

NJ Department of Environmental Protection Water Monitoring and Standards

COOPERATIVE COASTAL MONITORING PROGRAM

Summary Report for 2007 and 2008



December 2009

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New Jersey Department of Environmental Protection Land Use Management

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Water Monitoring and Standards

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Cover Photo – New Jersey Coastline at Wildwood (photo by Steve Jacobus)

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Introduction

The Cooperative Coastal Monitoring Program (CCMP) is coordinated by the New Jersey Department of Environmental Protection's Water Monitoring and Standards program. The CCMP assesses coastal water quality and investigates sources of water pollution. The information collected under the CCMP assests the DEP in responding to immediate public health concerns arising from contamination in coastal recreational bathing areas. Agencies that participate in the CCMP perform sanitary surveys of beach areas and monitor concentrations of bacteria in nearshore ocean and estuarine waters to assess the acceptability of these waters for recreational bathing. These activities and the resulting data are used to respond to immediate public health concerns associated with recreational water quality and to eliminate the sources of fecal contamination that impact coastal waters. Funding for the CCMP comes from the NJ Coastal Protection Trust Fund and the United States Environmental Protection Agency (EPA) Beaches Environmental Assessment and Coastal Health (BEACH) Act grants. BEACH Development and Implementation grants were awarded in the years 2001 through 2008. DEP designs the beach sampling and administers the communication, notification and response portion of the CCMP. A portion of the BEACH grant funds were passed through to the four county health departments participating in the CCMP who perform the weekly sample collection and analysis. The participating agencies are:

Atlantic County Health Department Cape May County Health Department Monmouth County Health Department Ocean County Health Department

Additional assistance is provided by the following agencies:

Atlantic City Health Department Long Beach Township Health Department Long Branch Health Department Middletown Health Department Monmouth County Regional Health Commission New Jersey Department of Health and Senior Services

As part of this program, DEP routinely inspects the 17 wastewater treatment facilities that discharge to the ocean (Appendix 1). DEP also performs aerial surveillance of New Jersey nearshore coastal waters and the Hudson-Raritan estuaries to observe changing coastal water quality conditions and potential pollution sources.

CCMP Procedures

Chapter IX of the State Sanitary Code N.J.A.C. 8:26 and the DEP Field Sampling Procedures Manual prescribe the sampling techniques and beach opening and closing procedures the agencies use for the CCMP. The agencies perform routine sampling from mid-May through mid-September on Mondays. Samples are analyzed for enterococci concentrations using DEP-certified laboratories for EPA approved methods; analyses provide results within 24 hours of sampling. Counties submit water monitoring data to DEP in electronic format after each sampling event through the use of DEP's web-based Beach Monitoring System. In 2007, monitoring and beach closing notification data was transferred to EPA's CDX node and then transferred electronically to STORET. In 2008, data was transferred via the new WQX data system.

The CCMP included water quality monitoring at 184 ocean stations and 72 bay stations in 2007 and 185 ocean stations and 68 bay stations in 2008. Most station locations coincided with recreational swimming beaches. However, 7 ocean stations and 33 bay stations were not located at recreational beaches. These environmental monitoring stations are used to assess water quality trends only. In 2007, the Cape May County Health Department removed all environmental bay monitoring stations from the program in order to focus limited sampling resources on recreational bathing sites. Recreational stations are sampled to assess trends and to protect recreational bathers from polluted water. Most ocean stations are sampled to evaluate the water quality

at several lifeguarded beaches in an area rather than just one lifeguarded beach. These areas consist of contiguous, similar beaches with no likely pollution sources. Individual beaches are assigned monitoring stations when effects from potential pollution sources are possible. A monitoring station is assigned at each recreational bay beach because of their noncontiguous locations.

Recreational beaches, both ocean and bay, are subject to opening and closing procedures of the State Sanitary Code and, therefore, must be resampled when, during routine sampling, bacteria concentrations exceed the primary contact standard. In the years prior to 2004, the primary contact standard was 200 fecal coliforms per 100 mL of sample. Studies performed by EPA determined that enterococci bacteria have a greater correlation with swimming-associated gastrointestinal illness in marine waters than fecal coliform bacteria. In 2004, the State Sanitary Code was amended and the primary contact standard changed to 104 enterococci bacteria per 100 mL of sample. Consecutive samples that exceed the standard require the closing of the beach until a sample is obtained that is within the standard. When high bacteria concentrations are recorded at an ocean station, the sampling is extended linearly along the beach to determine the extent of the problem and the pollution source. This "bracket sampling" can result in an extension of the beach closing to contiguous lifeguarded beaches. Sampling is always performed in conjunction with a sanitary survey, which includes identifying possible pollution sources and observing water and shoreline conditions.

Health or enforcement agencies may close beaches at any time at their discretion to protect the public's health and safety.

Beach Closings - 2007 and 2008

The participating health agencies closed 89 and 158 ocean beaches in the 2007 and 2008¹ summer seasons, respectively. These beach closings can be based on measured bacteria levels exceeding the standard or as a precautionary measure in response to an environmental condition, including floatables. Beach conditions, beach closings and the reasons for beach closings were posted on the DEP web page (www.njbeaches.org) and on the DEP Sandline (800-648-SAND) each day. Additionally, when beach closings were necessary the county or local health agency posted "No Swimming" signs at the beach. Signs remained posted until the swimming ban was lifted. Detailed beach closing information, including the specific beaches closed and reasons for the closings for this period are presented in Appendix 2. Table 1 below presents the numbers of closings from 1998 through 2008.

Table 1: Numbers of Ocean and Bay Beach Closings

Ocean Closings	<u>1998</u>	<u>1999</u>	2000	2001	<u>2002</u> ¹	2003	<u>2004</u> ²	2005	2006	2007	2008
for bacteria	3	8	8	16	0	9	17	7	18	0	1
# Precautionary closings	0	6	3	24	16	58	42	50	79	85	37
# Rainfall Provisional Beaches	0	0	0	0	2	2	2	3	3	4	4
For floatables	0	0	0	0	0	13	0	0	0	4	1203
Total	3	14	11	40	16	80	59	57	97	89	158

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¹ A criminal medical waste dumping event was responsible for 120 ocean beach closings in 2008

Table 1: Numbers of Ocean and Bay Beach Closings (cont.)

Bay Closings	<u>1998</u>	<u>1999</u>	2000	<u>2001</u>	2002	2003	<u>2004</u>	2005	2006	2007	2008
for bacteria	30	21	22	114	7	82	89	4	27	35	30
# Precautionary closings	6	0	0	4	8	26	20	18	10	18	13
# Rainfall Provisional Beaches	0	0	0	0	1	1	1	1	1	1	2
for floatables	0	0	0	0	0	0	0	0	0	0	0
total	36	21	22	118	15	108	109	22	37	53	43

¹ Precautionary rainfall-related beach closing policy implemented for two Spring Lake beaches. Two additional ocean and two bay beaches added to policy in subsequent years.

Closings include those required for consecutive high fecal coliform or enterococci concentrations and by health agency discretion due to public health concerns. The large majority of the bacterial closings in the above-listed years were related to contaminated stormwater (actual or potential). In 2002, the Monmouth County Health Department implemented a precautionary rainfall beach closing procedure which is in effect at beaches with known and identified sources of potential contamination. Precautionary beach closings after significant rainfall are more protective of public health since there is no need to wait for laboratory results from water quality sampling – thus the bathing public is protected from exposure to potentially contaminated stormwater. Since 2002, a total of four ocean beaches and two bay beaches in Monmouth County have been identified as rain provisional beaches which substantially affects the total beach closing numbers at ocean and bay beaches.

In 1990, floatable debris was responsible for a total of 10 separate beach closings. In the following 12 years, no closings had been due to floatables; however, in 2003, 13 separate closings and in 2007 four closings were due to reported wash-ups of trash and debris. In 2008, a criminal medical waste dumping event was responsible for 120 ocean beach closings.

The CCMP does not record closings related to rough seas, beach maintenance projects, shark sitings, and fish and clam wash-ups. The CCMP also does not include those closings that are briefly in effect during the assessment of water conditions by local officials. Only those beach closings ordered by local health officials are included here.

The increase in ocean and bay beach closings in the 2001, 2003, 2004 and 2006 summer seasons may be attributed to frequent periods of intense rainfall and the resulting stormwater discharges. The ocean beaches of Spring Lake were particularly affected by the stormwater impact on the Wreck Pond discharge. The affected beaches extended through the 2 1/2 miles of Spring Lake for two days in August 2001. As mentioned above, in 2002, a precautionary beach closing plan was implemented in Spring Lake. It requires that the two beaches north of the Wreck Pond outfall, Brown Avenue and York Avenue, close for a specified time period following a rain event. The bathing areas of these two beaches are automatically closed for 24 hours after the end of all rainfalls greater than 0.1 inch or that cause an increased flow in storm drains; and for 48 hours from the end of all rainfalls greater than 2.8 inches within a 24 hour period. In addition, lifeguards (or staff as designated by Spring Lake) will prohibit swimming near any parts of these beaches where the stormwater plume is observed to be mixing within the swimming area. In 2005, the Terrace beach and in 2007, Beacon Boulevard beach (both beaches in Sea Girt just south of the Wreck Pond outfall) were added to the precautionary beach closing plan. Intensive source trackdown has identified that sources of pollution to Wreck Pond include stormwater discharges directly to the pond and suspected failing infrastructure in the community surrounding the pond.

² Indicator changed from fecal coliform to enterococci in 2004

³ A criminal medical waste dumping event was responsible for 120 ocean beach closings in 2008

These factors contribute to the elevated levels of fecal coliform bacteria discharged to the ocean during rain events. The Department is moving ahead with steps to alleviate these sources of contamination (see below).

Ocean Beach Closings 1992 - 2008

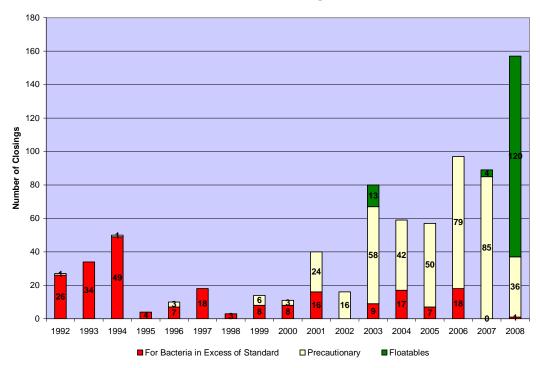


Figure 1. Trend in NJ ocean beach closings

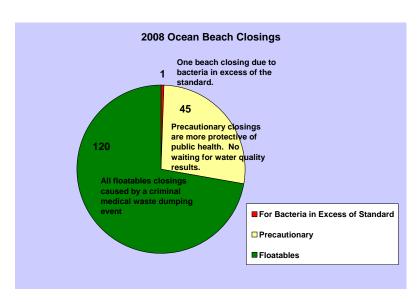


Figure 2. 2008 ocean beach closings; numbers and reasons for closings

Bay Beach Closings 1992 - 2008

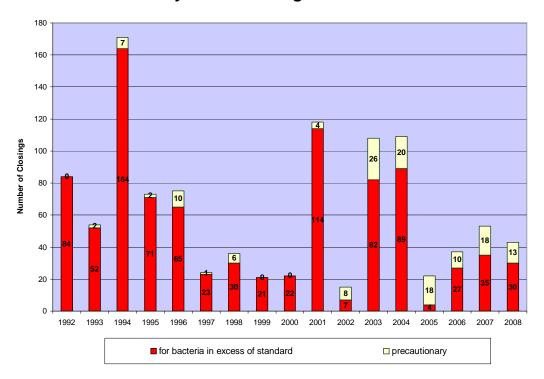


Figure 3. Trends in NJ bay beach closings

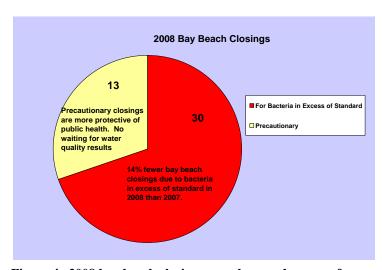


Figure 4. 2008 bay beach closings; numbers and reasons for closings

As shown in Figures 1 and 3, closures at New Jersey's ocean and bay beaches due to exceedances of the water quality standard have been down since the early 1990's. In fact, there were no closures at ocean beaches due to water quality exceedances in 2007 and only one closure in 2008. However, the overall number of closures is up at ocean beaches primarily due to precautionary closures since 2000 and the criminal medical waste dumping event in 2008. These precautionary closures represent an enhanced level of public health protection that has implemented by county and local health officials with the support of DEP. Even

with these additional precautionary closures, New Jersey beaches are open to bathing over 99.7% of the time (see Figure 5). The national average was 95% in 2007 ².

² USEPA, Water Headlines for June 2, 2008

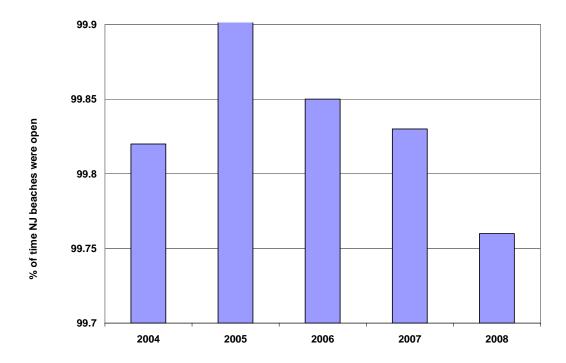


Figure 5. Percent of time NJ ocean and bay beaches are open for bathing by year

Enhancements to CCMP

DEP has joined with the USEPA and others in the private and public sectors to identify and address sources of pollution impacting the State's beaches. This approach will accelerate improvements in the quality of our beaches and coastal waters as a result of the increased coordination and pooling of resources.

DEP is currently working with local stakeholders to address the elevated bacteria levels in Wreck Pond. In early 2006, DEP completed a 300-foot extension of the Wreck Pond outfall into the ocean. In 2007, DEP's Water Monitoring and Standards Program began an intensive stormwater source trackdown study and has identified a number of potential sources of bacteria to the pond and surrounding beaches. DEP is working with the county and local governments to address these sources. Wet-weather sampling continues in an effort to pinpoint the sources.

In 2007 and 2008, DEP joined with EPA, Monmouth and Ocean County Health Departments and the Ocean County Utilities Authority in a joint sampling program to study the correlation between three different methods for the analysis of enterococcus bacteria in marine waters. EPA Method 1600 is the traditional method used by the CCMP and by Monmouth County for this study. Enterolert was used by Ocean County for the 2007 bathing season only and for this comparative study. Additional samples were collected and analyzed by EPA using quantitative polymerase chain reaction (qPCR) - a method for the rapid detection of enterococcus bacteria in bathing water. Samples were collected at 20 ocean and bay stations between June 18 and August 20 in 2007 and at two bay beaches in 2008. Final results for the 2007 study are available at: http://www.epa.gov/region2/water/oceans/PCRBeachStudyReportFinal2007.pdf.

In February 2008 DEP initiated a meeting of the partners of the multi-agency Floatables Action Plan for the New York/New Jersey Harbor. This plan is designed to capture slicks of floatable debris before they exit the Harbor. Slicks are monitored and captured through the use of:

- aerial surveillance detection of floating debris through the EPA Helicopter Monitoring and the NJDEP Aerial Surveillance Programs
- skimmer vessels specialized boats fitted with nets that can collect floating slicks of debris;
- floating booms floating barriers strewn across waterways near sewer-system discharge points from area sewer systems to trap debris for later collection; and
- sewer-system improvements to maximize their ability to retain floatables.

Changes and recommendations were made to the plan and the updated version can be viewed on the U.S. Environmental Protection Agency website at:

http://www.epa.gov/Region2/water/action_plan/index.html.

Coastal Pollution Incidents of Note

The following pollution incidents received public, DEP, and local health agency attention, although the incidents did not always require beach closings:

2007

Late May 2007 – Over Memorial Day weekend, the DEP hotline received numerous complaints of brown, foamy water in Raritan Bay and along the beaches in central Monmouth County. Samples collected identified the algae as predominantly diatoms in bloom concentrations. The bloom was greatly diminished after approximately one week.

On June 5th, the Asbury Park sewage treatment plant released approximately 250,000 gallons of chlorinated, primary treated sewage to the ocean through the 1700-foot long outfall in about 33 feet of water. All ocean beaches in the area were posted with "No Swimming" signs; however, only one ocean beach in Allenhurst was actually open that early in the season. That beach was closed as a precaution. Water quality results collected along the coast were all within the standard and all precautions were removed the next day.

On June 21st, several hundred dead menhaden were reported washing up on the beach in Keyport. Water quality samples were all within standards and algae samples showed some dinoflagellates in the water but not in bloom concentrations. It was determined that the fish were likely caught for bait and the catch was either lost or dumped.

On July 17th, four 55-gallon drums washed onto beaches between Ventnor and Longport. Two of the drums broke open and the contents spilled onto the beach. The contents were identified as fish bones, scallops, clams and other bait items. The contents were cleaned and removed by local public works crews and bacteria samples were collected. No beaches were closed due to the event.

On August 15th, a fish kill was reported in North Wildwood. First reported as bluefish and later confirmed as bunker, dead fish washed up on the beach at First Street. Most of the fish were cleaned up by public works. The source was likely a net spill. No beaches were closed.

On August 16th, the Monmouth County Health Department reported two fish kills in northern Monmouth County. Several thousand dead adult-sized bunker were found near the shore in Belford and Atlantic Highlands and were also reported floating near the pound nets in the bay. The source of these fish was

unknown, but may be spillage from a fishing net or caused by low dissolved oxygen due to rotting vegetation. Another fish kill was reported in Turtle Mews Creek in Oceanport Boro. Several thousand juvenile bunker were found along the banks of the creek. Dissolved oxygen levels were measured by the Monmouth County Health Department and were extremely low in the creek. There is evidence that enormous schools of bunker swimming in enclosed waterways such as tidal creeks use up all of the available oxygen and are then unable to move back into open water. ³

On August 24th, Thompson Avenue beach in Middletown was closed late in the afternoon due to a wash-up of trash and debris. The beach was reopened the following day.

On August 30th, the DEP hotline received several complaints of trash and greaseballs washing up on beaches along the Raritan bayshore and at some ocean beaches in Monmouth County. DEP's Central Bureau of Water Compliance and Enforcement and the Monmouth County Health Department responded to the complaints. In a separate incident, one syringe was reported on the beach in Sea Isle City. It was removed by local health officials.

On September 2nd, the DEP hotline received many complaints of large amounts of trash and debris, including approximately 30 syringes, washing onto beaches in Brick, Normandy Beach and Lavallette with more reports of smaller amounts of trash at other beaches in northern Ocean County. The trash came in on the high tide in the afternoon. A total of four beaches in Normandy Beach and Lavallette were closed due to the wash-up. A second wave of trash came in on the next high tide early the next morning. The municipalities cleaned and raked the beaches as the trash came in and the beaches were clean the following morning. The Ocean County Health Department re-inspected all of the beaches in northern Ocean County and reopened the four closed beaches by 10:00 the following morning. Investigations by DEP's Bureau of Solid Waste Compliance and Enforcement identified the source of the majority of the trash as coming from combined sewer overflows in the New York Harbor area which was associated with heavy rainstorms the previous week.

On September 2nd and 3rd, in a separate incident a total of six syringes were found in Sea Isle City and Strathmere. They were removed by the Cape May County Office of Emergency Management.

2008

On June 3rd, the Kentucky Avenue beach in Atlantic City was closed due to a sewage spill. The sewage leaked into a nearby storm drain which discharges to Kentucky Avenue, a bathing beach. Water quality results were collected along the coast and were found to be within the standard. The beach was reopened the following day.

From June 11th through June 15th the DEP hotline received numerous complaints of brown, foamy water in Raritan Bay and along the beaches in Monmouth County from Elberon South to Manasquan Inlet. DEP's Water Monitoring and Standards Program collected samples and identified the algae as predominately mixed diatoms and dinoflagellates in bloom concentrations. No toxic species of algae were identified and the bloom dissipated throughout the week. No beaches were closed.

On June 17th, the EPA helicopter reported large floatable slicks in the New York harbor area following heavy rainstorms. The full-moon tide during this time period helped to carry floating trash out of the harbor and onto the beaches at the Sandy Hook National Recreation Area. Sandy Hook maintenance staff cleaned all beach areas and no beaches were closed due to the event.

On June 23rd, Thompson Avenue bay beach in Middletown was closed as a precaution after a boat sank at the

³ Menhaden Resource Council http://www.menhaden.org/biology mortality.htm

Leonardo State Marina. The boat leaked an unknown amount of fuel into the Marina. Local hazmat personnel responded to the spill and the beach was reopened the next day.

Just after midnight on July 2nd, a 72-foot clam dredge, the Susan II out of Massachusetts, hit the rocks at Manasquan Inlet. The vessel drifted approximately 200 yards east of the inlet and sank in 35 feet of water. There was an estimated 2000 gallons of diesel fuel plus an additional 100 gallons of hydraulic oil onboard. DEP's Bureau of Emergency Management, the Coast Guard, the State Police and Monmouth and Ocean County Health Departments all responded to the spill. No impacts occurred at any bathing beaches and beaches were not closed due to the event.

On July 7th and July 8th, small amounts of trash washed up on beaches in Manasquan, Point Pleasant and Lavallette. Trash slicks were also observed off the coast of Sea Girt. On the night of July 7th two syringes and one IV bag were also found on the beach at Point Pleasant. The Ocean County Health Department and local municipalities responded to the reports of trash and medical waste and local public works crews cleaned debris off the beaches. No beaches were closed

On July 12th, the DEP hotline received complaints about two separate fish kills. Approximately 800 – 1000 dead fish including fluke, sea robin, puffer, flounder, grass shrimp and crabs were found at the Leonardo State Marina in the Atlantic Highlands. A second fish kill consisting of several hundred dead fluke, all approximately 1-2 inches in length were found in the weeds along the beach at Cliffwood Beach. DEP's Division of Fish and Wildlife, Monmouth County Health Department, Middletown Health Department and Middlesex County Health Department staff all responded to the sites. The causes of the fish kills could not be determined; however, a fairly significant algal bloom was occurring in the western portion of Raritan Bay and likely caused the events.

On July 16th, another small fish kill was reported at Cliffwood Beach. Approximately 12 small fluke and 100 small porgies were found washed up on the beach. Monmouth County Health Department collected algae samples from the beach and reported an offshore low dissolved oxygen event. This fish kill was likely related to the algal bloom that was occurring in the western portion of Raritan Bay.

On July 18th, two beaches in Ocean City (8th and 9th Avenues) were closed as a precaution due to a suspected sewage spill at a nearby storm drain. The Cape May County Health Department collected water quality samples from the affected beaches. Both beaches were reopened on Saturday after bacteria sampling indicated that no sewage had reached the beaches.

From August 14th to August 19th, pink colored water was observed off the coast of Long Beach Island. DEP's Water Monitoring and Standards Program took several samples along the coast and determined that the pink water was caused by a high concentration of comb jellies. No beaches were closed due to the event.

On Saturday, August 23rd, the DEP hotline received a report of medical waste washing onto beaches in Avalon. By late that afternoon approximately 150-200 vaccutainer tubes, several syringes and medical cotton swabs had washed onto the beaches. All beaches between 9th and 24th Streets were closed. Additional swabs and syringes washed in the following day and continued to wash in at various beaches for several days. Beaches closed and reopened as waste washed in and was removed. DEP's Water Monitoring and Standards provided boat and helicopter surveillance and worked with multiple state and local agencies to identify the source of the medical waste. Rutgers University Coastal Ocean Observing Laboratory utilized its remote sensing for ocean currents to narrow down the source of the debris as an area from Townsend's Inlet north to Great Egg Inlet. It was found that the majority of the waste was caused by an intentional criminal dumping event in the inlet. The perpetrator was identified, indicted and charged with Unlawful Discharge of a Pollutant and Unlawful Disposal of Medical Waste for dumping used dental needles and waste in the inlet⁴. During this

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⁴ NJ Department of Law and Public Safety, Environmental Crimes Bureau 2008 Annual Report

event, other syringes were found on beaches in Ocean City and Sea Isle City and beaches in those towns also closed during the investigation and cleanup. A total of 120 beaches were closed due to the medical waste dumping event.

Relative Status of New Jersey Beach Water Quality

According to the latest data from USEPA's 2008 assessment report of the nation's beaches⁵, New Jersey's beach water quality is among the best on the East Coast of the U.S. As shown in Figure 3 and 4, New Jersey had among the lowest exceedances of the safe water quality criterion and lowest percentage of beach closings/advisories of the East Coast states in both 2007 and 2008. This good water quality is also reflected in the number of days the beaches were open to the public in NJ. With 260 monitored marine beaches in NJ and 16 weeks to the bathing season, NJ has a total of more than 29,000 beach-days available each summer⁶. In 2007, there were a total of 142 beach closings, representing 0.48% of the available beach days. In other words, when the public in NJ went to the beach in 2008, they found the beach was open for bathing 99.5 percent of the time. As Figure 6 shows, NJ had among the lowest percentage of beaches affected by closures/advisories on the East Coast in 2008 or, as Figure 7 shows, NJ has among the highest percentage of beach days open for bathing.

% of Beach-Days affected by a Closure/Advisory – East Coast States in 2008

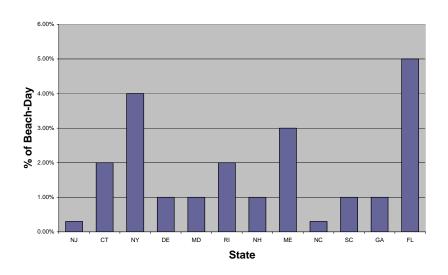


Figure 6. East Coast bathing beaches affected by a closure or advisory in 2008

(http://www.state.nj.us/lps/dcj/ecb/ecb-2008-annual-rpt.pdf)

⁵ USEPA 2008 Beach Notification Summary [updated 2009 October 16]. United States Environmental Protection Agency, Water Science http://www.epa.gov/waterscience/beaches/seasons/2008/

⁶ If both the monitored and non-monitored beaches are counted, New Jersey has 700 lifeguarded marine beaches. If these were included in the above calculations, New Jersey's percent of beach-days open would be even higher.

% of Beach Days Open for Bathers -- East Coast States in 2008

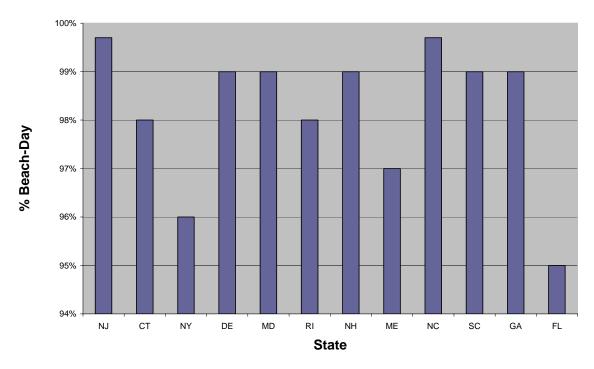


Figure 7. Percent of beach days available to bathers based on USEPA data. Beach days are defined as the # of beaches open multiplied by the # of days in a season.

Standards

As previously stated, the recreational or primary contact standard in the State Sanitary Code for the purpose of closing/opening beaches is 104 enterococci bacteria per 100 mL of sample. Two consecutive concentrations exceeding this standard require the health agency to close the beach where the concentrations were recorded.

The Department also evaluated the overall water quality for recreational use based on the Enterococcus criteria using the NJ Surface Water Quality Standards (SWQS). The SWQS for recreation at coastal beaches is a geometric mean of 35 enterococci bacteria per 100 mL based on a minimum of five samples collected within a 30 day period. In addition, as stated above, a single sample maximum concentration of 104 enterococci bacteria per 100 mL is also used for beach notification purposes to protect the public who are swimming at NJ's beaches. For the CCMP, all samples taken from a monitoring station during the summer sampling season are averaged geometrically and compared to the standard. Seasonal averages are presented in Appendix 3. Table 2 presents the number of recreational monitoring stations that exceeded the applicable surface water quality standard in 2007 and 2008.

Table 2: Recreational Monitoring Stations that Exceeded Surface Water Quality Standards

Ocean Stations	Enterococcus Average	Enterococcus SWOS Standard
2007 – none, 100% met SWQS	All <35	35
2008 – none, 100% met SWQS	All <35	35
Bay Stations		
2007 – L Street, Belmar	43.1	35
Maxon Ave., Pt. Pleasant	50.7	
River Ave., Pt. Pleasant	71.7	
Windward Beach, Brick	36	
Reese Ave., Lavallette	44	
Brooklyn Ave., Lavallette	35.9	
Hancock Ave., Seaside	136.2	
5th, Seaside Park	49.8	
Summit, Island Heights	35.4	
Money Island, Dover	76.8	
Beachwood West, Beachwood	114.4	
West Beach, Pine Beach	64.2	
East Beach, Pine Beach	41	
Anglesea, Ocean Gate	36	
2008 – Maxon Ave., Pt. Pleasant	47.2	35
River Ave., Pt. Pleasant	53.8	
Windward Beach, Brick	38	
Hancock Ave., Seaside	35.6	

In 2007, 100% of recreational ocean stations and 81.6% of recreational bay stations were within the Enterococcus SWQS, and in 2008, 100% of recreational ocean stations and 93.4% of recreational bay stations were within SWQS. The increase in the number of recreational bay stations meeting the SWQS in 2008 is likely due to a decrease in the amount of rainfall in that year.

Related Programs:

A. Clean Shores Program

Non-recreational shorelines that have been left unattended serve as reservoirs of floatable debris that can be refloated during extreme high tides and can wash up on recreational beaches, bojecome floating hazards to navigation, or impact marine life. DEP uses state correctional facility inmates to remove floatable debris from the shorelines of the Hudson, Raritan, and Delaware estuaries and barrier island bays. The Clean Shores Program conducts shoreline cleanups year-round. In the years 2007 and 2008, the Clean Shores Program removed 4.1 and 4.14 million pounds of debris from 130.5 and 134.5 miles of shoreline, respectively.

B. Adopt A Beach Program

This program fosters citizen stewardship of coastal beaches and teaches the public about the hazards of marine debris to marine life by providing information and field experience. Twice a year, volunteers in groups or as individuals clean their selected beaches and count and categorize the debris. The cleanup activities prevent marine debris from returning to the coastal waters and assist the DEP in tracking pollution sources. Volunteers in 60 groups removed 19,004 items in 2007 and 74,628 items in 2008 from the state's beaches. DEP forwards the marine debris information to EPA to be included in the Floatables Action Plan Annual Summary and the Ocean

Conservancy to be included in its national and international marine debris databases.

Additional Information

For additional information about the CCMP, or New Jersey's beach monitoring in general, contact Virginia Loftin at 609-984-5599 or <u>Virginia.Loftin@dep.state.nj.us</u> or visit the Program's website at <u>www.njbeaches.nj.us</u>.

Appendix 1 -

Wastewater Treatment Facilities Discharging to the Nearshore Coastal Waters

- 1 Monmouth County Bayshore Regional Sewage Authority
- 2 Township of Middletown Sewage Authority
- 3 Northeast Monmouth Regional Sewerage Authority
- 4 Long Branch Sewerage Authority
- 5 Township of Ocean Sewerage Authority
- 6 Asbury Park Sewerage Authority
- 7 Township of Neptune Sewerage Authority
- 8 South Monmouth Regional Sewerage Authority
- 9 Ocean County Utilities Authority, Northern
- 10 Ocean County Utilities Authority, Central
- 11 Ocean County Utilities Authority, Southern
- 12 Atlantic County Utilities Authority
- 13 Cape May County Municipal Utilities Authority, Ocean City Cape May County Municipal Utilities Authority, Seven Mile
- 14 Middle
- 15 Cape May County Municipal Utilities Authority, Wildwood
- 16 Cape May County Municipal Utilities Authority, Cape May Point
- 17 Lower Township Municipal Utilities Authority

Appendix 2 – 2007 and 2008 Beach Closings

DATE 2007	COUNTY	MUNICIPALITY	ВЕАСН	REASON	
5/28/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
5/28/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	
5/28/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
5/28/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
6/5/2007	Monmouth	Allenhurst	Cedar Ave.	sewage spill - precautionary	
6/20/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
6/20/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
6/22/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
6/22/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
6/28/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
6/28/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
6/28/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
6/28/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	
6/29/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
6/29/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	
6/29/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
6/29/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
7/5/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
7/5/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	
7/5/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
7/5/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
7/6/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
7/6/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	
7/6/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
7/6/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
7/12/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
7/12/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	
7/12/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
7/12/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
7/19/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
7/19/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	
7/19/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
7/19/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
7/20/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
7/20/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	
7/20/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
7/20/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
7/23/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
7/23/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	
7/23/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
7/23/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
7/24/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
7/24/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	
7/24/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain	
7/24/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain	
7/29/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain	
7/29/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain	

_ / /				
7/29/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain
7/29/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
7/30/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain
7/30/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
7/30/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain
7/30/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
8/10/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain
8/10/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
8/10/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain
8/10/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
8/11/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain
8/11/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
8/11/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain
8/11/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
8/16/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain
8/16/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
8/16/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain
8/16/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
8/18/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain
8/18/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
8/18/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain
8/18/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
8/20/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain
8/20/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
8/20/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain
8/20/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
8/21/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain
8/21/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
8/21/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain
8/21/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
8/22/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain
8/22/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
8/22/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain
8/22/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
8/23/2007	Monmouth	Spring Lake	York Ave.	precautionary due to rain
8/23/2007	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
8/23/2007	Monmouth	Sea Girt	The Terrace	precautionary due to rain
8/23/2007	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
9/2/2007	Ocean	Normandy (Brick)	7th Ave	floatable trash
9/2/2007	Ocean	Normandy (Brick)	4th Ave	floatable trash
9/2/2007	Ocean	Toms River (Chadwick)	Ocean Beach	floatable trash
9/2/2007	Ocean	Toms River (Chadwick)	East Tuna Way	floatable trash
2008				
6/1/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain
6/1/2008	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
6/1/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
6/1/2008	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
6/15/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain
6/15/2008	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
6/15/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
6/15/2008	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
6/3/2007	Atlantic	Atlantic City	Kentucky Ave.	sewage spill - precautionary
6/23/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain

6/23/2008	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
6/23/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
6/23/2008	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
6/28/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain
6/28/2008	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
6/28/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
6/28/2008	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
6/30/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain
6/30/2008	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
6/30/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
6/30/2008	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
7/5/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain
7/5/2008	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
7/5/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
7/5/2008	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
7/6/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain
7/6/2008	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
7/6/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
7/6/2008	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
7/24/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain
7/24/2008	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
7/24/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
7/24/2008	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
7/24/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain
7/28/2008	Monmouth	Spring Lake Spring Lake	Brown Ave.	
7/28/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
		Sea Girt	Beacon Blvd.	precautionary due to rain
7/28/2008	Monmouth			precautionary due to rain
8/11/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain
8/11/2008	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
8/11/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
8/11/2008	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
8/15/2008	Monmouth	Spring Lake	York Ave.	precautionary due to rain
8/15/2008	Monmouth	Spring Lake	Brown Ave.	precautionary due to rain
8/15/2008	Monmouth	Sea Girt	The Terrace	precautionary due to rain
8/15/2008	Monmouth	Sea Girt	Beacon Blvd.	precautionary due to rain
8/20/2008	Monmouth	Long Branch	Ocean Beach Club	high bacteria
8/23/2008	Cape May	Avalon	9	precautionary due to medical waste
8/23/2008	Cape May	Avalon	15	precautionary due to medical waste
8/23/2008	Cape May	Avalon	18	precautionary due to medical waste
8/23/2008	Cape May	Avalon	21	precautionary due to medical waste
8/23/2008	Cape May	Avalon	24	precautionary due to medical waste
8/23/2008	Cape May	Avalon	26	precautionary due to medical waste
- / /		Avalon(all closed at 4:42 PM		
8/24/2008	Cape May	today)	9	precautionary due to medical waste
8/24/2008	Cape May	Avalon	15	precautionary due to medical waste
8/24/2008	Cape May	Avalon	18	precautionary due to medical waste
8/24/2008	Cape May	Avalon	21	precautionary due to medical waste
8/24/2008	Cape May	Avalon	24	precautionary due to medical waste
8/24/2008	Cape May	Avalon	26	precautionary due to medical waste
8/24/2008	Cape May	Avalon	28	precautionary due to medical waste
8/24/2008	Cape May	Avalon	30	precautionary due to medical waste
8/24/2008	Cape May	Avalon	32	precautionary due to medical waste
8/24/2008	Cape May	Avalon	35	precautionary due to medical waste
8/24/2008	Cape May	Avalon	38	precautionary due to medical waste

8/24/2008	Cape May	Avalon	40	precautionary due to medical waste
8/24/2008	Cape May	Avalon	43	precautionary due to medical waste
8/24/2008	Cape May	Avalon	50	precautionary due to medical waste
8/24/2008	Cape May	Avalon	57	precautionary due to medical waste
8/24/2008	Cape May	Avalon	61	precautionary due to medical waste
8/24/2008	Cape May	Avalon	65	precautionary due to medical waste
8/24/2008	Cape May	Avalon	69	precautionary due to medical waste
8/24/2008	Cape May	Avalon	73	precautionary due to medical waste
8/24/2008	Cape May	Avalon	76	precautionary due to medical waste
8/24/2008	Cape May	Avalon	78	precautionary due to medical waste
8/26/2008	Cape May	Avalon	9	precautionary due to medical waste
8/26/2008	Cape May	Avalon	15	precautionary due to medical waste
8/26/2008	Cape May	Avalon	18	precautionary due to medical waste
8/26/2008	Cape May	Avalon	21	precautionary due to medical waste
8/26/2008	Cape May	Avalon	24	precautionary due to medical waste
8/26/2008	Cape May	Avalon	26	precautionary due to medical waste
8/26/2008	Cape May	Avalon	28	precautionary due to medical waste
8/26/2008	Cape May	Avalon	30	precautionary due to medical waste
8/26/2008	Cape May	Avalon	32	precautionary due to medical waste
8/26/2008	Cape May	Avalon	35	precautionary due to medical waste
8/26/2008	Cape May	Avalon	38	precautionary due to medical waste
8/26/2008	Cape May	Avalon	40	precautionary due to medical waste
8/26/2008	Cape May	Avalon	43	precautionary due to medical waste
8/26/2008	Cape May	Avalon	50	precautionary due to medical waste
8/26/2008	Cape May	Avalon	57	precautionary due to medical waste
8/26/2008	Cape May	Avalon	61	precautionary due to medical waste
8/26/2008	Cape May	Avalon	65	precautionary due to medical waste
8/26/2008	Cape May	Avalon	69	precautionary due to medical waste
8/26/2008	Cape May	Avalon	73	precautionary due to medical waste
8/26/2008	Cape May	Avalon	76	precautionary due to medical waste
8/26/2008	Cape May	Avalon	78	precautionary due to medical waste
8/28/2008	Cape May	Ocean City	Seaspray Rd	trash
8/28/2008	Cape May	Ocean City	30th St	precautionary due to medical waste
8/28/2008	Cape May	Ocean City	34	precautionary due to medical waste
8/28/2008	Cape May	Ocean City	36	precautionary due to medical waste
8/28/2008	Cape May	Ocean City	39th St	trash
8/28/2008	Cape May	Ocean City	46th	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	Seaspray Rd.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	Surf Rd	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	Waverly Blvd	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	Atlantic Blvd.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	North St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	Stenton Pl.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	St. Charles Pl.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	Pennlyn Pl.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	Park Pl.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	Brighton Pl.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	5th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	7th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	8th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	9th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	10th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	11th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	12th St.	precautionary due to medical waste

8/29/2008	Cape May	Ocean City	13th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	14th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	15th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	16th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	17th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	18th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	20th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	22nd St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	24th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	26th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	28th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	30th St	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	32nd St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	34th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	36th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	39th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	42nd St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	44th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	46th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	48th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	50th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	53rd St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	55th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	57th St.	precautionary due to medical waste
8/29/2008	Cape May	Ocean City	60th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	9th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	15th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	18th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	21st. St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	24th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	26th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	28th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	30th St	precautionary due to medical waste
8/29/2008	Cape May	Avalon	32nd St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	35th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	38th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	40th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	43rd St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	50th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	57th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	61st St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	65th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	69th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	73rd St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	76th St.	precautionary due to medical waste
8/29/2008	Cape May	Avalon	78th St.	precautionary due to medical waste
9/4/2008	Cape May	Cape May City	Congress	precautionary due to medical waste
9/4/2008	Cape May	Cape May City	Stockton	precautionary due to medical waste
9/4/2008	Cape May	Cape May City	Queen	precautionary due to medical waste

Bay Beach Closings

2007

6/27/2007 Ocean Seaside Hts. Hancock Ave. high bacteria

6/27/2007	Ocean	Toms River	Money Island	high bacteria
6/28/2007	Ocean	Toms River	Money Island	high bacteria
6/29/2007	Ocean	Toms River	Money Island	high bacteria
7/5/2007	Monmouth	Belmar	L Street	precautionary due to rain
7/6/2007	Monmouth	Belmar	L Street	precautionary due to rain
7/11/2007	Ocean	Seaside Hts.	Hancock Ave.	high bacteria
7/12/2007	Ocean	Seaside Hts.	Hancock Ave.	high bacteria
7/12/2007	Monmouth	Belmar	L Street	precautionary due to rain
7/13/2007	Ocean	Seaside Hts.	Hancock Ave.	high bacteria
7/18/2007	Monmouth	Belmar	L Street	precautionary due to rain
7/19/2007	Monmouth	Belmar	L Street	precautionary due to rain
7/20/2007	Monmouth	Belmar	L Street	precautionary due to rain
7/23/2007	Monmouth	Belmar	L Street	precautionary due to rain
7/24/2007	Monmouth	Belmar	L Street	precautionary due to rain
7/25/2007	Ocean	Seaside Hts.	Hancock Ave.	high bacteria
7/25/2007	Monmouth	Belmar	L Street	high bacteria
7/25/2007	Ocean	Pt. Pleasant Boro	Maxson Ave.	high bacteria
7/25/2007	Ocean	Pt. Pleasant Boro	River Ave.	high bacteria
7/25/2007	Monmouth	Highlands	South Bay Ave	high bacteria
7/26/2007	Ocean	Seaside Hts.	Hancock Ave.	high bacteria
7/26/2007	Ocean	Pt. Pleasant Boro	Maxson Ave.	high bacteria
7/29/2007	Monmouth	Belmar	L Street	precautionary due to rain
7/30/2007	Monmouth	Belmar	L Street	precautionary due to rain
8/1/2007	Ocean	Beachwood	Beachwood Beach	high bacteria
8/1/2007	Ocean	Seaside Hts.	Hancock Ave.	high bacteria
8/1/2007	Ocean	Pt. Pleasant Boro	Maxson Ave.	high bacteria
8/1/2007	Ocean	Pt. Pleasant Boro	River Ave.	high bacteria
8/1/2007	Ocean	Brick	Windward	high bacteria
8/2/2007	Ocean	Seaside Hts.	Hancock Ave.	high bacteria
8/2/2007	Ocean	Pt. Pleasant Boro	Maxson Ave.	high bacteria
8/2/2007	Ocean	Pt. Pleasant Boro	River Ave.	high bacteria
8/3/2007	Ocean	Seaside Hts.	Hancock Ave.	0
		Pt. Pleasant Boro	Maxson Ave.	high bacteria
8/3/2007	Ocean	Pt. Pleasant Boro Pt. Pleasant Boro		high bacteria
8/3/2007	Ocean	Pt. Pleasant Boro Pt. Pleasant Boro	River Ave.	high bacteria
8/4/2007	Ocean		Maxson Ave.	high bacteria
8/4/2007	Ocean	Pt. Pleasant Boro	River Ave.	high bacteria
8/8/2007	Ocean	Seaside Hts.	Hancock Ave.	high bacteria
8/9/2007	Ocean	Seaside Hts.	Hancock Ave.	high bacteria
8/10/2007	Monmouth	Belmar	L Street	precautionary due to rain
8/11/2007	Monmouth	Belmar	L Street	precautionary due to rain
8/16/2007	Monmouth	Belmar	L Street	precautionary due to rain
8/18/2007	Monmouth	Belmar	L Street	precautionary due to rain
8/20/2007	Monmouth	Belmar	L Street	precautionary due to rain
8/21/2007	Monmouth	Belmar	L Street	precautionary due to rain
8/22/2007	Ocean	Beachwood	Beachwood Beach	high bacteria
8/22/2007	Monmouth	Belmar	L Street	precautionary due to rain
8/22/2007	Ocean	Pt. Pleasant Boro	River Ave.	high bacteria
8/23/2007	Ocean	Beachwood	Beachwood Beach	high bacteria
8/23/2007	Monmouth	Belmar	L Street	precautionary due to rain
8/23/2007	Ocean	Pt. Pleasant Boro	River Ave.	high bacteria
8/24/2007	Ocean	Beachwood	Beachwood Beach	high bacteria
8/24/2007	Ocean	Pt. Pleasant Boro	River Ave.	high bacteria
8/24/2007	Monmouth	Middletown	Thompson Ave	floatable debris*
	*beach closed at 3:30 p.	m. not full day closing		
	-	_		

2008				
6/18/2008	Ocean	Brick	Windward	high bacteria
6/18/2008	Ocean	Dover	Money Island	high bacteria
6/18/2008	Ocean	Beachwood	Beachwood West	high bacteria
6/18/2008	Ocean	Pine Beach	Station Ave	high bacteria
6/19/2008	Ocean	Beachwood	Beachwood West	high bacteria
0/15/2000	Occan	Beachwood	Deachwood West	precautionary - fuel spill at nearby
6/23/2008	Monmouth	Middletown	Thompson Ave.	marina
6/30/2008	Monmouth	Belmar	L Street	rain provisional
7/2/2008	Ocean	Beachwood	Beachwood West	high bacteria
7/2/2008	Ocean	Pine Beach	Station Ave	high bacteria
7/3/2008	Ocean	Beachwood	Beachwood West	high bacteria
7/4/2008	Ocean	Beachwood	Beachwood West	high bacteria
7/5/2008	Ocean	Beachwood	Beachwood West	high bacteria
7/6/2008	Ocean	Beachwood	Beachwood West	high bacteria
7/5/2008	Monmouth	Belmar	L Street	rain provisional
7/6/2008	Monmouth	Belmar	L Street	rain provisional
7/9/2008	Ocean	Dover	Money Island	high bacteria
7/23/2008	Monmouth	Belmar	L Street	rain provisional
7/23/2008	Ocean	Brick	Windward	high bacteria
7/23/2008	Ocean	Ocean Gate	Wildwood Ave	high bacteria
7/23/2008	Ocean	Pt. Pleasant Boro	Maxon	high bacteria
7/24/2008	Ocean	Brick	Windward	high bacteria
7/24/2008	Ocean	Ocean Gate	Wildwood Ave	high bacteria
7/24/2008	Ocean	Pt. Pleasant Boro	Maxon	high bacteria
7/24/2008	Monmouth	Belmar	L Street	rain provisional
			Shark River Beach &	
7/24/2008	Monmouth	Neptune Twp	Yacht Club	rain provisional
7/28/2008	Monmouth	Belmar	L Street	rain provisional
T /20 /2000	36 1	N. H.	Shark River Beach &	
7/28/2008	Monmouth	Neptune Twp	Yacht Club	rain provisional
7/30/2008	Ocean	Pt. Pleasant Boro	River Ave	high bacteria
7/30/2008	Ocean	Pt. Pleasant Boro	Maxon	high bacteria
7/30/2008	Ocean	Brick	Windward	high bacteria
7/31/2008	Ocean	Pt. Pleasant Boro	River Ave	high bacteria
7/31/2008	Ocean	Pt. Pleasant Boro	Maxon	high bacteria
7/31/2008	Ocean	Brick	Windward	high bacteria
8/1/2008	Ocean	Pt. Pleasant Boro	River Ave	high bacteria
8/1/2008	Ocean	Pt. Pleasant Boro	Maxon	high bacteria
8/1/2008	Ocean	Brick	Windward	high bacteria
8/11/2008	Monmouth	Belmar	L Street	rain provisional
8/13/2008	Ocean	Pt. Pleasant Boro	River Ave	high bacteria
8/13/2008	Ocean	Pt. Pleasant Boro	Maxon	high bacteria
8/14/2008	Ocean	Pt. Pleasant Boro	River Ave	high bacteria
8/15/2008	Monmouth	Belmar	L Street Shark River Beach &	rain provisional
8/15/2008	Monmouth	Neptune Twp	Yacht Club	rain provisional
8/16/2008	Monmouth	Belmar	L Street	rain provisional
0/ 10/ 2000	MOIIIIOUUI	Dennai	T SHEEL	Taili provisionai

Appendix 3 – Recreational and Environmental Station Results

A. Recreational Bathing Beach Station Results

Municipality	Beach	Station Number	2007 Geomean	2008 Geomean
Atlantic County Ocean S	Stations			
		000 000 0000		
Brigantine	4th St. South	CCMPAC1092	2.7	4.4
Brigantine	10th St. South	CCMPAC1067	2.1	2.9
Brigantine	15th St South	CCMPAC1004	2.4	4
Brigantine	26th St. South	CCMPAC1091	2.5	4
Brigantine	33rd St. South	CCMPAC1099	3.4	4
Brigantine	43rd St. South	CCMPAC1090	2.7	4.4
Brigantine	Seaside	CCMPAC1098	3	4.6
Brigantine	South Beach	CCMPAC1007	3.1	4.4
Atlantic City	New Hampshire	CCMPAC1012	3.5	4.9
Atlantic City	States	CCMPAC1072	5	6.7
Atlantic City	South Carolina	CCMPAC1073	4.4	4.4
Atlantic City	Kentucky	CCMPAC1070	5.3	5.8
Atlantic City	Illinois	CCMPAC1074	5.8	5.4
Atlantic City	Arkansas	CCMPAC1016	5.5	6.7
Atlantic City	Missouri	CCMPAC1075	6	6.3
Atlantic City	Lincoln	CCMPAC1080	3.8	5.3
Atlantic City	Texas	CCMPAC1081	5	6.2
Atlantic City	Michigan	CCMPAC1082	3.9	5.4
Atlantic City	St. James	CCMPAC1083	5.1	6.2
Atlantic City	North Carolina	CCMPAC1084	5.9	5.9
Atlantic City	Bartram	CCMPAC1085	3.3	4.1
Atlantic City	Chelsea	CCMPAC1017	5	5.8
Ventnor	Oakland	CCMPAC1024	3.5	4.5
Ventnor	Dorset	CCMPAC1097	3.6	4.3
Ventnor	New Haven	CCMPAC1089	3.1	4.2
Ventnor	Washington	CCMPAC1096	3.1	3.2
Margate	Granville	CCMPAC1038	3.7	5.4
Margate	Osborne	CCMPAC1095	3.3	5.2
Margate	Washington	CCMPAC1088	4.4	4.9
Longport	33rd St.	CCMPAC1087	4	3.9
Longport	26th St.	CCMPAC1094	3.3	4.9
Longport	19th St.	CCMPAC1086	4.2	5.3
Atlantic County Bay Star	tions			
Brigantine	Public Dock	CCMPAC0005	4.9	7.1
Atlantic City	Adriatic	CCMPAC0071	5.8	7
Titianitie City	Somers Point NJ	001111100071	3.0	,
Somers Point	Ave.	CCMPAC0050	7.3	8.6
Cape May County Ocean	n Stations			
Ocean City	Surf	CCMPCC1101	4	5.5
Ocean City	Park	CCMPCC1101	3.3	3.3 4.7
Ocean City	Faik	CCMPCC1100	3.3	4./

0	NI41-	CCMDCC1101	2.2	E /
Ocean City	North	CCMPCC1181	3.3	5.6
Ocean City	9th St	CCMPCC1103	3.3	5.6
Ocean City	16th	CCMPCC1182	4.4	4.8
Ocean City	24th	CCMPCC1162	5.5	4.2
Ocean City	28th	CCMPCC1183	3.4	3.5
Ocean City	34th St	CCMPCC1104	2.8	3.4
Ocean City	48th	CCMPCC1184	2.5	2.9
Ocean City	55th	CCMPCC1105	2.2	3
Upper Twp	Williard	CCMPCC1106	2.8	2.7
Upper Twp	Webster	CCMPCC1163	2.9	2.9
Sea Isle City	29th	CCMPCC1185	2.3	3.4
Sea Isle City	34th St	CCMPCC1107	2.2	2.5
Sea Isle City	40th St	CCMPCC1108	2.2	3.3
Sea Isle City	49th	CCMPCC1186	2.2	2.4
Sea Isle City	59th	CCMPCC1166	2.6	2.5
Sea Isle City	65th	CCMPCC1187	2.3	3.3
Sea Isle City	77th	CCMPCC1188	2.2	3
Sea Isle City	78th	CCMPCC1177	2.3	2.8
Avalon	9th	CCMPCC1168	2.7	3.6
Avalon	15th	CCMPCC1189	2.7	4.3
Avalon	21st St	CCMPCC1111	2.5	4
Avalon	30th	CCMPCC1156	2.8	4.4
Avalon	40th St	CCMPCC1051	2.1	2.7
Avalon	50th	CCMPCC1190	2.2	2.4
Avalon	57th	CCMPCC1191	2.6	2.3
Avalon	65th	CCMPCC1178	2.5	2.7
Avalon	76th	CCMPCC1192	2.5	2.7
Stone Harbor	83rd St	CCMPCC1112	2.5	2.7
Stone Harbor	90th	CCMPCC1169	2.1	3.7
Stone Harbor	96th	CCMPCC1193	2.1	2.7
Stone Harbor	103rd	CCMPCC1179	2.1	3.2
Stone Harbor	108th	CCMPCC1170	2.2	3.8
Stone Harbor	119th	CCMPCC1171	2	3.5
North Wildwood	2nd & JFK	CCMPCC1116	5.4	6.5
North Wildwood	10th & JFK	CCMPCC1210	5.3	5.6
North Wildwood	18th	CCMPCC1211	3.4	5
North Wildwood	24th	CCMPCC1180	5.6	4.9
Wildwood	Maple	CCMPCC1119	5.2	4.8
Wildwood	Schellenger	CCMPCC1120	5	5.4
Wildwood	Montgomery	CCMPCC1121	5.5	4.4
Wildwood	Bennett	CCMPCC1122	6	3.7
Wildwood Crest	Lavendar	CCMPCC1175	5.1	4.3
Wildwood Crest	Forgetmenot	CCMPCC1123	6.3	3.2
Wildwood Crest	Orchid	CCMPCC1195	4.4	3
Wildwood Crest	Miami	CCMPCC1124	4.1	3
Wildwood Crest	Hollywood	CCMPCC1196	3.7	3.5
Wildwood Crest	Jefferson	CCMPCC1125	3.6	5.9
Lower Township	Richmond	CCMPCC1154	2.9	4.6
Cape May City	Poverty	CCMPCC1172	3.1	3.5
Cape May City	Queen North	CCMPCC1129	3.1	3.3
Cape May City	Congress	CCMPCC1133	3.2	2.7
Cape May City	Grant	CCMPCC1134	2.5	3.2
Cape May City	Broadway	CCMPCC1135	3.4	3
Cape May City	2nd	CCMPCC1136	2.4	2.6
1 / /			•	

Cape May City	Ocean Ave.	CCMPCC1130	2.9	3.4
Cape May City	Philadelphia	CCMPCC1176	3.4	3.3
Cape May Point	Whildin	CCMPCC1173	3.2	2.4
Cape May Point	Brainard	CCMPCC1148	2.3	2.9
Cape May Point	Ocean	CCMPCC1174	2.3	2.6
Cape May County Bay S	Stations			
	Ocean City Yacht			
Ocean City	Club	CCMPCC0001	5.7	6.5
Upper Twp	Beesley's Point Beach	CCMPCC0093	12.8	8.1
Sea Isle City	SIC Yacht Club	CCMPCC0094	7.8	8.3
Avalon	Yacht Club	CCMPCC0025	10	6.4
Stone Harbor	90th (Yacht Club)	CCMPCC0049	8.6	14
	WW Gables Yacht			
Wildwood Crest	Club	CCMPCC0098	5.3	3.1
	WW Crest Yacht			
Wildwood Crest	Club	CCMPCC0096	7.1	4.7
Cape May City	Corinthian YC	CCMPCC0099	8.9	6.5
M 10 0	0			
Monmouth County Oc	ean Stations			
Sandy Hook	Army Rec. Beach	CCMPMC1004	11	10.9
Sandy Hook	Fort Hancock	CCMPMC1006	11.2	10.6
Sandy Hook	Area E	CCMPMC1066	13.5	10.4
Sandy Hook	Surf Beach	CCMPMC1010	11.9	10.7
Sea Bright	Public Beach	CCMPMC1013	11.4	10.4
8	Monmouth Beach			
Monmouth Beach	Club	CCMPMC1016	12.1	11.9
	Seven President's			
Monmouth Beach	Park	CCMPMC1018	11.5	12.5
Long Branch	Joline	CCMPMC1019	14.4	12.8
Long Branch	Laird	CCMPMC1039	16	12.9
Long Branch	North Bath	CCMPMC1023	14.1	11.5
Long Branch	Ocean Beach Club	CCMPMC1047	14.2	14
Long Branch	Elberon Beach Club	CCMPMC1021	20.4	15.5
	Takanasee Beach			
Elberon	Club	CCMPMC1073	14.1	11.2
Deal	Deal Casino	CCMPMC1022	15.9	13.5
Allenhurst	Cedar	CCMPMC1041	24.5	10.7
Loch Arbour	Village Beach Club	CCMPMC1043	14.5	11.8
Asbury Park	3rd	CCMPMC1024	16.6	12.2
Asbury Park	7th	CCMPMC1065	14.7	14.3
Asbury Park	Asbury	CCMPMC1050	15.9	11.7
Ocean Grove	Main	CCMPMC1051	14.5	11.6
Ocean Grove	Broadway	CCMPMC1052	15.1	11.7
Bradley Beach	Ocean Park	CCMPMC1053	20.4	11.9
Bradley Beach	Evergreen South	CCMPMC1054	15.9	10.7
Avon	Sylvania	CCMPMC1027	14.2	10.4
Belmar	6th	CCMPMC1055	*	*
Belmar	7th	CCMPMC1074	16.8	13
Belmar	12th	CCMPMC1056	14.9	11.7
Belmar	20th	CCMPMC1075	18.8	12

Spring Lake	Worthington	CCMPMC1057	15	13.6
Spring Lake	Newark	CCMPMC1069	12.3	
Spring Lake	Washington	CCMPMC1058	13.4	12.9
Spring Lake	Essex	CCMPMC1059	12.9	11.9
Spring Lake	Union	CCMPMC1071	*	14.1
Spring Lake	York	CCMPMC1070	*	16.9
Spring Lake	Beacon	CCMPMC1072	14.1	10.5
Spring Lake	Brown South	CCMPMC1060	16.5	15.7
Spring Lake	Outfall **	CCMPMC1080		122
Sea Girt	The Terrace	CCMPMC1067	14.1	10.7
Sea Girt	Philadelphia	CCMPMC1068	13.7	*
Sea Girt	Neptune	CCMPMC1062	15	10
Sea Girt	Chicago	CCMPMC1076	14.6	*
Sea Girt	Baltimore **	CCMPMC1081		10.4
Sea Girt	New York **	CCMPMC1082		10.9
Manasquan	East Main	CCMPMC1036	11	11.7
11111111111111111111111111111111111111	East Hair	GGIII 111G1030	11	11.7
Monmouth County Ba	y Stations			
Middletown	Ideal Beach	CCMPMC0044	13.8	11.1
Leonardo	Thomson	CCMPMC0045	16.8	13.2
Highlands	Rec Center	CCMPMC0049	23.5	16.5
Highlands	Miller Beach	CCMPMC0050	19.5	14.5
Highlands	South Bay Ave	CCMPMC0051	16.8	*
Highlands	Conner's Beach	CCMPMC0052	15.4	13
Belmar	L Street Beach	CCMPMC0031	43.1	21
Ocean County Ocean				
Pt Pleasant Beach	Broadway	CCMPOC1001	16	12.1
Pt Pleasant Beach	Central	CCMPOC1002	15.6	13.9
Pt Pleasant Beach	Maryland	CCMPOC1135	13.9	11.7
Bay Head	Johnson	CCMPOC1005	14.3	11.7
Bay Head	Mount	CCMPOC1004	13.3	11.1
Mantoloking	Lyman	CCMPOC1012	12.9	11.9
Mantoloking	Princeton	CCMPOC1014	13.7	12.6
Brick	Brick Beach	CCMPOC1019	11.8	12.8
Brick	7th	CCMPOC1020	12.4	10.7
Chadwick	East Tuna Way	CCMPOC1089	13.5	10.8
Lavallette	Bryn Mawr	CCMPOC1094	12.9	10.4
Lavallette	Guyer	CCMPOC1025	14.4	10
Lavallette	Brooklyn	CCMPOC1024	17.2	10
Lavallette	Jersey City	CCMPOC1027	12.6	10.7
Lavallette	Trenton	CCMPOC1029	11.9	10.8
Dover	4th	CCMPOC1130	12.8	10
Dover	Fielder	CCMPOC1129	12.5	10.8
Dover	North Beach	CCMPOC1033	12.6	10
Seaside Heights	Sheridan	CCMPOC1035	13.3	13.5
Seaside Heights	Lincoln	CCMPOC1095	11.8	11.1
Seaside Park	O St	CCMPOC1044	13.1	10
Seaside Park	Brighton	CCMPOC1096	12.3	10.7
Seaside Park	124	CCMDOC1042	12.4	10.7
	12th	CCMPOC1042	12.4	10.7
South Seaside	23rd	CCMPOC1042 CCMPOC1046	12.4	10.7

Island Beach	USCG 110	CCMPOC1086	15.8	11.1
Island Beach	Ocean Area 1	CCMPOC1085	10.9	10
Island Beach	Access Road	CCMPOC1090	11.8	11
Island Beach	A23	CCMPOC1084	12.4	10.7
Barnegat Light	10th	CCMPOC1048	12.3	10.8
Barnegat Light	24th	CCMPOC1050	11.7	11
Lovelades	Loveladies	CCMPOC1052	13.4	10.8
Harvey Cedars	75th	CCMPOC1054	11.4	10
Harvey Cedars	Atlantic	CCMPOC1097	11.3	10.8
Harvey Cedars	Bergen	CCMPOC1058	12.3	10
North Beach	Roxie	CCMPOC1098	11.6	10
Surf City	23rd	CCMPOC1062	12.4	10.4
Surf City	North 10th	CCMPOC1099	12.1	10.4
Ship Bottom	South 3rd	CCMPOC1100	12.1	10.7
Ship Bottom	14th	CCMPOC1068	11.8	11.2
Ship Bottom	25th	CCMPOC1070	10.8	10
Brant Beach	50th	CCMPOC1091	11.4	10
Brant Beach	Stockton	CCMPOC1072	10.8	10
Haven Beach	Florida	CCMPOC1101	10.9	10.4
Beach Haven Terrace	New Jersey	CCMPOC1076	11.3	10
Beach Haven	14th	CCMPOC1102	11.3	10
Beach Haven	Berkeley	CCMPOC1092	11.4	14.4
Beach Haven	Leeward	CCMPOC1080	10.9	10.4
Beach Haven	Webster	CCMPOC1093	10.8	10.4
Ocean County Bay Station Pt Pleasant	ons Maxon	CCMPOC0109	50.7	47.2
Pt Pleasant	River	CCMPOC0109	71.7	53.8
Brick	Windward Beach	CCMPOC0103	36	33.8
Lavallette	Reese	CCMPOC0023	44	18.8
Lavallette	Brooklyn	CCMPOC0138	35.9	19.3
Seaside Heights	Hancock	CCMPOC0036	136.2	35.6
Seaside Park	5th	CCMPOC0132	49.8	19.8
Dover	Shelter Island	CCMPOC0112	19.1	18.6
Island Heights	Summit	CCMPOC0115	35.4	21
Dover	Money Island	CCMPOC0113	76.8	33.4
Beachwood	West Beach	CCMPOC0116	114.4	63.9
Pine Beach	West Beach	CCMPOC0118	64.2	28.3
Pine Beach	East Beach	CCMPOC0117	41	28.7
Ocean Gate	Wildwood	CCMPOC0117	26.3	25.9
Ocean Gate	Anglesea	CCMPOC0140	36	20.5
Berkeley	Berkeley Island	CCMPOC0122	30.5	16.2
Barnegat	Bay Beach	CCMPOC0124	22	20.9
Stafford	Jennifer	CCMPOC0125	23.4	21.9
Little Egg Harbor	Parkertown	CCMPOC0126	17.7	16.4
Barnegat Light	25th	CCMPOC0142	26.8	21.9
Harvey Cedars	75th	CCMPOC0055	26.8	17.2
Surf City	16th	CCMPOC0136	25.5	21.5
Ship Bottom				
*	14th	((WEEK HOUNG	10.4	78.7
Beach Haven Crest	14th Stockton	CCMPOC0069 CCMPOC0073	30.4 28.2	28.2 24.6
Beach Haven Crest Beach Haven Terrace	Stockton New Jersey	CCMPOC0069 CCMPOC0073 CCMPOC0077	28.2 25.2	28.2 24.6 29.5

B. Environmental (non-swimming) Station Results

		Station		
Municipality	Beach	Number	2007	2008
			Geomean	Geomean
Atlantic County Oce	an Stations			

					environmental (non-
Longport	11th St.	CCMPAC1044	3.2	6.1	swimming) station
					environmental (non-
Brigantine	North Beach	CCMPAC1001	3	4.4	swimming) station
					environmental (non-
Atlantic City	Pennsylvania	CCMPAC1015	6.4	5	swimming) station

Atlantic County Bay Stations

					environmental (non-
Atlantic City	Harrah's Marina	CCMPAC0009	30.7	12.8	swimming) station
					environmental (non-
Atlantic City	Maryland	CCMPAC0065	8.4	6	swimming) station
					environmental (non-
Atlantic City	Harrah Pond	CCMPAC0072	8.6	11	swimming) station
					environmental (non-
Atlantic City	City Island STP	CCMPAC0013	9	7.9	swimming) station
					environmental (non-
Atlantic City	Murray & Riverside	CCMPAC0015	7.6	10.6	swimming) station
					environmental (non-
Atlantic City	Albany West	CCMPAC0019	7.7	9.1	swimming) station
					environmental (non-
Atlantic City	Albany East	CCMPAC0020	24.6	19	swimming) station
					environmental (non-
Atlantic City	40 & 32nd	CCMPAC0022	10.1	13	swimming) station
					environmental (non-
Egg Harbor	LP & SP Blvd.	CCMPAC0062	11.5	10.7	swimming) station
					environmental (non-
Somers Point	SP 9th St. Bridge	CCMPAC0080	7.2	5.9	swimming) station

Cape May County Ocean Stations No Environmental Stations

Cape May County Bay Stations No Environmental Stations

Middlesex County Bay Stations

Laurence Harbor	Beach Pier	CCMPMX0001	19.7	*	environmental (non-

^{*} Station eliminated

^{**} Station added

					swimming) station
					environmental (non-
South Amboy	Boat Club Pier	CCMPMX0002	19.2	*	swimming) station
					environmental (non-
Perth Amboy	Raritan Yacht Club	CCMPMX0004	9	*	swimming) station
					environmental (non-
Perth Amboy	Sadowski Park	CCMPMX0005	10.6	*	swimming) station

Monmouth County Ocean Stations

					environmental (non-
Sea Bright	Island View Way	CCMPMC1015	12.8	10.6	swimming) station
					environmental (non-
Long Branch	South Bath	CCMPMC1020	13.6	10.8	swimming) station

Monmouth County Bay Stations

					environmental (non-
Keyport	Broad	CCMPMC0001	25.2	22.3	swimming) station
					environmental (non-
Union Beach	Front	CCMPMC0002	20.7	17.6	swimming) station
					environmental (non-
Keansburg	Beachway	CCMPMC0003	23.2	23.5	swimming) station
					environmental (non-
Middletown	Monmouth & Wilson	CCMPMC0046	19.4	24.1	swimming) station
					environmental (non-
Sandy Hook	Lighthouse	CCMPMC0005	13.3	12.1	swimming) station
					environmental (non-
Sandy Hook	Horseshoe Cove	CCMPMC0007	13.9	12.4	swimming) station
					environmental (non-
Sandy Hook	Spermaceti	CCMPMC0009	12.7	15.1	swimming) station
					environmental (non-
Monmouth Beach	Wharfside Manor Condos	CCMPMC0017	17.1	12.3	swimming) station
					environmental (non-
Belmar	Rt 71 Bridge	CCMPMC0030	19.1	16.5	swimming) station
					environmental (non-
Neptune	Myron & Wilson	CCMPMC0037	50.7	42.8	swimming) station
					environmental (non-
Neptune Twp	Riverside & Clinton	CCMPMC0038	23.5	23.3	swimming) station
					environmental (non-
Manasquan	Fisherman's Cove	CCMPMC0064	21.5	21.7	swimming) station
					environmental (non-
Manasquan	Stockton Lake	CCMPMC0035	42.9	*	swimming) station

^{*} Station eliminated

Ocean County Ocean Stations

					environmental (non-
Beach Haven	Taylor	CCMPOC1078	10.8	10	swimming station)
					environmental (non-
S. Beach Haven	Joan	CCMPOC1082	10.8	10.4	swimming station)

Ocean County Bay Stations

29

Seaside Park	L Street	CCMPOC0043	48.2	31.5	environmental (non- swimming) station
T.1. 1.D. 1	T' 1 01 1	CCMDC C0007	24.6	24.0	environmental (non-
Island Beach	Tice's Shoal	CCMPOC0087	34.6	26.8	swimming) station
	Canoe/Kayak Launch,				environmental (non-
Island Beach	ESP3	CCMPOC0089	67.4	23.4	swimming) station
					environmental (non-
Island Beach	Freeman House	CCMPOC0088	47.6	35.4	swimming) station
					environmental (non-
Island Heights	Central	CCMPOC0113	197.1	28.4	swimming) station
					environmental (non-
Berkeley	Amhearst Dr	CCMPOC0120	34.9	16.8	swimming) station

^{*} Station eliminated