

This is the eight update of the 2006 NY Bight Monitoring Program.

UPDATE OF NY BIGHT MONITORING PROGRAM FROM July 22 – July 28, 2006

NY Bight Sampling has been as follows:

July 22	NY/NJ Harbor Complex	Overflight
July 24	NY/NJ Harbor Complex Perpendiculars	Overflight JC61, JC69, JC75, JC85, JC90
July 25	NY/NJ Harbor Complex LI Beaches	Overflight Rockaway to Shinnecock Inlet
July 26	NY/NJ Harbor Complex New Jersey Beaches	Overflight Sandy Hook to Cape May
July 27	NY/NJ Harbor Complex Perpendiculars	Overflight NYB20, JC14, JC27, JC41, JC53
July 28	NY/NJ Harbor Complex Perpendiculars	Overflight JC61, JC69, JC75, JC85, JC90

Projected Activities for Next Week:

July 29	NY/NJ Harbor Complex	Overflight
July 31	NY/NJ Harbor Complex Perpendiculars	Overflight NYB20, JC14, JC27, JC41, JC53
August 1	NY/NJ Harbor Complex LI Beaches	Overflight Rockaway to Shinnecock Inlet
August 2	NY/NJ Harbor Complex New Jersey Beaches	Overflight Sandy Hook to Cape May
August 3	NY/NJ Harbor Complex Perpendiculars	Overflight JC61, JC69, JC75, JC85, JC90
August 4	NY/NJ Harbor Complex Perpendiculars	Overflight NYB20, JC14, JC27, JC41, JC53
August 5	NY/NJ Harbor Complex	Overflight

Floatables

The New York/New Jersey Harbor Complex was monitored for floatables six times from July 22 – July 28, 2006. The Harbor Complex was clear of significant floatable debris on July 26, 27 and 28.

On July 22, a slick, approximately ¼ miles long with varying widths, was reported in the East River. A second slick, approximately ½ miles by 25 feet, was reported in the Upper Harbor.

On July 24, two small slicks were reported, one in Newark Bay and one in the Upper Harbor. Each slick was approximately 200 feet by 20 feet.

On July 25, a patch of debris, approximately 100 square feet, was reported off Coney Island.

On July 26, an oily sheen, approximately 100 square feet, was report in Newark Bay. This oily sheen was reported to the US Coast Guard.

All slicks consisted of large wood, trash and tires. The Army Corps of Engineers conducted clean-up as necessary.

Bacteria

On July 25, bacteriological samples were taken along the Long Island coast from Rockaway Point (LIC01) to Shinnecock Inlet East (LIC28). On July 26, samples were taken along the New Jersey coast from Sandy Hook (JC01A) to Cape May (JC97). The Long Island samples were tested for fecal coliform (FC) and enterococcus bacteria. The New Jersey samples were analyzed for enterococcus bacteria.

On July 25, along the Long Island coast, the highest fecal coliform count, 32 FC/100ml, occurred at Rockaway Point (LIC01). The highest enterococcus count, 7 enterococci/100ml, occurred at Rockaway (LIC02).

On July 26, along the New Jersey coast, the highest fecal coliform count, 59 FC/100ml, occurred at Monmouth Beach (JC11) and Lavallette (JC49).

All bacteriological values were below water quality standards.

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 (JC90) perpendiculars on July 24 and 28, 2006, and at the Sandy Hook (NYB20), Long Branch (JC14), Belmar (JC27), Bay Head (JC41) and Seaside Heights (JC53) perpendiculars on July 27.

Table 1 presents the bottom DO results for the perpendiculars sampled on July 24 and 28. The

lowest DO concentration, 2.9 mg/l, occurred nine nautical miles off Beach Haven (JC69M), on July 28. Values between 2 – 3 mg/l are considered lethal if prolonged. This station will be re-sampled on Monday, weather permitting.

Tables 2 and 3 present the bottom dissolved oxygen (DO) results for the perpendiculars sampled on July 27. The lowest DO value 4.3 mg/l, occurred one nautical mile off Bay Head (JC41E). Values between 4 – 5 mg/l are considered borderline to healthy.

Table 4 presents the bi-monthly average DO values for the past five years. The lowest average, 4.9 mg/l, occurred in late July in 2002.

Table 1

Dissolved Oxygen Concentrations of Bottom Water Samples at the Barnegat (JC61), Beach Haven (JC69), Atlantic City (JC75), Strathmere (JC85) and Hereford (JC90) perpendiculars – July 24 and 28, 2006.

Location (Nautical Miles Offshore)	Barnegat JC61		Beach Haven JC69		Atlantic City JC 75		Strathmere JC 85		Hereford JC 90	
	7/24	7/28	7/24	7/28	7/24	7/28	7/24	7/28	7/24	7/28
1	5.7	4.7	5.7	3.5	6.9	4.9	7.4	5.7	6.2	5.1
3	6.3	3.8	4.1	3.8	7.6	4.7	6.7	7.6	6.7	5.4
5	4.7	4.0	4.3	3.4	7.9	4.9	6.5	7.4	7.5	7.0
6	4.4	4.4	4.5	3.3	5.6	4.6	6.9	7.6	7.1	7.7
7	4.9	6.0	4.0	2.9	4.9	5.8	6.9	7.3	7.6	7.7

Table 2

Dissolved Oxygen Concentrations of Bottom Water Samples at the Sandy Hook Perpendicular (mg/l) – July 27, 2006.

Location (Nautical Miles Offshore)	Station	DO (mg/l)
2	NYB20	5.9
4	NYB21	5.4
6	NYB22	5.2
7.4	NYB23	5.3
8.6	NYB24	5.9

Table 3

Dissolved Oxygen Concentrations of Bottom Water Samples at the Long Branch (JC14), and Belmar (JC27), Bay Head (JC 41) and Seaside Heights (JC53) Perpendiculars (mg/l) – July 27, 2006.

Location (Nautical Miles Offshore)	Long Branch JC 14	Belmar JC 27	Bay Head JC 41	Seaside Heights JC 53
1	5.6	6.2	4.3	5.0
3	6.3	6.5	4.9	4.8
5	7.2	4.8	4.5	4.8
7	6.0	5.3	4.7	4.9
9	6.8	6.2	5.3	5.5

Table 4

Five Year Average Dissolved Oxygen Values (mg/l), for Late June (June 15 – 30), Early July (July 1 – 14), Late July (July 15 – 31).

	Average Dissolved Oxygen Values (mg/l)		
	Late June	Early July	Late July
2006	6.0	6.4	5.6*
2005	6.7	5.8	6.8
2004	7.8	7.7	6.7
2003	6.4	6.7	No data
2002	no data	5.7	4.9

* This value includes results up to July 28, 2006.