

NJDEP Water Monitoring and Standards
Bureau of Marine Water Monitoring
Algal Conditions in New Jersey Estuarine and Coastal Waters
Week of August 27, 2007

TO: Distribution

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

DATE: August 29, 2007

SUBJECT: Report of Algal Conditions in New Jersey Coastal Waters
Week of August 27, 2007

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 Bay were generally clear with sparse algal concentrations. The waters of the Sandy Hook Bay had low concentrations of a vast assemblage of phytoplankton. No toxic species were detected

New Jersey Coastal Area

The ocean waters off Long Branch generally clear with sparse algal concentrations. The ocean waters from Manasquan to Cape May were experiencing a mild bloom of mixed diatoms and dinoflagellates. No toxic species were detected.

Barnegat Bay Area

The waters of Barnegat Bay from Toms River to Manahawkin had sparse algal concentrations with significant amounts of detritus. No toxic species detected in any samples from Barnegat Bay.

The waters of Little Egg Harbor had sparse algal concentrations with significant amounts of detritus. No toxic species were detected.

Great Bay

The waters of Great Bay had a low concentration of mixed diatoms. No toxic species were detected.

Great Egg Harbor

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

Delaware Bay/Capeshore Area

The waters of the Delaware Bay near the mouth of the bay had sparse algal concentrations with significant amounts of detritus. The waters of the Delaware Bay near Dias Creek had sparse algal concentrations with significant amounts of detritus. 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: 08/28/2007

Collector: EPA

Station #	Time	Water Temp.	Chlorophyll (ug/l)	Dominant Species	Toxic Species*
26A	1055	22.3	8.41	Sparse algal concentrations	None present
906A	1104	23.9	21.02	Low concentration of <i>Prorocentrum</i> sp. (240 cells/ml)	None present
A11A	1117	21.8	5.89	Sparse algal concentrations	None present
A24A	1128	22.1	12.19	Mild bloom of mixed diatoms and dinoflagellates	None present
1605A	1133	23.9	10.51	Sparse algal concentrations Significant amounts of detritus	None present
1651D	1142	24.7	18.92	Sparse algal concentrations Significant amounts of detritus	None present
1670D	1148	24.8	14.30	Sparse algal concentrations Significant amounts of detritus	None present
1703C	1154	25.3	16.40	Sparse algal concentrations Significant amounts of detritus	None present
A54B	1158	22.1	12.19	Mild bloom of mixed diatoms and dinoflagellates	None present
1800B	1203	24.3	15.98	Sparse algal concentrations Significant amounts of detritus	None present
1818D	1207	24.3	4.63	Sparse algal concentrations Significant amounts of detritus	None present
2100A	1211	24.4	5.47	Low concentrations of mixed diatoms	None present
2720B	1225	24.3	3.36	Sparse algal concentrations Significant amounts of detritus	None present
A85A2	1331	23.4	10.93	Mild bloom of mixed diatoms and dinoflagellates	None present
3826A	1306	24.2	4.20	Sparse algal concentrations Significant amounts of detritus	None present
3895E	1316	25.3	12.19	Sparse algal concentrations Significant amounts 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>**

