

Fifth update of the 2011 Helicopter Monitoring Program

The New York Bight Floatables Action Plan Assessment Report 2010, is now available at: http://www.epa.gov/region02/water/action_plan/index.html

Floatables:

The New York/New Jersey Harbor Complex was monitored for floatables six times from June 25 - July 1. The Harbor was clear of significant floatables on June 25, 28, 30 and July 1.

On June 27, a floatable slick, approximately 400 yards long by 1 yard wide was reported in the Newark Bay.

On June 29, a heavy floatable patch, approximately 50 yards by 50 yards was reported off Coney Island.

All floatable debris slicks/patches consisted of wood, plastic and paper, were reported to the Army Corps of Engineers, and cleanup was conducted as necessary.

Sampling:

Phytoplankton samples were collected along the New Jersey coast, in Raritan Bay, Sandy Hook Bay, Barnegat Bay, Great Bay, Great Egg Harbor and Delaware Bay, on June 29. Samples were given to the New Jersey Department of Environmental Protection (NJDEP), Bureau of Marine Water Monitoring Leeds Point Laboratory for analysis. These samples help fulfill NJDEP's commitments to the National Shellfish Sanitation Program. Results, as reported by NJDEP are as follows:

Barnegat Bay and Little Egg Harbor are experiencing elevated concentrations of *Nannochloris oculata*. The brown tide organism *Aureococcus anophagefferens* looks to be present but in low levels in Manahawkin Bay and Little Egg Harbor.

The Bureau has implemented an aircraft remote sensing program for estimating chlorophyll levels in NJ's coastal waters. This program provides a valuable perspective on algal conditions and trends. To view these maps please visit the website. <http://www.nj.gov/dep/bmw/remotesensing.htm>

No samples collected in the New Jersey Coastal Waters were found to contain the Paralytic Shellfish Poisoning species *Alexandrium* spp.

See next page for the complete report by NJDEP.

NJDEP Water Monitoring and Standards
Bureau of Marine Water Monitoring
Algal Conditions in New Jersey Estuarine and Coastal Waters
Week of June 27, 2011

TO: Distribution

FROM: Bill Heddendorf, Senior Environmental Specialist
Bureau of Marine Water Monitoring

DATE: June 30, 2011

SUBJECT: Report of Algal Conditions in New Jersey Coastal Waters
Week of June 27, 2011

Samples were collected by the USEPA helicopter and analyzed at the NJDEP Bureau of Marine Water Monitoring's Leeds Point Laboratory.

Raritan/Sandy Hook Bay Area

The waters of Raritan and Sandy Hook Bay are experiencing a mild bloom of a diverse assemblage of phytoplankton. No toxic species were detected.

New Jersey Coastal Area

The ocean waters off the coast of Long Branch are experiencing a bloom of *Heterocapsa rotundata* (6360 cells/mL). The ocean waters from Manasquan to Cape May are generally clear with sparse algal concentrations. No toxic species were detected in the ocean waters off the coast of New Jersey.

Barnegat Bay Area

The waters of Barnegat Bay from Toms River to Barnegat Inlet are experiencing low levels of mixed diatoms. The waters of Barnegat Bay from Barnegat Inlet to Little Egg Harbor are experiencing elevated concentrations of *Nannochloris oculata*. The brown tide organism *Aureococcus anophagefferens* looks to be present but in low levels from Manahawkin Bay to Little Egg Harbor.

Great Bay

The waters of Great Bay are experiencing sparse algal concentrations with a significant amount of detritus. No toxic species were detected.

Great Egg Harbor

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

Delaware Bay/Capeshore Area

A normally diverse assemblage of phytoplankton with a large amount of detritus is present in the waters along the Cape Shore near Dias Creek. The waters at the mouth of the bay are experience elevated levels of mixed diatoms. Total diatom count of 840 cells/mL. No toxic species were detected.

*No samples collected in the New Jersey Coastal Waters were found to contain the Paralytic Shellfish Poisoning species *Alexandrium spp.*

**NJDEP Water Monitoring and Standards
Bureau of Marine Water Monitoring
Phytoplankton Data Sheet**

Date: 06/29/2011

Collector: EPA

Station #	Time	Water Temp.	Chlorophyll (ug/l)	Dominant Species	Toxic Species*
26A	0747	23.6	20.60	Diverse assemblage of phytoplankton	None present
906A	0754	23.9	8.41	Diverse assemblage of phytoplankton	None present
A11A	0759	20.1	21.44	<i>Heterocapsa rotundata</i> 6,360 cells/mL	None present
A24A	0811	20.3	2.10	Sparse algal concentrations	None present
1605A	0817	20.3	5.89	Mixed diatoms	None present
1651D	0827	25.2	5.47	Mixed diatoms	None present
1670D	0853	24.9	12.19	<i>Nannochloris oculata</i>	None present
1703C	0859	25.8	15.98	<i>Nannochloris oculata</i>	None present
A54B	0903	21.8	4.20	Sparse algal concentrations	None present
1800B	0909	25.7	10.93	<i>Nannochloris oculata</i>	None present
1818D	0913	25.9	17.66	<i>Nannochloris oculata</i>	None present
2100A	0919	25.6	4.20	Sparse algal concentrations Significant amount of detritus	None present
2720B	0934	25.2	2.52	Sparse algal concentrations	None present
A85A2	0949	22.9	4.20	Sparse algal concentrations	None present
3826A	1002	23.0	5.89	Mixed diatoms	None present
3895E	0954	26.4	11.77	Diverse assemblage of phytoplankton Significant amount of detritus	None present

- Toxic Species = toxic species associated with shellfish safety including; *Prorocentrum lima.*, *Alexandrium spp.*, *Dinophysis spp.*, and *Pseudonitzschia spp.*
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