

NJDEP Water Monitoring and Standards  
Bureau of Marine Water Monitoring  
Algal Conditions in New Jersey Estuarine and Coastal Waters  
Week of August 29, 2011

TO: Distribution

FROM: Bill Heddendorf, Environmental Specialist 2  
Bureau of Marine Water Monitoring

DATE: September 1, 2011

SUBJECT: Report of Algal Conditions in New Jersey Coastal Waters  
Week of August 29, 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 are generally clear with sparse algal concentrations. The waters of Sandy Hook Bay are experiencing a mild bloom of *Eutreptiella* sp (640 cells/mL). 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 in the ocean waters off the coast of New Jersey.

**Barnegat Bay Area**

The waters of Barnegat Bay from Toms River to Little Egg Harbor are experiencing sparse algal concentrations with a significant amount of detritus. No toxic species were detected in all of Barnegat Bay.

**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 experiencing sparse algal concentrations with a significant amount of detritus. 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 of Delaware Bay near the mouth of the bay are generally clear with sparse algal concentrations. 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:** 08/31/2011

**Collector:** EPA

Station #	Time	Water Temp.	Chlorophyll (ug/l)	Dominant Species	Toxic Species*
26A	0851	20.6	2.52	Sparse algal concentrations	None present
906A	0858	21.1	15.98	<i>Eutreptiella sp</i> 640 cells/mL	None present
A11A	0903	20.5	5.05	Sparse algal concentrations	None present
A24A	0915	20.2	5.47	Sparse algal concentrations	None present
1605A	0921	20.8	7.15	Sparse algal concentrations Significant amount of detritus	None present
1651D	0930	20.8	9.25	Sparse algal concentrations Significant amount of detritus	None present
1670D	0955	21.8	6.73	Sparse algal concentrations Significant amount of detritus	None present
1703C	1003	20.9	11.77	Sparse algal concentrations Significant amount of detritus	None present
A54B	1006	20.9	5.89	Sparse algal concentrations	None present
1800B	1012	21.1	19.34	Sparse algal concentrations Significant amount of detritus	None present
1818D	1016	21.3	13.88	Sparse algal concentrations Significant amount of detritus	None present
2100A	1021	21.2	11.35	Sparse algal concentrations Significant amount of detritus	None present
2720B	1035	20.6	10.51	Sparse algal concentrations Significant amount of detritus	None present
A85A2	1039	20.8	7.15	Sparse algal concentrations	None present
3826A	1101	20.1	5.05	Sparse algal concentrations	None present
3895E	1053	21.6	15.14	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>**

