

Tenth update of the 2013 Helicopter Monitoring Program

Floatables:

The New York/New Jersey Harbor Complex was monitored for floatables six times from August 3 - 9. The Harbor was clear of significant floatables on August 3, 5, 7 and 8.

On August 6, two floatable slicks, each approximately 400 to 500 yards long by 1 - 2 yards wide, were reported in Newark Bay. A floatable slick, approximately 400 yards long by 2 yards wide was reported in the Kill Van Kull.

On August 9, a floatable slick, approximately 750 yards long by 2 yards wide was reported in Gravesend Bay. An oily sheen, approximately one and a half mile long with varying widths was reported in the Arthur Kill. The oily sheen was reported to the US Coast Guard.

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

Sampling:

New Jersey:

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 August 7. 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 waters of Raritan and Sandy Hook Bay showed a bloom of *Skeletonema menzeli* with cell counts reaching 148,000 cells/mL.

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 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 Aug 5, 2013

TO: Distribution

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

DATE: August 8, 2013

SUBJECT: Report of Algal Conditions in New Jersey Coastal Waters
Week of August 5, 2013

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 bloom of *Skeletonema menzeli* with cell counts of 148,000 and 4,000 respectively. No toxic species were detected.

New Jersey Coastal Area

The ocean waters from Long Branch to Cape May are 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 are generally clear with sparse algal concentrations. The waters of Manahawkin Bay are experiencing low levels of *Amphiprora sp* (480 cells/mL). The lower portion of the bay is experiencing low levels of mixed diatoms with a significant amount of detritus. 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 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 were generally clear with sparse algal conditions. 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: 08/07/13

Collector: EPA

Station #	Time	Water Temp.	Chlorophyll (ug/l)	Dominant Species	Toxic Species*
26A	0859	20.6	70.22	<i>Skeletonema menzeli</i> 148,000 cells/mL	None present
906A	0907	20.7	32.38	<i>Skeletonema menzeli</i> 4,000 cells/mL	None present
A11A	0913	19.7	3.36	Sparse algal concentrations	None present
A24A	0925	19.9	3.78	Sparse algal concentrations	None present
1605A	0932	19.8	3.36	Sparse algal concentrations	None present
1651D	0943	20.9	9.67	Sparse algal concentrations Significant amount of detritus	None present
1670D	1014	21.2	6.73	Sparse algal concentrations Significant amount of detritus	None present
1703C	1023	21.4	10.51	<i>Amphiprora sp</i> 480 cells/mL	None present
A54B	1026	19.4	1.68	Sparse algal concentrations	None present
1800B	1032	21.1	19.97	Mixed diatoms 560 cells/mL Significant amount of detritus	None present
1818D	1037	21.2	7.57	Mixed diatoms 800 cells/mL Significant amount of detritus	None present
2100A	1046	20.6	5.47	Sparse algal concentrations Significant amount of detritus	None present
2720B	1106	20.5	4.20	Sparse algal concentrations Significant amount of detritus	None present
A85A2	1114	19.7	6.73	Sparse algal concentrations Significant amount of detritus	None present
3826A	1138	19.4	5.89	Sparse algal concentrations Significant amount of detritus	None present
3895E	1149	21.2	30.69	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.**
- **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>**

