

UPDATE OF NY BIGHT MONITORING PROGRAM

June 30 - July 6, 2001

NY Bight Sampling has been as follows:

July 2	NY/NJ Harbor Complex NJ Perpendiculars	Overflight JC61, 69, 75, 85, 90
July 3	NY/NJ Harbor Complex Long Island Beaches	Overflight Rockaway to Shinnecock Inlet
July 4	NY/NJ Harbor Complex	Overflight
July 5	NY/NJ Harbor Complex New Jersey Beaches	Overflight Sandy Hook to Cape May
July 6	NY/NJ Harbor Complex NJ Perpendiculars	Overflight JC 41, 53

Projected Activities for Next Week:

July 7	NY/NJ Harbor Complex	Overflight
July 9	NY/NJ Harbor Complex NJ Perpendiculars	Overflight JC61, 69, 75, 85, 90
July 10	NY/NJ Harbor Complex LI Beaches	Overflight Rockaway to Shinnecock Inlet
July 11	NY/NJ Harbor Complex New Jersey Beaches	Overflight Sandy Hook to Cape May
July 12	NY/NJ Harbor Complex NJ Perpendiculars	Overflight NYB20, JC14, 27, 41, 53
July 13	NY/NJ Harbor Complex	Overflight

Floatables

The New York/New Jersey Harbor Complex was monitored for floatables a total of five times from June 30 - July 6. The floatables overflight was not done on June 30 due to mechanical problems. The Harbor was clear of significant floatables from July 2 - 6.

Bacteria

Bacteriological samples were collected along the Long Island coast, from Rockaway Point (LIC01) to Shinnecock Inlet (LIC28) on July 3. Samples were collected along the New Jersey Coast from Sandy Hook (JC01A) to Cape May (JC99) on July 5. All samples were tested for fecal coliform and enterococcus bacteria.

Along the Long Island coast, the highest fecal coliform (FC) concentration, 29 FC/100ml, and the highest enterococcus count, 7 enterococci/100ml, occurred at Rockaway Point (LIC01). The majority of the remaining counts were zero.

Along the New Jersey coast, the highest fecal coliform count, 53 FC/100ml, occurred at Atlantic City (JC75). The two highest enterococcus counts, 37 and 40 enterococci/100ml, occurred at Atlantic City (JC75) and Spring Lake (JC30), respectively. These two enterococcus counts exceeded the EPA criteria for enterococcus. The EPA criteria for enterococcus, 35 enterococci/100ml, is based on a geometric mean of five samples collected over a 30 day period. NJDEP was informed of the high enterococcus counts.

Phytoplankton

- **Raritan/Sandy Hook Bay Area:** A sparse mix of diatoms were present in Raritan and Sandy Hook Bay waters. No toxic species were detected.
- **New Jersey Coastal Area:** In coastal waters north of the Manasquan River and southern coastal waters, algal concentrations were sparse. No toxic species were detected.
- **Barnegat Bay Area:** The waters in this area generally were clear with algal concentrations sparse. In Manahawkin Bay, a mild bloom of mixed diatoms was observed.
- **Great Bay:** The waters of the Great Bay contained a significant amount of detritus with algal concentrations sparse. No toxic species were detected.
- **Great Egg Harbor:** The waters of Great Egg Harbor contained a significant amount of detritus with algal concentrations sparse. No toxic species were detected.
- **Delaware Bay/Capeshore Area:** The waters of the Delaware Bay contained a significant amount of detritus with algal concentrations sparse. No toxic species were detected.

Dissolved Oxygen

Bottom water samples were collected for dissolved oxygen (DO) analysis at the Barnegat (JC61), Beach Haven (JC69), Atlantic City (JC75), Strathmere (JC85), and Hereford Inlet (JC90) perpendiculars on July 2.

Table 1 presents the bottom DO results for the perpendiculars sampled on July 2. The DO values range from 2.3 - 4.1 mg/l, with the lowest value occurring one nautical mile off Strathmere and seven nautical miles off Hereford Inlet. These values are low for this time of the year. These perpendicular stations are scheduled to be re-sampled next week.

Bottom water samples were collected for DO analysis at the Bay Head (JC41) and Seaside Heights (JC53) perpendiculars on July 6. These results were not available for this weeks report and will be reported next week.

Table 1

Dissolved Oxygen Concentrations of Bottom Water Samples at the Barnegat (JC61), Beach Haven (JC69), Atlantic City (JC75), Strathmere (JC85), and Hereford Inlet (JC90) perpendiculars (mg/l) - July 2, 2001.

Location Nautical Miles Offshore	Barnegat JC 61	Beach Haven JC 69	Atlantic City JC 75	Strathmere JC 85	Hereford Inlet JC90
1	2.7	2.8	3.7	2.3	3.8
3	3.7	2.8	2.9	3.0	4.1
5	2.4	3.9	3.6	2.9	3.0
7	2.9	2.6	3.0	2.8	2.3
9	3.8	2.7	3.4	2.8	3.4