)

The NJDEP's NJPDES program requires every industrial discharger with discharges of stormwater to surface water in the state of NJ to have discharge permits, most with pollutant loading limits. (NJDEP 2004, NJDEP—Barry Chalofsky 2009)

NYCDEP has completed a characterization of stormwater runoff from five different land use locations including: highways, commercial areas, heavy industrial zones, and high and low density residential areas. As part of this effort, an inventory of industrial and waste handling facilities that discharge to the municipal separate storm system was compiled to better regulate these entities. (NYCDEP 2004)

Stormwater provisions have now been incorporated by NYCDEP into discharge permits or directives for industrial pretreatment firms. (NYCDEP 2004)

NYCDEP's other planned initiatives under the Stormwater Program include: control of construction and contaminated site runoff, assessment of the effectiveness of a Spill Response/Slug Control Program, enforcement against improper disposal of spent vehicle fluids, and the implementation of a program to control release of specific toxicants from non-industrial pretreatment firms that discharge to the municipal sewer system. (NYCDEP 2004)

HEP's Toxics, Pathogens, and Nutrients Workgroups are currently working on several TMDLs for the Estuary and their corresponding implementation plans. Implementation plans are likely to include additional requirements in stormwater permits and/or source control measures for stormwater management. (HEP Office, 2009)

NPS-1. Focus Clean Water Act non-point source programs on Harbor/Bight watersheds.

Key Elements: Section 319 of the Clean Water Act requires states to identify waters impacted by non-point source pollution and to prepare and implement state non-point source management programs. USEPA awards grants to states under section 319(h) to assist with implementation of the state management programs. Both New York and New Jersey have USEPA-approved state non-point source management programs.

Description of Activities to Date

The NJDEP's new Stormwater Regulations deals with many NPS issues like site development, stormwater regulations and water quality. The NJDEP has hosted and will continue to host NPS meeting with municipalities and builders. (NJDEP 2004)

NPS-2. Develop and implement coastal non-point source management programs under Coastal Zone Act Reauthorization

Key Elements: Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA) of 1990 requires states with approved coastal zone management programs to prepare and implement coastal non-point pollution management programs. The coastal non-point pollution management programs should include management measures in six categories of non-point source pollution, which include urban runoff, agricultural runoff, shoreline erosion, and marinas.

Description of Activities to Date

NJ developed its Coastal Nonpoint Pollution Control Program plan (CNPCP), which has 13 subsections of water quality improvements for floatables, hydromodification restrictions, agriculture regulation, and urban center stormwater management plans. The NJDEP administers the plan and is in the process of implementing it. (NJDEP 2004). CNPCP Highlights include the Clean Marina Program, which encourages marina owners, yacht clubs, boatyards and boaters to prevent and reduce nonpoint sources of pollution (see T-3, F-4 and F-5); stormwater management, which includes NJPDES and Stormwater Management Rules (see SW-1); and regulations and guidance materials for septic systems (CMP website http://www.state.nj.us/dep/cmp/czm_cnpp.html 2009).

In November 2008, NJDEP adopted amendments to the Coastal Permit Program rules, N.J.A.C. 7:7 to add a new permit-by-rule for the construction and/or installation of boat wash wastewater systems. Requirements ensure that the systems will effectively wash boat bottoms, collect the wash wastewater, and treat to remove contaminants or dispose of the wash wastewater so that it is not discharged into the surface or ground water. This permit-by-rule will facilitate compliance with the Stormwater General Permit. In April 2008, NJDEP adopted amendments to N.J.A.C. 7:7E that update the goals of the NJ's Coastal Management Program. Each goal is supplemented by related policies that set forth the means to realize that goal. The eight CMP goals are: healthy coastal ecosystems; effective management of ocean and estuarine resources; meaningful public access to and use of tidal waterways and their shores; sustained and revitalized water-dependent uses; coastal open space; safe, healthy and well-planned coastal communities and regions; coordinated coastal decision-making, comprehensive planning and research; and coordinated public education and outreach. (NJDEP—Tali Engoltz 2009)

NPS-3. Focus the Urban Resources partnership on Harbor/Bight watersheds.

Key Elements: The US Department of Agriculture (USDA) has an Urban Resources Partnership (URP). This partnership, including representatives from USDA's Natural Resources Conservation Service, US Forest Service, the US National Park Service, US Fish and Wildlife Service, USEPA, and Cornell Cooperative Extension, is working with local government and community groups to implement natural resource-related projects intended to improve the quality of life in urban areas.

Description of Activities to Date

No activities have been reported.

NPS-4. Continue and enhance education programs for control of non-point source pollution.

Key Elements: Education is a major part of reducing pollutants in stormwater discharges. Individual's daily activities can contribute to the non-point source pollution. HEP should continue and enhance educational programs for control of non-point source pollution.

Description of Activities to Date

NJDEP DWM through meetings/presentations and the continued use of Americorp to use the Enviroscope model at community, school and public events to demonstrate point and non-point pollution in the Harbor Estuary Area. (NJDEP 2004)

Future City, Inc (FCI), a longtime HEP partner and CAC member, is continually engaged in public NPS pollution educational programs and activities within the Elizabeth River/Arthur Kill watershed. Examples include installation of rain gardens with HEP support, stormwater drain marking, public service announcements and online videos on NPS pollution prevention, and yearly Earth Day and Estuary Day events with many educational activities. (HEP Office, 2009)

The HEP office has been engaged in NPS pollution prevention education through presentations and use of Enviroscope stormwater model at Estuary Day and other events, web postings, creation and dissemination of brochures and other materials, and The Tidal Exchange newsletter articles.

Planned Activities: HEP intends to continue these activities, including participation in 2009 World Water Day at the American Museum of Natural History and Bronx River Fest. (HEP Office 2009)

NJDEP CNPCP's Clean Marina Program encourages marina owners, yacht clubs, boatyards and boaters to prevent and reduce nonpoint sources of pollution through education and outreach (see NPS-1). (CMP website http://www.state.nj.us/dep/cmp/czm_cnpp.html 2009)