

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

DATE:

SUBJECT: New York Bight Monitoring Program Observations, 2005

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TO: Barbara A. Finazzo, Director
Division of Environmental Science and Assessment (DESA)

THRU: John Kushwara, Chief
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Attached for your information is the ninth update of the 2005 NY Bight Monitoring Program. This update covers the period from August 6 - August 18, 2005.

Attachment

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2MOS-MAB 2MOS-MAB 2MAB-DESA

Grebe Braun Kushwara
UPDATE OF NY BIGHT MONITORING PROGRAM FROM August 6 - 18, 2005

NY Bight Sampling has been as follows:

August 6	NY/NJ Harbor Complex	Overflight
August 8	NY/NJ Harbor Complex	Cancelled due to rain
	Perpendiculars	Cancelled due to rain
August 9	NY/NJ Harbor Complex	Cancelled due to rain
	Long Island Beaches	Cancelled due to rain
August 10	NY/NJ Harbor Complex	Overflight
	New Jersey Beaches	Sandy Hook to Cape May Point
August 11	NY/NJ Harbor Complex	Overflight
	Perpendiculars	NYB20, JC14, JC27, JC41, JC53
August 12	NY/NJ Harbor Complex	Overflight
August 13	NY/NJ Harbor Complex	Overflight
August 15	NY/NJ Harbor Complex	Overflight
August 16	NY/NJ Harbor Complex	Overflight
	Long Island Beaches	Rockaway to Shinnecock Inlet
August 17	NY/NJ Harbor Complex	Overflight
	New Jersey Beaches	Sandy Hook to Cape May Point
August 18	NY/NJ Harbor Complex	Overflight
	NJ Nutrients	Sandy Hook to Barnegat

Projected Activities for Next Week:

August 19	NY/NJ Harbor Complex	Overflight
	Perpendiculars	JC61, JC69, JC75, JC85, JC90
August 20	NY/NJ Harbor Complex	Overflight
August 22	NY/NJ Harbor Complex	Overflight
	NJ Nutrients	Barnegat to Delaware Bay
August 23	NY/NJ Harbor Complex	Overflight
	Long Island Beaches	Rockaway to Shinnecock Inlet
August 24	NY/NJ Harbor Complex	Overflight
	New Jersey Beaches	Sandy Hook to Cape May Point
August 25	NY/NJ Harbor Complex	Overflight
	Perpendiculars	NYB20, JC14, JC27, JC41, JC53
August 26	NY/NJ Harbor Complex	Overflight
	Perpendiculars	JC61, JC69, JC75, JC85, JC90
August 27	NY/NJ Harbor Complex	Overflight

Floatables

The New York/New Jersey Harbor Complex was monitored for floatables nine times from August 6 - 18. The Harbor Complex was clear of significant floatable debris on all nine days.

Bacteria

On August 10 and 17, bacteriological samples were taken along the New Jersey coast from Sandy Hook (JC01A) to Cape May Point (JC99). On August 16, bacteriological samples were taken along the Long Island coast from Rockaway Point (LIC01) to Shinnecock Inlet East (LIC28). The Long Island samples were tested for fecal coliform (FC) and enterococcus bacteria. New Jersey samples were analyzed for enterococcus bacteria.

On August 10, along the New Jersey coast, the highest enterococcus count, 102 enterococci/100ml, occurred at Cape May Point (JC99). Data for samples collected on August 17 are not available for this week's report and will be reported next week.

On August 16, along the Long Island coast, the highest fecal coliform count, 43 FC/100ml, occurred at Point Lookout (LIC10). The highest enterococcus count, 28 enterococci/100ml, occurred at Rober Moses State Park (LIC17).

All bacteriological values are below single sample maximum water quality standards.

Phytoplankton

Phytoplankton samples were collected along the New Jersey coast, in Raritan Bay, Sandy Hook Bay, Barnegat Bay, and Delaware Bay on August 10. Samples were given to the New Jersey Department of Environmental Protection, Bureau of Marine Water Monitoring's Leeds Point Laboratory for analysis.

Raritan/Sandy Hook Bay Area

The waters of Raritan Bay were generally clear with sparse algal concentrations. The waters of Sandy Hook Bay were experiencing a mild bloom of mixed diatoms (1000 cells/ml). No toxic species were detected.

New Jersey Coastal Area

The ocean waters from Long Branch to Cape May were generally clear with sparse algal concentrations. No toxic species were detected.

Barnegat Bay Area

The waters of Barnegat Bay from Toms River to Barnegat inlet had sparse algal concentrations with a significant amount of detritus. The potentially toxic species *Prorocentrum lima* was detected near Island Beach but concentrations were below bloom or toxic levels. No toxic species were detected anywhere else.

The waters of Manahawkin Bay were generally clear with low concentrations of *Pleurosigma sp.*. No toxic species were detected.

The waters of Little Egg Harbor are generally clear with sparse algal concentrations. No toxic species were detected.

Great Bay

The waters of Great Bay are generally clear with sparse algal concentrations. No toxic species were detected.

Great Egg Harbor

The waters of Great Egg Harbor have sparse algal concentrations with a significant amount of detritus. No toxic species were detected

Delaware Bay/Capeshore Area

The waters of the Delaware Bay near the mouth of the bay were experiencing a mild bloom composed of a diverse assemblage of phytoplankton. The waters of the Delaware Bay near Dias creek were generally clear with sparse algal concentrations. No toxic species were detected.

Dissolved Oxygen

Bottom water samples were collected for dissolved oxygen (DO) analysis at the Sandy Hook (NYB20), Long Branch (JC14), Belmar (JC27), Bay Head (JC41) and Seaside Heights (JC53) perpendiculars on August 11.

Tables 1 and 2 present the bottom dissolved oxygen (DO) results for the perpendiculars sampled on August 11. The lowest DO value 3.5 mg/l, occurred one nautical mile off Long Branch (JC14E). These values are typical for this time of year.

Table 1

Dissolved Oxygen Concentrations of Bottom Water Samples at the Sandy Hook Perpendiculars (mg/l) - August 11, 2005.

Location (Nautical Miles Offshore)	Station	DO (mg/l)
2	NYB20	5.0
4	NYB21	5.2
6	NYB22	5.8
7.4	NYB23	7.6
8.6	NYB24	7.0

Table 2

Dissolved Oxygen Concentrations of Bottom Water Samples at the Long Branch (JC14), Belmar (JC27), Bay Head (JC 41) and Seaside Heights (JC53) perpendiculars (mg/l) - August 11, 2005.

Location (Nautical Miles Offshore)	Long Branch JC 14	Belmar JC 27	Bay Head JC 41	Seaside Heights JC 53
1	3.5	5.7	4.0	3.7
3	4.4	4.8	5.5	9.2
5	4.9	5.0	8.2	5.4
7	5.2	5.0	6.1	6.9
9	5.8	4.9	5.8	7.0