

The New York Bight Floatables Action Plan
Partnership in the Abatement of Floatable Debris
May 2008

1.0 Introduction

In response to the impacts of floatable debris washing up on New York and New Jersey recreational bathing beaches, the Short-Term Action Plan for Addressing Floatable Debris in the New York Bight was developed in 1989. This document updates and replaces the short-term action plan and defines Federal, State and local agency's roles and responsibilities towards addressing floatable debris in the New York Bight for the next 10 year period. Periodic reviews, evaluations and modification of this plan will occur during this 10 year period. The New York Bight includes the New York/New Jersey Harbor Complex and the shorelines of Long Island and New Jersey.

Interagency partners from Federal, State and local agencies included in this plan are: the U.S. Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (ACOE), National Oceanic and Atmospheric Association (NOAA), New Jersey Department of Environmental Protection (NJDEP), New York State Department of Health (NYSDOH), New York City Department of Environmental Protection (NYCDEP), the Passaic Valley Sewage Commission (PVSC) and the Interstate Environmental Commission (IEC).

The primary objects of this plan are to define the roles and responsibilities:

- for surveillance of the New York/New Jersey Harbor Complex, and the New Jersey shore for floatable debris;
- for communication of an effective cleanup of floatable debris observed in the Harbor Complex, and;
- for the effective communication and notification of State and local authorities of impending debris washups.

2.0 Background

Floatable debris consists of a wide assortment of plastic, wood, paper, glass, rubber, metal and organic waste materials that float or are suspended in the water column and may eventually be deposited on shorelines and beaches. Floatable debris originating from street litter, combined sewer overflow (CSO) discharges, storm water discharges, decaying shoreline structures, pleasure boaters, and littering beach goers, can harm the marine environment and cause area beaches to close.

Through surveillance, communication and clean up efforts, we intend to improve water quality, protect the marine environment, eliminate navigational hazards, and prevent the occurrence of beach closures due to floatable debris. Specifically, the main goals of this partnership consist of the following:

- Elimination of floatable debris escaping the New York/New Jersey Harbor Complex.
- Maintaining an effective communication network to coordinate floatable debris removal activities and to respond to observed slicks.
- Elimination of the adverse impact of floatable debris on the marine environment.
- Ensuring timely notification of beach operators concerning potential washups of floatable debris.
- Elimination of beach closures due to floatable debris.

The following sections will describe the surveillance and cleanup activities agreed upon by the interagency partners. Communication being an integral part of the plan will be discussed throughout. A flow chart summarizing the communication sequence for reporting and responding to floatable debris slicks is displayed in Figure 1.

3.0 Surveillance

The primary objective of the surveillance plan is to detect floatable debris early enough to allow effective cleanup, thereby eliminating their impact. Surveillance will be implemented during the critical beach season, approximately one week before Memorial Day through Labor Day.

3.1 Surveillance of the New York/New Jersey Harbor Complex

Most floatable debris slicks that can impact the shores of New York and New Jersey are known to originate in the New York/New Jersey Harbor Complex. In order to effectively mitigate floatable debris slicks, surveillance will focus as close as possible to the point of origin, the Harbor Complex. Within the context of this action plan we have defined the New York/ New Jersey Harbor Complex to include the Arthur Kill, Newark Bay, the Kill Van Kull, the Upper and Lower New York Harbor, the lower Hudson River, and the coastline of Coney Island.

EPA will provide aerial surveillance of the Harbor Complex daily, except Sundays throughout the critical beach season. NJDEP will fly on Sunday into Raritan Bay to ensure seven day a week coverage.

During the EPA surveillance, the date, the time, and the name of the waterbody will be recorded in a field log book. If nothing significant is observed, the observer will write “clear”. If a significant slick is observed the following additional information will be recorded:

- the location of the debris including buoy numbers and landmarks,
- the latitude and longitude,
- the type of debris observed,
- the approximate width and length of the slick,
- the concentration of the slick, and

- the direction of the tide, if known.

3.11 Definitions

As in the 1989 Short-Term Action Plan for Addressing Floatable Debris, a significant “slick” is defined as an aggregation of floatable debris of indefinite width and a minimum length of approximately 400 meters. This definition has been adopted for practical purposes, it is difficult to detect and maintain a sighting for a smaller aggregation of floating debris from the air.

Concentration of a slick can be defined as heavy, moderate or light. A heavy density slick forms a continuous mat, very little if any water is visible because the material is packed so close together. Heavy density slicks contain a great deal of wood and garbage. A moderate density slick forms a mat with water visible through breaks in the mat. A light density slick is defined as material loosely floating together becoming dispersed and spread out.

3.12 Communication

Once the information is recorded, Monday through Friday, the ACOE dispatcher will be immediately notified using a marine radio or cell phone. On Saturday and Sunday, the operating vessel will be contacted directly via marine radio or cell phone. The time the ACOE was notified will be recorded in the EPA field logbook. Section 7.0 contains a complete list of telephone numbers and contacts for floatable coordinators. This list will be updated yearly.

EPA will summarize observations in a weekly report and conduct trend analysis in a yearly report. The yearly report will be posted on the following web site:
http://www.epa.gov/region02/water/action_plan/index.html.

3.2 Surveillance of the New Jersey Shoreline

The NJDEP administers the Cooperative Coastal Monitoring Program (CCMP) with the New Jersey Department of Health and Senior Services and local environmental health agencies. As part of this program, NJDEP will provide aerial surveillance from Raritan Bay south to Barnegat Light four days a week; and from Raritan Bay to Cape May Point, two days a week, throughout the critical beach season.

As a pilot program, NJDEP will extend their Sunday flight into the Arthur Kill, Newark Bay, Kill Van Kull and up the Hudson River as far as the George Washington Bridge. This flight area is covered by EPA from Monday through Saturday and will be tested for practicality by NJDEP to provide 7 day/week surveillance of the Harbor Complex.

Weather, sea conditions if notable, discoloration of water, and significant floatable debris will be recorded in field logbooks.

3.21 Definitions

Significant floatables along the New Jersey coast are rare and are defined differently than those spotted in the New York/ New Jersey Harbor Complex. They are defined as a concentrated amount of trash 10 feet in length or longer.

3.22 Communication

If a significant slick (as defined by section 3.21), is observed, upon completion of the flight, NJDEP will notify the appropriate county health department. The county health department will then notify the local beach manager. Local beach managers have the responsibility to ensure cleanup as appropriate.

Updates of daily beach conditions are posted on the NJDEP beaches web page:
<http://www.nj.gov/dep/beaches/>.

4.0 Cleanup

Cleanup operations within the Harbor Complex will be conducted by specially equipped drift vessels and will involve a cooperative integration from the ACOE, PVSC and NYCDEP.

4.1 ACOE

The ACOE will provide three drift vessels equipped with specially designed nets to be used on a routine basis and to respond when slicks are reported. Vessels, equipped with a net, will operate on a rotating basis seven days a week with one to three vessels operating on any given day throughout the critical summer season

4.11 Communication

All slick sighting within the Harbor Complex will be communicated to the ACOE on a real time basis, see Figure 1: Communication Chart for Reporting and Responding to Floatable Debris Slicks. The ACOE will deploy one of their vessels or contact PVSC or NYSDEC for an alternate vessel deployment. PVSC and/or NYSDEC will contact the ACOE to confirm cleanup was conducted.

If a slick is not reached for efficient cleanup, the ACOE will supply feedback to the EPA Floatables Coordinator. If the slick has a potential to wash up on a local beach, the EPA Floatables Coordinator will contact NOAA to run a floatables tracking model. Once the model is run, the EPA Floatables Coordinator will contact the NJDEP CCMP Coordinator or the appropriate NY County Health Department, see Figure 2: Communication Chart for observed slicks that the ACOE, PVSC or NYCDEP were not able to reach for an effective cleanup. Results of the tracking model will also be forwarded to the ACOE.

Documentation of slick cleanup will be maintained by the ACOE in an electronic tracking sheet. This spread sheet will include feedback from PVSC and NYCDEP see Figure 3: Army Corps of Engineers (ACOE) Tracking Sheet for Reported Floatable Slicks.

The ACOE will record the weight of all floatable debris collected and supply this information to the EPA Floatables Coordinator on a yearly basis for inclusion into the yearly report.

4.2 PVSC

The PVSC will provide a 50-foot skimmer vessel, the *SV Newark Bay*, to respond to slicks located within Newark Bay. The PVSC operates year round Monday through Friday from 8:45am to 3:00pm.

4.21 Communication

Once notified by the ACOE, PVSC will determine if they can respond to the slick sighting. If after attempting to clean up the slick and the slick is not reached by PVSC, feedback will be supplied to the ACOE who will notify the EPA Floatables Coordinator.

The PVSC will record the weight of all floatable debris collected and supply this information to the EPA Floatables Coordinator on a yearly basis for inclusion into the yearly report.

4.3 NYCDEP

The NYCDEP will provide an open water skimmer vessel, the *SV Cormorant*, to respond to slicks located within the Upper and Lower NY Harbor. Hours of operation are Monday through Friday 7:00am until 3:00pm.

4.31 Communication

Once notified by the ACOE, NYCDEP will determine if they can respond to the slick sighting. If after attempting to clean up the slick and the slick is not reached by NYCDEP, feedback will be supplied to the ACOE who will notify the EPA Floatables Coordinator.

The NYCDEP will record the weight of all floatable debris collected and supply this information to the EPA Floatables Coordinator on a yearly basis for inclusion into the yearly report.

5.0 Interagency Collection Programs

In addition to the surveillance and cleanup programs discussed above, the following section lists various floatable debris removal activities throughout New York and New Jersey.

5.1 Ocean Conservancy's International Coastal Cleanup

The Ocean Conservancy sponsors an Annual International Coastal Cleanup every September. Coordinated throughout New York State by the American Littoral Society, over 10,000 volunteers cleaned up and documented the pounds of debris at 338 sites across New York State.

Participating counties include: Suffolk, Nassau, Queens, Kings, Richmond, Manhattan, Bronx, and Westchester. Website: <http://www.alsnyc.org/cleanup.htm>

5.2 New York City Department of Environmental Protection (NYCDEP) Vessel, Booming and Skimming Collection Program, and Special Project Program

The 1992 CSO Abatement Order on Consent between the NYCDEP and New York State Department of Environmental Conservation (NYSDEC) required the NYCDEP to implement a short-term booming and skimming program to address floatables debris from approximately 50% of the City's CSO area. The NYCDEP operates a large open water skimmer vessel, the SV *Cormorant*, which is an integral part of this Action Plan, in the NY/NJ Harbor. In addition, four smaller skimming vessels are used in Jamaica Bay, the East River, Newtown Creek, Buttermilk Channel, Flushing Bay and Bowery Bay. The SV *Cormorant* began collecting floatable debris in 1994, and the smaller vessels beginning in 1995. Website: http://nyc.gov/html/dep/html/harbor_water/float.shtml.

In 1998, the NYCDEP initiated a volunteer beach cleanup program in the Gerritsen Beach area of Brooklyn, NY. This project, now termed NYCDEP's Special Project Program, was expanded in 1999 to also include Fort Hamilton High School and Coney Island Creek Beach components. These new components serve to remove debris collected in the vicinity of the Verrazano Narrows Bridge.

5.3 New Rochelle, NY Boom Floatable Debris Collection System

In 1998, the City of New Rochelle, under a NYSDEC grant, installed a "Stream Floatables Debris Collection System" at the Stephenson Brook stormwater drainage area outfall, which empties into Echo Bay and Long Island Sound. The system has a holding capacity of 1 cubic yard of debris. Collected debris includes wood, paper, glass, metal, plastics and organics. Website: <http://www.newrochelleny.com/storm.asp>

5.4 NJDEP's Clean Shores Program

Beginning in 1989, NJDEP began a program called "Operation Clean Shores", designed to collect shoreline floatable debris before it became resuspended due to tidal influences. This program uses New Jersey inmates to collect floatable debris, comprised mainly of landed drift wood, on non-recreational shorelines in order to prevent floatable debris from being re-floated during extreme high tides and washing up on recreational beaches, and/or becoming hazards to navigation and impacting marine life. The program, now called "Clean Shores", is conducted throughout the State of New Jersey in the Hudson, Raritan and Delaware estuaries and barrier island bays. In 1993, the Clean Shores Program was put into service on a year-round basis, whereas formerly it was only implemented during the bathing season. Website: <http://www.state.nj.us/dep/bmw/CleanShores/CSmain.html>

5.5 NJDEP's Adopt A Beach Program

The State of New Jersey enacted a law in January 1993 which authorized NJDEP to administer an "Adopt A Beach" program fostering volunteer stewardship of coastal beaches. NJDEP sponsors two statewide beach cleanups each year. Volunteers select (adopt) a beach for these cleanups. Data are then forwarded to the Ocean Conservancy in order to be included in their national and international marine debris database. For this program, collection totals are recorded by the number of items collected and not by weight. Website: http://www.state.nj.us/dep/watershedmgt/adopt_a_beach.htm

NJDEP's Clean Shores and Adopt A Beach Programs are funded by the sale of Shore Protection license plates.

5.6 Passaic Valley Sewerage Commissioners (PVSC) Skimmer Vessel Collection

PVSC operates two skimmer vessels which are used on the Passaic River and in Newark Bay. The larger vessel, SV *Newark Bay* which is an integral part of this Action Plan, is used in the Passaic River and the Newark Bay. The smaller vessel, SV *Passaic Valley*, is used in the upper parts of the Passaic River where the larger vessel can not reach, due to shallow waters and low bridges. Website: <http://www.pvsc.com/rr/index.htm>

5.7 Passaic River/Newark Bay Restoration Program

Beginning in 1998, PVSC established a program to aid in removing trash along the banks of the Passaic River. The program provides coordination and support to municipalities, counties, citizens, service groups, and local businesses to conduct shoreline cleanups along the river and in their communities. In addition to the sponsorship of voluntary efforts, PVSC has implemented an extensive cleanup of the river's shoreline by creating a River Restoration Department, consisting of 22 full-time employees dedicated to the removal of trash and debris from the Passaic River and Newark Bay. Website: <http://www.pvsc.com/rr/index.htm>

5.8 Floatables Abatement Programs of New Jersey Communities

Using General Permit conditions, NJDEP requires municipalities with combined sewer systems to construct control measures which will capture and remove solids and floatables through a bar screen having a bar spacing of 0.5 inches. Twelve New Jersey Communities participate in this program to decrease the amount of solids/floatables in the New Jersey area.

7.0 Contact list: **2008 Floatable Coordinators Contact List**

United States Environmental Protection Agency

Helen Grebe (732) 321-6797, home (732) 714-7017, cell (732) 278-1435

Randy Braun (732) 321-6692 , cell (732) 407-1023

John Kushwara (732) 321-6685, home (732) 566-4207

DESA Helicopter 2008 CellPhone: (908) 420-4495

EPA National Response Center 1-800-424-8802 - 24 hours

United States Army Corps Of Engineers (for In-Harbor Slicks) 212-264-7147 fax

Marine Dispatch: Ed Nerges (201) 333-1170

Tim Lafontaine (732) 577-1322, cell (917)-567-9121

P.T. Siu (201) 333-1170, home (201) 224-2424

Bob Pivirotto (201) 333-1170, home (201) 447-6169, cell (646)-210-2159

Caven Point Terminal Shipkeeper(201) 433-6110 – 24 hours

Hayward: (917) 567-9062 Driftmaster: (917) 567-9063 Gelberman: (917) 567- 9067

United States Coast Guard (oil slicks)

National Response Center 1-800-424-8802 (24-Hour Hotline)

Pollution Response Center (718) 354-4121

National Oceanic and Atmospheric Administration (Trajectory Model Run / Major Slicks)

Ed Levine (212) 668-6428 [212668-6370 fax]

Glen Watabayashi (206) 526-6324 [206-526-6329 fax]

Main Office (206) 526-4911 (24-hour Hotline)

New Jersey Department of Environmental Protection

CCMP Coordinator: Virginia Loftin work (609) 984-5599 [609-292-1803 fax]

NJDEP Environmental Hot Line 1-877-927-6337

Public Beach Information 1-800-648-SAND

New York Health Departments

NYC Health Department – Jim Luke (212) 676-1520

Nassau County Health Department – John Jacobs (516) 571-2930

Suffolk County Health Department – Robert (Mack) Waters (631) 852-5760

New York City Department of Environmental Protection - Cormorant

Marine Dispatch (212) 860- 8250

Abraham Lutterodt, Marine Section, (212) 860-8254

John Chen, (212) 860-8251

Walter Goyzueta, (718) 595-4925

PVSC Skimmer Vessel (Passaic River and Newark Bay)

Robert DeVita (973) 466-2710 cell 973-277-8889

Brian Davenport (973) 817-8332 cell 973-277-8890

Figure 1. Communication Chart for Reporting and Responding to Floatable Debris Slicks

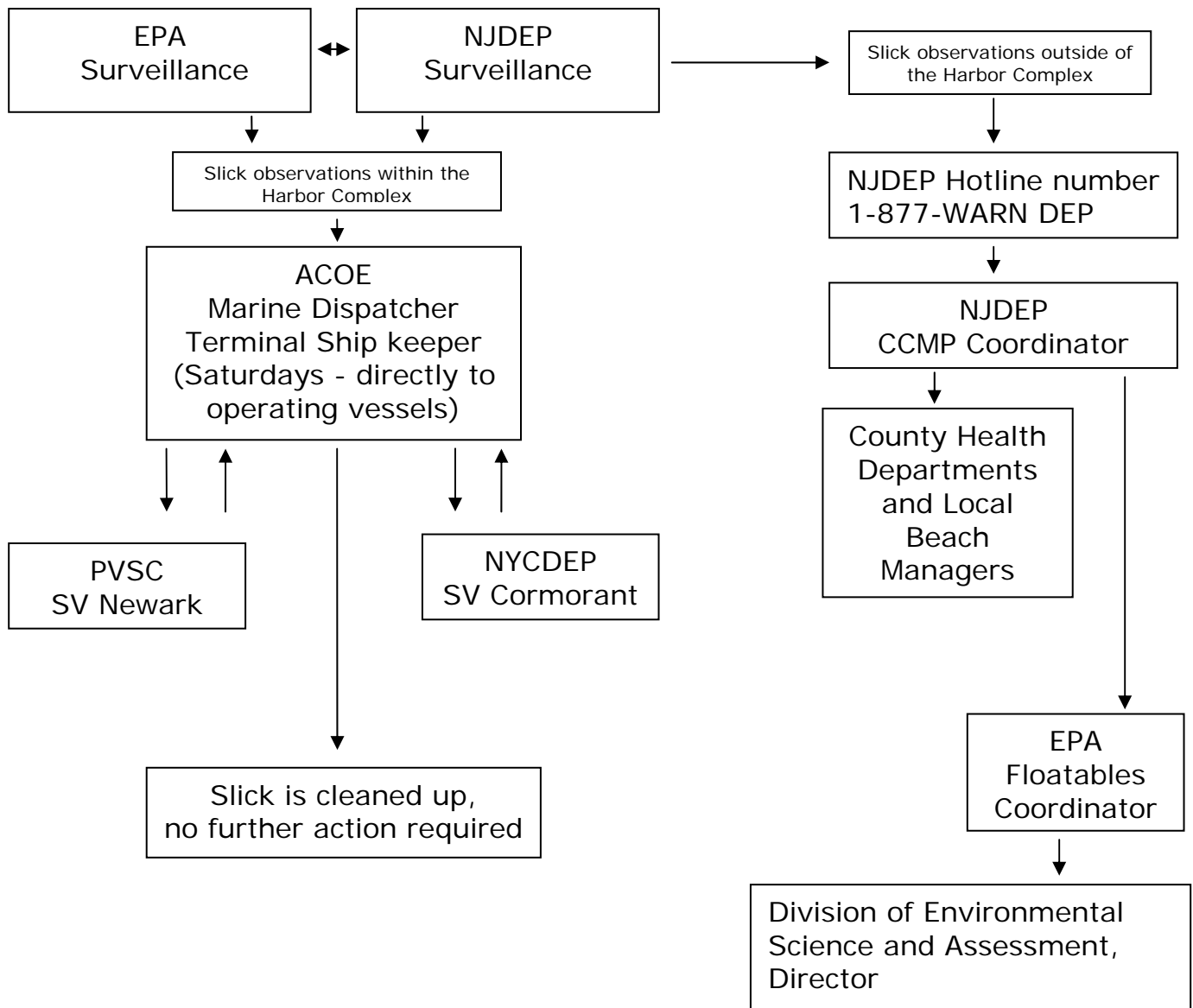


Figure 2. Communication Chart for observed slicks that the ACOE, PVSC or NYCDEP were not able to reach for an effective cleanup.

