

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

DATE:

SUBJECT: New York Blight 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, Acting Chief
Monitoring and Assessment Branch (DESA-MAB)

Attached for your information is the sixth update of the 2002 NY Blight Monitoring Program. This update covers the period from June 29 - July 5 , 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
Deborah Szarro, 2DESA, via LAN
Peter Brandt, 2CD, via LAN
Mario Del Vicario, 2DEPP, via LAN
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Leslie McGeorge, NJDEP, via LAN
Alfred Korndoerfer, NJDEP, via EMAIL
Eric Feerst, NJDEP, via EMAIL
Robert Connell, NJDEP, via EMAIL
Virginia Loftin, NJDEP, via EMAIL
Elaine Makatura, NJDEP, via EMAIL
Carol Hoffman, NYSDDES
Robert Nuzzi, SCHD, via EMAIL
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Williams Simmons, MCHD, via EMAIL
Elizabeth Cosgrove, MCHD, via EMAIL
J. Fredrick Grassel, Rutgers via EMAIL
Dr. Robert Howarth, Cornell, via EMAIL
Robert Reid, NOAA, via EMAIL

2MOS-MAB-DESA:HGrebe:hg:x6797:bldg209:finalized:7/8/02
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Grebe Glogower Braun
UPDATE OF NY BIGHT MONITORING PROGRAM FROM June 29 - July 5, 2002

NY Bight Sampling has been as follows:

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|---------|----------------------|---------------------------------|
| June 29 | NY/NJ Harbor Complex | Overflight |
| July 1 | NY/NJ Harbor Complex | Overflight |
| | Long Island Beaches | Rockaway to Shinnecock Inlet |
| July 2 | NY/NJ Harbor Complex | Overflight |
| | New Jersey Beaches | Asbury to Avalon |
| July 3 | NY/NJ Harbor Complex | Overflight |
| | Phytoplankton | New Jersey coast and bays |
| July 4 | NY/NJ Harbor Complex | Overflight |
| July 5 | NY/NJ Harbor Complex | Overflight |
| | Perpendiculars | NYB20's, JC14, JC27, JC41, JC53 |

Projected:

| | | |
|---------|---------------------------|---------------------------------|
| July 6 | NY/NJ Harbor Complex | Overflight |
| July 8 | NY/NJ Harbor Complex | Overflight |
| | Perpendiculars | JC61, 69, 75, 85, 90 |
| July 9 | NY/NJ Harbor Complex | Overflight |
| | Long Island Beaches | Rockaway to Shinnecock Inlet |
| July 10 | NY/NJ Harbor Complex | Overflight |
| | New Jersey Beaches | Sandy Hook to Cape May |
| July 11 | NY/NJ Harbor Complex | Overflight |
| | New Jersey Perpendiculars | NYB20's, JC14, JC27, JC41, JC53 |
| July 12 | NY/NJ Harbor Complex | Overflight |

Floatables

The New York/New Jersey Harbor Complex was monitored for floatables a total of six times from June 29 to July 5, 2002. The Harbor Complex was clear of significant floatables on July 1 - 5.

On June 29, an acre wide oily sheen was reported in the Lower New York Harbor. The sheen was reported to the US Coast Guard and cleanup was conducted as necessary.

Bacteria

Bacteriological samples were collected along the Long Island coast, from Rockaway (LIC01) to Shinnecock Island (LIC28), on July 1. Selected New Jersey coast stations were sampled on July 2 from Asbury Park (JC21) to Avalon (JC89). The samples were tested for fecal coliform (FC) and enterococcus bacteria.

Along the Long Island coast, the highest FC count, 6 FC/100ml, occurred at Rockaway (LIC04). The highest enterococcus count, 4 enterococci/100ml, occurred at Atlantic Beach (LIC07) and Moriches Inlet West (LIC23). The majority of the remaining results were zero.

Along the New Jersey coast, the highest FC count, 2 FC/100ml, occurred at Absecon Inlet (JC74) and Avalon (JC89). The highest enterococcus count, 1 enterococcus/100ml, occurred at Seaside Heights (JC53). The remaining results were zero.

Phytoplankton

Phytoplankton samples were collected along the New Jersey coast, in Raritan Bay, Sandy Hook Bay, Barnegat Bay, Great Bay, and Delaware Bay, on July 3. Samples were given to the New Jersey Department of Environmental Protection, Bureau of Marine Water Monitoring's Leeds Point Laboratory for analysis. The results, reported by NJDEP are as follows:

Raritan/Sandy Hook Bay Area

A bloom of mixed diatoms was reported in the waters of the Raritan/Sandy Hook Bay area. Species present include *Skeletonema costatum*, *cylindrotheca sp.*, *nitzschia sp.*, and *Thalassiosira sp.*. No toxic species were detected.

New Jersey Coastal Area

The coastal waters, near Manasquan, were generally clear with algal concentrations sparse. No toxic species were detected.

The coastal waters near Ship Bottom, contained a sparse mix of diatoms with a significant amount of detritus. No toxic species were detected.

The coastal waters near Cape May, contained a significant amount of detritus with sparse algal concentrations. No toxic species were detected.

Barnegat Bay Area

In the northern portion of Barnegat Bay, a bloom of the small plankton species *Nannochloris* (cell counts ranged from 40,000 to 170,000 cells/ml) was reported. There was significant amounts of detritus. No toxic species were detected.

In Manahawkin Bay, a mild bloom of mixed diatoms was reported (1000 cells/ml). The chlorophyll *a* level was very high for this area (62.02ug/l), but this is probably due to an unusually large amount of detritus in the sample. No toxic species were detected.

From Tuckerton to Little Egg Inlet, a mix of *Nannochloris* and picoplankters were dominant (90,000 cells/ml). No toxic species were detected.

Great Bay

The waters of the Great Bay contained a mix of diatom (600 cells/ml), and large amounts of detritus. Great Bay recorded the highest level of chlorophyll *a* this season (71.48ug/l), caused by a large amount of detritus in the sample, not an algal bloom. No toxic species were detected.

Delaware Bay/Capeshore Area

A mild bloom of mixed diatoms (1000 cells/ml) was reported in the waters of the Delaware Bay. 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 July 5. The results are not available for this week's report and will be reported next week.