

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

UPDATE OF NY BIGHT MONITORING PROGRAM FROM June 17 – June 23, 2006

**NY Bight Sampling has been as follows:**

June 17	NY/NJ Harbor Complex	Overflight
June 19	NY/NJ Harbor Complex NJDEP Nutrient Network	Canceled Sandy Hook to Barnegat
June 20	NY/NJ Harbor Complex LI Beaches	Overflight Rockaway to Shinnecock Inlet
June 21	NY/NJ Harbor Complex New Jersey Beaches	Overflight Sandy Hook to Cape May Point
June 22	NY/NJ Harbor Complex Perpendiculars	Overflight JC41, JC53
June 23	NY/NJ Harbor Complex Perpendiculars	Overflight NYB20's, JC14, JC27

**Projected Activities for Next Week:**

June 24	NY/NJ Harbor Complex	Overflight
June 26	NY/NJ Harbor Complex NJDEP Nutrient Network	Overflight Barnegat to Delaware Bay
June 27	NY/NJ Harbor Complex LI Beaches	Overflight Rockaway to Shinnecock Inlet
June 28	NY/NJ Harbor Complex New Jersey Beaches	Overflight Sandy Hook to Cape May Point
June 29	NY/NJ Harbor Complex Perpendiculars	Overflight JC61, JC69, JC75, JC85, JC90
June 30	NY/NJ Harbor Complex Perpendiculars	Overflight NYB20's, JC14, JC27, JC41, JC53

## **Floatables**

The New York/New Jersey Harbor Complex was monitored for floatables five times from June 17 – June 23, 2006. The Harbor Complex was clear of significant floatable debris on all five days. Due to flight restrictions, the floatable flight was canceled on June 19.

On June 17, an oily sheen, approximately one mile by 50 feet wide, was reported in the Arthur Kill. On June 20 and 22, oily sheens, approximately 2 miles long by 30 - 50 feet wide, were reported in Newark Bay. All sheens were reported to the US Coast Guard.

## **Bacteria**

On June 20, bacteriological samples were taken along the Long Island coast from Rockaway Point (LIC01) to Shinnecock Inlet East (LIC28). On June 21, samples were taken along the New Jersey coast from Sandy Hook (JC01A) to Cape May Point (JC99). The Long Island samples were tested for fecal coliform (FC) and enterococcus bacteria. The New Jersey samples were analyzed for enterococcus bacteria.

On June 20, along the Long Island coast, the highest fecal coliform count, 5 FC/100ml, and the highest enterococcus count, 5 enterococci/100ml, occurred at Point Lookout (LIC10).

On June 21, along the New Jersey coast, the highest enterococcus count, 20 enterococci/100ml, occurred at Cape May Point (JC99).

All bacteriological values are below single sample maximum water quality standards.

## **NJDEP NEPPS**

As part of our Performance Partnership Agreement with NJDEP, surface water samples were collected at 20 stations from Sandy Hook to Barnegat on June 19. The samples will be analyzed by NJDEP for chlorophyll, salinity, nitrate, nitrite, ortho-phosphate, ammonia, total nitrogen, and total suspended solids. Samples were also collected for temperature and dissolved oxygen analyses, which were completed in the field and by our Edison Laboratory respectively. These 20 stations are part of NJDEP's 200 Nutrient Station Network.

## **Dissolved Oxygen**

Bottom water samples were collected for dissolved oxygen (DO) analysis at the Bay Head (JC41) and Seaside Heights (JC53) perpendiculars on June 22, and at the Sandy Hook (NYB20), Long Branch (JC14), and Belmar (JC27) Perpendiculars on June 23.

Tables 1 and 2 present the bottom dissolved oxygen (DO) results for the perpendiculars sampled on June 22 and 23. The lowest DO value 3.9 mg/l, occurred nine nautical miles off Bay Head (JC41M). These values are typical for this time of year.

Table 1

Dissolved Oxygen Concentrations of Bottom Water Samples at the Sandy Hook Perpendicular (mg/l) - June 23, 2006.

Location (Nautical Miles Offshore)	Station	DO (mg/l)
2	NYB20	5.2
4	NYB21	6.4
6	NYB22	6.8
7.4	NYB23	7.5
8.6	NYB24	7.6

Table 2

Dissolved Oxygen Concentrations of Bottom Water Samples at the Long Branch (JC14), and Belmar (JC27) Perpendiculars (mg/l) – June 23, 2006; and Bay Head (JC 41) and Seaside Heights (JC53) Perpendiculars (mg/l) - June 22, 2006.

Location (Nautical Miles Offshore)	Long Branch JC 14	Belmar JC 27	Bay Head JC 41	Seaside Heights JC 53
1	4.5	4.7	5.7	5.7
3	5.1	5.1	5.1	4.3
5	6.9	6.9	6.2	6.0
7	7.1	7.2	5.8	6.4
9	7.6	6.4	3.9	6.6