NJDEP Water Monitoring and Standards
Bureau of Marine Water Monitoring
Algal Conditions in New Jersey Estuarine and Coastal Waters
Week of July 30, 2012

TO: Distribution

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

DATE: August 3, 2012

SUBJECT: Report of Algal Conditions in New Jersey Coastal Waters
Week of July 30, 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 and Sandy Hook Bay are experiencing a mild bloom of mixed diatoms (880-2080 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 Island Beach are generally clear with sparse algal concentrations. The waters from Barnegat Inlet to Little Egg Harbor have low levels of mixed diatoms dominated by *Skeletonema costatum.* No toxic species were detected.

Great Bay

The waters of Great Bay have low levels of *Skeletonema costatum* (880 cells/mL). 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 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.

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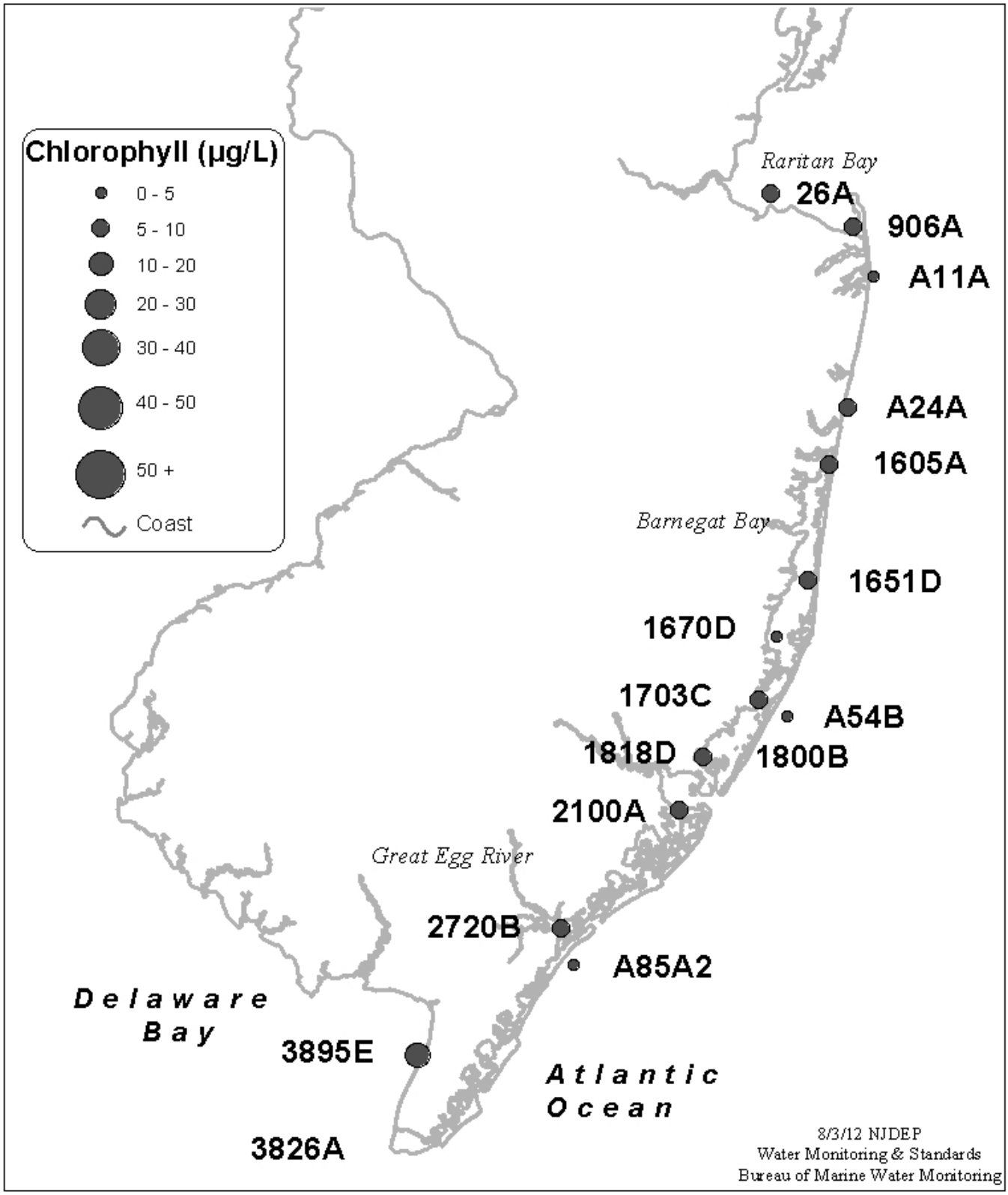
Phytoplankton Data Sheet

Date: 08/02/12

Collector: EPA

Station #	Time	Water Temp.	Chlorophyll (ug/l)	Dominant Species	Toxic Species*
26A	1010	25.1	7.15	Mixed diatoms 880 cells/mL	None present
906A	1018	25.3	8.41	Mixed diatoms 2080 cells/mL	None present
A11A	1023	24.2	0.42	Sparse algal concentrations	None present
A24A	1033	24.5	5.05	Sparse algal concentrations	None present
1605A	1038	26.2	5.89	Sparse algal concentrations	None present
1651D	1048	26.7	5.05	Sparse algal concentrations	None present
1670D	1050	26.9	2.94	Mixed diatoms 800 cells/mL	None present
1703C	1102	26.7	7.15	Mixed diatoms 640 cells/mL	None present
A54B	1105	25.8	2.94	Sparse algal concentrations	None present
1800B	1110	26.6	Lab Accident	*Skeletonema costatum* 1320 cells/mL	None present
1818D	1114	26.7	5.47	Mixed diatoms 1160 cells/mL	None present
2100A	1120	26.3	8.41	*Skeletonema costatum* 880 cells/mL	None present
2720B	1205	26.8	7.57	Sparse algal concentrations	None present
A85A2	1210	26.2	2.10	Sparse algal concentrations	None present
3826A	1234	25.5	Lab Accident	Sparse algal concentrations	None present
3895E	1224	27.3	16.82	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.**
- **This data can also be found online at http://www.nj.gov/dep/bmw/phytoplankton.htm**
- **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**


Chlorophyll (µg/L)
0 - 5
5 - 10
10 - 20
20 - 30
30 - 40
40 - 50
50 +
Coast
Raritan Bay
26A
906A
A11A
A24A
1605A
Barnegat Bay
1651D
1670D
1703C
A54B
1818D
1800B
2100A
Great Egg River
2720B
A85A2
Delaware Bay
3895E
Atlantic Ocean
3826A
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