3.6 Water Quality



Mark McCarroll, 2003

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The water quality of Broadstreet Hollow has been monitored for a numbers of years as one of the routine stream locations in the NYC watershed-monitoring program. The sample location is immediately upstream of the confluence of Broadstreet Hollow with the Esopus Creek. Figure 1 below compares the annual medians for turbidity, total phosphorus, and fecal coliforms from several Catskill streams to Broadstreet Hollow. The results show the water quality in Broadstreet Hollow to be comparable to the other Catskill streams in the Ashokan basin, i.e. generally very good with occasional spikes of turbidity. Total phosphorus levels are slightly higher in Broadstreet Hollow than in the other streams, but the levels are still below guidance values of 50 μ g/L.

In terms of turbidity, Broadstreet Hollow was one of the streams studied during the mid 1990's, in an effort to determine the distribution and behavior of turbidity in the Catskill District streams. Of the streams studied in the Ashokan basin, Broadstreet Hollow was generally in the upper half of rankings for producing turbidity. However, because it is a relatively small stream, its overall contribution to turbidity entering the reservoir was relatively small. In other words, the stream was very turbid at times, but this did not contribute a great deal of turbidity to the Catskill system. For additional discussion on turbidity in Broadstreet Hollow, see Section 3.2.4.3, Applied Geology.

Figures 1, 2 and 3. Annual medians for selected water quality analytes (turbidity, total phosphorus and fecal coliform) for several Catskill streams in the Ashokan basin, 1991-2001.

