

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

DATE:

SUBJECT: New York Bight Monitoring Program Observations, 2002

FROM: Helen Grebe, Regional Coastal Monitoring Coordinator
Monitoring Operations Section (DESA-MOS)

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

THRU: Randy Braun, Chief
Monitoring and Assessment Branch (DESA-MAB)

Attached for your information is the thirteenth update of the 2002 NY Bight Monitoring Program. This update covers the period from August 27 - September 3, 2002.

Attachment

cc: Jane Kenny, 2RA, via LAN
William Muszynski, 2DRA, via LAN
Richard Caspe, DECA, via LAN
Walter Mugdam, DEPP, via LAN
Bonnie Bellow, 2CD, via LAN
Herbert Barrack, 2OPM, via LAN
Eric Schaaf, 2ORC, via LAN
Paul Molinari, 2DEPP, via LAN
Deb Szaro, 2DESA, via LAN
Peter Brandt, 2CD, via LAN
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Dr. Robert Howarth, Cornell, via EMAIL
Robert Reid, NOAA, via EMAIL
Richard M. Warren, OCUA, via EMAIL
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2MOS-MAB-DESA:HGrebe:hg:x6797:bldg209:finalized:9/3/02
2MOS-MAB 2MOS-MAB 2MAB-DESA

Grebe Glogower Braun
UPDATE OF NY BIGHT MONITORING PROGRAM FROM Aug. 27 - Sept. 3, 2002

NY Bight Sampling has been as follows:

August 27	NY/NJ Harbor Complex	Overflight
	Long Island Beaches	Rockaway to Shinnecock Inlet
August 28	NY/NJ Harbor Complex	Overflight
	New Jersey Beaches	Sandy Hook to Seaside Heights
August 30	NY/NJ Harbor Complex	Overflight
	Perpendiculars	NYB20's, JC14, JC27, JC41, JC53
August 31	NY/NJ Harbor Complex	Overflight
September 3	DRBC	Delaware River

Projected for the Remainder of the Helicopter Program:

September 4	NY/NJ Harbor Complex	Overflight (Last Floatables Flight)
	Phytoplankton	NJ Coast and Back Bays
September 5	Perpendiculars	JC61's, JC69, JC75, JC85, JC90
September 6	Perpendiculars	NYB20's, JC14, 27, 41, 53
September 9	Perpendiculars	JC61's, JC69, JC75, JC85, JC90
September 10	Perpendiculars	NYB20's, JC14, 27, 41, 53

Floatables

The New York/New Jersey Harbor Complex was monitored for floatables a total of four times from August 27 - September 3, 2002. Due to poor visibility, the floatable flights were not conducted on August 29 or September 2.

The harbor complex was clear of floatables on all four days as follows: August 27, 28, 30, and 31.

Bacteria

Bacteriological samples were collected along the Long Island coast, from Rockaway (LIC01) to Shinnecock Inlet (LIC28) on August 27, and along the New Jersey coast from Sandy Hook (JC01) to Seaside Heights (JC53), on August 28. The samples were tested for fecal coliform (FC) and enterococcus bacteria.

Along the Long Island coast, the highest FC count, 820 FC/100ml, and the highest enterococcus count, 21 enterococci/100ml occurred at Rockaway Point (LIC01). All other FC counts were below 8 FC/100ml and all other enterococcus counts were below 5 enterococci/100ml.

On August 28, along the New Jersey coast, the highest FC count, 144 FC/100ml, occurred at Bradley Beach (JC24). The highest enterococcus count, 240 enterococci/100ml, occurred at Mantoloking (JC44).

Delaware River Basin Commission Sampling

At the request of Ed Santoro, Monitoring Coordinator for the DRBC, surface water samples were collected at low slack tide at four sites along the Delaware River, on September 3. All samples were analyzed by a contract Laboratory for bacteria, algae, metals, dissolved oxygen and organic carbon. This sampling will augment DRBC's longstanding water quality sampling program in the Delaware Estuary.

Dissolved Oxygen

The Sandy Hook (NYB20), Long Branch (JC14), Belmar (JC27), Bay Head (JC41) and Seaside Heights (JC53) perpendiculars were sampled on August 30.

Tables 1 and 2 present the bottom dissolved oxygen (DO) results for the perpendiculars sampled on August 30. The lowest DO value 3.1 mg/l, occurred nine nautical miles off Seaside Heights.

These DO values are significantly higher than samples collected on August 16 and 26. On August 16 and 26 at the northern perpendiculars, 48.9% of the results were below 4 mg/l, compared to August 30 were 20% were below 4 mg/l.

These DO 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 30, 2002.

Location (Nautical Miles Offshore)	Station	DO (mg/l)
2	NYB 20	6.8
4	NYB 21	6.5
6	NYB 22	7.2
7	NYB 23	5.4
8	NYB 24	3.7

Table 2

Dissolved Oxygen Concentrations of Bottom Water Samples at the Long Branch (JC14), Belmar (JC27), Bay Head (JC41) and Seaside Heights (JC53) perpendiculars (mg/l) - August 30, 2002.

Location (Nautical Miles Offshore)	Long Branch JC 14	Belmar JC 27	Bay Head JC 41	Seaside Heights JC 53
1	6.3	5.1	5.4	6.5
3	6.2	6.7	6.6	6.4
5	7.1	6.6	5.5	6.2
7	3.2	6.5	5.6	5.9
9	3.3	3.2	5.6	3.1