



Hudson River Water Quality Report: August 17-21, 2010

Together with our science partners from Lamont-Doherty Earth Observatory and Queens College, Riverkeeper sampled for *Enterococcus* (an indicator of untreated sewage) at our 74 standard sampling locations, plus the Gowanus Canal, between August 17 and 21. Our August data was posted online on 8/23.

To learn more about Riverkeeper's Water Quality Program, and to view historic sampling data, please visit www.riverkeeper.org/water-quality/udson.

Summary and Conditions

Our patrol in August came after a continued period of relatively low rainfall regionally. If you've been following these reports since May, you'll start seeing both how different each month's sampling results are, i.e., how variable our water quality is generally, but you'll also start to see some patterns - predictable results at several locations.

A big regional rain finally came on the 22nd when I was in Waterford. The water rose about three feet overnight at the dock. I sampled again at a few sites southbound on 8/23. Wow, what a difference a day makes! (Plus 1 to 3 inches of rain) We've listed the southbound results at the end of the data table below.

This month 10 sample sites of 75 had unacceptable *Enterococcus* (Entero) counts.

Some Observations




- **NY Harbor:** Both Newtown Creek and the Gowanus had very high Entero counts when we sampled on 8/17. This is the first day we've measured high counts on the same day at both locations this year. So far this sampling season rainfall has been lower than usual, so there have been fewer sewage overflows. However, in August, there were some heavy downpours the day prior to sampling.
- **Yonkers to Little Stony Point:** Entero counts were generally lower than last month throughout this area except at Sparkill Creek in Orangetown - my hometown. Something isn't right here: the May count was 488 (per 100 ml water), June 1046, July pegged our system at >2420, and this month it was 1553. On July 26, 'just for fun,' we sampled at Sparkill Creek and did a one in ten dilution, which gives our equipment the ability to count Entero up to a max of 24,200 (per 100 ml water) instead of 2,420. On that day the Entero count was 9860. The EPA standard for primary contact with fresh water is 61.
- **Newburg, Beacon and Wappinger's Creek:** These three sites, all relatively close to one another, had either 'unacceptable' or 'possible risk' Entero counts on the day we sampled in August, compared to 'acceptable' counts for several miles both north and south of this area. At Newburg I expect this now, but not at the other two.

- **Beacon to mouth of Rondout Creek:** All sites were “acceptable.” Inside Rondout Creek however, both the local waterfront at the Strand and the water at the sewage treatment plant (STP) outfall were not. About ½ of the samples (53%) taken at the Kingston STP outfall have been “unacceptable” since we first sampled there in May 2008. But, as the count at the Strand was the higher of the two on the 20th, there may be a separate discharge close to the Strand as well.
- **Kingston Point and Rondout Creek:** Interesting data this month. There was almost no flow over the dam at Eddyville – no flow in Rondout Creek as it entered the Hudson, which means we were sampling local water, not the greater Rondout watershed. We saw ‘acceptable’ Entero counts for miles north and south of Rondout Creek and also at Eddyville. But at the Kingston sewage treatment plant outfall (STP), we pegged our equipment with a count of **>2420** (per 100 ml water). The Kingston STP outfall has had mostly ‘unacceptable’ Entero counts this year, and the count on 8/20 was by far the highest. What’s interesting is that at our two sample sites on either side of the STP (the Kingston City docks and public Kingston Point Beach) Entero counts were in the ‘possible risk’ range. Why? Were they elevated by the outflow of the sewer plant?
- **Esopus Creek:** We measured an elevated, ‘unacceptable,’ Entero count near the mouth of the Esopus and a low count farther in/upstream. There was a large vessel with many passengers in the vicinity of the higher count – maybe a holding tank was flushed.
- **Saugerties to Albany:** Entero counts were generally ‘acceptable’ on the day we sampled.
- **Troy:** Another problem area. Our sampling sites both above and below the Troy Dam/lock had elevated, ‘unacceptable,’ Entero counts. Both were also either ‘unacceptable’ or ‘possible risk’ in June and July this year.

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August 2010 Sampling Data

For River Mile 0 to River Mile 44, the following standards apply:

-  Enterococcus count (under 35/100ml) is acceptable by EPA standards*
-  Enterococcus count (between 35 and 104/100ml), if sustained over time, would be unacceptable by EPA standards*
-  Enterococcus count (over 104/100ml) is unacceptable by EPA standards*

River Mile	Site Name	Sample Date	Enterococcus Count	Quality
-1	Gowanus canal	August 17, 2010	4884	Unacceptable
0.1	The Battery midchannel	August 17, 2010	0	Acceptable
2.5	East River midchannel at 23rd St.	August 17, 2010	31	Acceptable
2.6	Newtown Creek- Dutch Kills	August 17, 2010	3448	Unacceptable

2.7	Newtown Creek- Metropolitan Ave. Bridge	August 17, 2010	3873	Unacceptable
4	East River at Roosevelt Island	August 17, 2010	63	Possible Risk
4.7	Castle Point, NJ	August 17, 2010	0	Acceptable
6	Pier 96 Kayak Launch	August 17, 2010	0	Acceptable
7	79th St. midchannel	August 17, 2010	0	Acceptable
7.9	125th St. Pier	August 17, 2010	0	Acceptable
8	125th St. WWTP Outfall	August 17, 2010	10	Acceptable
8.1	Harlem River- Washington Ave. Bridge	August 17, 2010	41	Possible Risk
12	GW Bridge midchannel	August 17, 2010	0	Acceptable
12.1	Harlem River- Willis Ave. Bridge	August 17, 2010	63	Possible Risk
14	Dyckman St. Beach	August 17, 2010	41	Possible Risk
17.5	Yonkers Wastewater Treatment Plant Outfall	August 18, 2010	0	Acceptable
18.4	Saw Mill River	August 18, 2010	85	Possible Risk
18.5	Yonkers midchannel	August 18, 2010	0	Acceptable
25.9	Irvington Beach	August 18, 2010	10	Acceptable
26	Piermont Sewage Treatment Plant Outfall	August 18, 2010	97	Possible Risk
26.1	Piermont Pier	August 18, 2010	41	Possible Risk
26.5	Upper Sparkill Creek	August 10, 2010	1553	Unacceptable
27	Tarrytown marina	August 18, 2010	10	Acceptable
27.5	Tappan Zee Bridge midchannel	August 18, 2010	0	Acceptable
28	Kingsland Point Park and Pocantico River	August 18, 2010	52	Possible Risk
28.1	Nyack Launch Ramp	August 18, 2010	0	Acceptable
34	Ossining Beach	August 18, 2010	0	Acceptable
35	Croton Point Beach	August 18, 2010	10	Acceptable
35.5	Haverstraw Bay midchannel	August 18, 2010	0	Acceptable
38	Furnace Brook	August 18, 2010	0	Acceptable
39	Emeline Beach	August 18, 2010	10	Acceptable
40	Cedar Pond Brook	August 18, 2010	0	Acceptable
40.5	Stony Point midchannel	August 18, 2010	0	Acceptable
43	Peekskill Riverfront Green Park	August 18, 2010	0	Acceptable
44	Annesville Creek	August 18, 2010	0	Acceptable

For River Mile 45 north, the following standards apply:

- Enterococcus count (under 33/100ml) is acceptable by EPA standards*
- Enterococcus count (between 33 and 61/100ml), if sustained over time, would be unacceptable by EPA standards*
- Enterococcus count (over 61/100ml) is unacceptable by EPA standards*

River Mile	Site Name	Sample Date	Enterococcus Count	Quality
46	Fort Montgomery	August 19, 2010	2	Acceptable

52.5	West Point Sewage Treatment Plant Outfall	August 19, 2010	4	Acceptable
53.5	Cold Spring Harbor	August 19, 2010	6	Acceptable
54	Little Stony Point	August 19, 2010	1	Acceptable
60	Newburgh Launch Ramp	August 19, 2010	328	Unacceptable
61	Beacon Harbor	August 19, 2010	48	Possible Risk
66.5	Wappingers Creek	August 20, 2010	84	Unacceptable
68	Marlboro Landing	August 20, 2010	7	Acceptable
75	Poughkeepsie Launch Ramp	August 20, 2010	7	Acceptable
77	Poughkeepsie Drinking Water Intake	August 20, 2010	5	Acceptable
84.5	Norrie Point midchannel	August 20, 2010	3	Acceptable
85	Norrie Point Yacht Basin	August 20, 2010	20	Acceptable
88	Port Ewen Drinking Water Intake	August 20, 2010	1	Acceptable
92	Kingston Point Beach	August 20, 2010	38	Possible Risk
92.1	Kingston Sewage Treatment Plant Outfall	August 20, 2010	2420	Unacceptable
92.2	Kingston Public Dock	August 20, 2010	50	Possible Risk
92.3	Eddyville Anchorage	August 20, 2010	20	Acceptable
97	Ulster Landing Beach	August 20, 2010	12	Acceptable
99	Tivoli Landing	August 20, 2010	6	Acceptable
102	Esopus Creek Entrance	August 20, 2010	326	Unacceptable
102.1	Esopus Creek West	August 20, 2010	12	Acceptable
103	Malden Launch Ramp	August 20, 2010	46	Possible Risk
108.5	Inbocht Bay	August 20, 2010	16	Acceptable
113	Catskill Launch Ramp	August 21, 2010	8	Acceptable
113.1	Catskill Creek – East End	August 21, 2010	51	Possible Risk
113.2	Catskill Creek – First Bridge	August 21, 2010	31	Acceptable
116.5	Hudson Launch Ramp	August 21, 2010	12	Acceptable
117	Athens Sewage Treatment Plant Outfall	August 21, 2010	5	Acceptable
122.5	Gay's Point Midchannel	August 21, 2010	3	Acceptable
124	Coxsackie Waterfront Park	August 21, 2010	2	Acceptable
133	Coeymans Landing	August 21, 2010	8	Acceptable
137	Castleton- Vlockie Kill	August 21, 2010	8	Acceptable
138	Bethlehem Launch Ramp	August 21, 2010	1	Acceptable
142	Island Creek/Normans Kill	August 21, 2010	20	Acceptable
144.5	Dunn Memorial Bridge	August 21, 2010	25	Acceptable
146	Albany Rowing Dock	August 21, 2010	21	Acceptable
151.5	Congress Street Bridge	August 21, 2010	84	Unacceptable
152.5	Hudson River above Troy Lock	August 21, 2010	67	Unacceptable
155	Mohawk River	August 21, 2010	26	Acceptable
155.1	Hudson above confluence with Mohawk River	August 21, 2010	25	Acceptable

Additional Data: Southbound on the 8/23, AFTER 1 to 3 inches of rain regionally.

Compare these Entero counts to what we measured two days before on the way north. For this section of the Estuary the EPA standard for primary contact with fresh water is 61 (per 100 ml water).

	8/23	8/21
Hudson River above Troy Lock:	345	67
Congress Street Bridge, Troy:	727	84
Dunn Memorial Bridge, Albany:	488	25
Catskill Launch Ramp:	435	8
Catskill Creek/both sites:	>2,420	51/31
Esopus Creek/both sites:	>2,420	326/12

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