

TOWN OF WAYNESVILLE
WATERSHED ADVISORY COMMITTEE
OCTOBER 1, 2007 - 7:00 P.M.
TOWN HALL

The Watershed Committee of the Town of Waynesville held a meeting at 7:00 p.m. on Monday, October 1, 2007 in the Waynesville Town Hall. Members present included Jack Swanner, Bill Skelton, Gordon Small, Pat Maier, Bill Yarborough and Karen Kaufman. Also present were Dr. Peter Bates, Dr. Jerry Miller, Dr. Tom Martin and Rob Lamm, representatives of Western Carolina University which is under contract with the Town to perform the Forestry Management Plan, and Lee Galloway, Town Manager.

The Town Manager opened the meeting and thanked those who were in attendance. He called on Dr. Peter Bates who noted that the plans for the evening were to hear reports from Dr. Jerry Miller on his studies of the water quality in the watershed streams and from Dr. Tom Martin on his study of the microbiology in the watershed.

Dr. Miller presented findings from the samplings in the watershed, noting the current quality and the factors to check in the samplings for geological and biological change. He explained how quality is measured, noting the various devices used in measuring the flow, the total suspended solids (TSS), turbidity, velocity, for example, and how a sampler is used to measure items at different points in a stream channel.

The sampler had been used at one site from November, 2006 until February 10, 2007, and it has been at the second site from March 3, 2007 until the present. Originally, there had been plans to beam the information by cell phone and computer, but the location could not register a signal. So the information is measured every two weeks and information entered into the computer and taken back to Western Carolina. The data is actually collected every five minutes on Allens Creek. The sampler can be programmed to sample at given intervals or to adjust sampling during a flood event.

Dr. Miller explained that variations in the sampling process can help you understand what is occurring in the stream and where sedimentation that does occur originates. In the case of the sampler in the Allens Creek Watershed, the location picks up a very large section of the watershed, and it is located just below a section of the watershed that was clear cut in 1986. This was intentionally placed to see if the clear cutting done 20 years ago was having a negative impact upon water quality in the stream today. Because the water is so clean, any change in or near a stream will likely show up. It may be a large percentage change, but the higher level may not be bad because it was so clean to begin with. How much change is too much? You have to consider the toxicity, the turbidity and the total suspended solids to try and make that determination.

For now, Dr. Miller plans to continue monitoring at various points, to refine the sampling methods and to try and bring better understanding of the factors in variations. He noted that more samplers were needed and would be useful in measuring the water quality. The Isco sampler costs approximately \$3,600 and the Probe costs around \$6,000.

Dr. Tom Martin reviewed a map of the various watersheds within the Allens Creek Watershed. He discussed the various stream types or characteristics, noting that there were cascades, glides, pools and riffles. He said that the majority of their work had been confined to fish sampling, to macro invertebrate sampling. Dr. Martin noted that there were five basic species of fish, but that the dominant fish was the brook trout. Most of these were small, less than seven inches in length, and he said the primary reason for the small size is that there is a lack of nutrients in the stream. In other words, he explained, the water is too clean and provides little in the way of food or nutrients for the fish. In the watershed, there are various bugs present, but the main types present are the mayflies, the stoneflies and the caddis flies.

The Committee members thanked those from Western Carolina for their research and the information provided. The next meeting is scheduled for Thursday, November 1, but Mr. Yarborough indicated that the first Thursday is difficult for him as he has to be in Raleigh on that day. The group agreed to meet on the second Thursday in November, which is November 8, at 7:00 p.m. At that time, Dr. Bates and Mr. Lamm will talk about the plants and trees found in the watershed.

Dr. Bates reminded everyone that on Saturday, November 3, there would be a fall Watershed Day, with a half day hike. Everyone was invited to attend.

There being no further business, the meeting adjourned at 9:20 p.m.

A. Lee Galloway
Town Manager