

Third update of the 2012 Helicopter Monitoring Program

Floatables:

The New York/New Jersey Harbor Complex was monitored for floatables four times from June 16 to June 22. The harbor was clear of significant floatable debris on June 16, 18, and 19. The floatable flight was not conducted on June 21 or 22 due to maintenance conducted on the helicopter.

On June 20, a slick, approximately 1400 feet long by 400 feet wide, was reported in the Upper Harbor.

All floatable debris consisted of wood, paper, plastic, or rubber, 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, and Great Egg Harbor, on June 18. 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:

The potentially toxic species *Dinophysis acuminata* was detected in Barnegat Bay near Island Beach State Park, but it was below bloom or toxic levels.

NJDEP 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 the complete report by NJDEP on next page for more information.

NJDEP Water Monitoring and Standards
Bureau of Marine Water Monitoring
Algal Conditions in New Jersey Estuarine and Coastal Waters
Week of June 18, 2012

TO: Distribution

FROM: Bill Heddendorf, Environmental Specialist 3
Bureau of Marine Water Monitoring

DATE: June 19, 2012

SUBJECT: Report of Algal Conditions in New Jersey Coastal Waters
Week of June 18, 2012

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 are generally clear with sparse algal concentrations. The waters of Sandy Hook Bay are experiencing low levels of mixed dinoflagellates. No toxic species were detected.

New Jersey Coastal Area

The ocean waters from Long Branch to Ship Bottom are experiencing low levels of *Thalassiosira rotula*(200-240 cells/mL). The ocean waters off 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 near Toms River have elevated levels of *Nitzschia paleacea*(1400 cells/mL). The waters from Island Beach State Park to Little Egg Harbor are generally clear with sparse algal concentrations. The toxic species *Dinophysis acuminata* was detected in Barnegat Bay near Island Beach State Park.

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 are generally clear with sparse algal concentrations. No toxic species were detected.

Delaware Bay/Capeshore Area

No samples were collected.

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: 06/18/12

Collector: EPA

Station #	Time	Water Temp.	Chlorophyll (ug/l)	Dominant Species	Toxic Species*
26A	0830	20.9	1.31	Sparse algal concentrations	None present
906A	0840	20.6	4.20	Mixed dinoflagellates	None present
A11A	0846	19.2	4.63	<i>Thalassiosira rotula</i> 200 cells/mL	None present
A24A	0900	19.7	3.78	<i>Thalassiosira rotula</i> 240 cells/mL	None present
1605A	0906	19.4	1.68	<i>Nitzschia paleacea</i> 1400 cells/mL	None present
1651D	0916	20.3	1.26	Sparse algal concentrations	<i>Dinophysis acuminata</i>
1670D	0922	20.4	1.26	Sparse algal concentrations	None present
1703C	0930	20.3	2.52	Sparse algal concentrations	None present
A54B	0934	19.3	2.92	<i>Thalassiosira rotula</i> 200 cells/mL	None present
1800B	0940	20.2	1.26	Sparse algal concentrations	None present
1818D	1020	20.2	1.68	Sparse algal concentrations	None present
2100A	1025	19.8	12.52	Sparse algal concentrations	None present
2720B	1040	20.9	1.26	Sparse algal concentrations	None present
A85A2	1043	19.6	0.84	Sparse algal concentrations	None present
3826A	NS	NS	NS	No Sample	No Sample
3895E	NS	NS	NS	No Sample	No Sample

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

