

Riparian Notes

Note Number 6, July, 2004

Steve Nelle, NRCS, San Angelo, Texas

Watersheds or Water Catchments??

About 2400 years ago, the great historian and scholar, Plato described the condition of the landscape in ancient Greece as well as a dramatic change he observed. The description below is a paraphrase of the English translation:

“In the primitive state of the country, the mountains and hills were covered with soil and there was an abundance of timber. The plains were full of rich earth, bearing an abundance of food for cattle. Moreover, the land reaped the benefit of the annual rainfall, having an abundant supply of water in all places; receiving the rainfall into herself and storing it up in the soil. The land let off the water into the hollows which it absorbed from the heights, providing everywhere abundant fountains and rivers. Such was the state of the country, which was cultivated by true husbandmen, who made husbandry their business, and had a soil the best in the world and abundance of water.

In comparison of what then was, there now remain only the bones of the wasted body. All the richer and softer parts of the soil have fallen away with the mere skeleton of the land being left. For the fact is that a single night of excessive rain now washes away the earth, and lays bare the rock. Now the land is losing the water, which flows off the bare earth into the sea.”

In the earlier account, Plato described what must have been a near perfectly functioning water cycle. The land was well vegetated and the soil was rich. When it rained, the land caught the water and stored it. Excess water was slowly released and emerged as springs and flowing streams. As a result of these things working together, the land produced a great bounty of timber and grazing. He went on to describe those early land managers as “husbandmen”, who apparently practiced a high form of land stewardship. Those lands can be accurately described as water catchments, not watersheds.

After some unknown interval of time, Plato wrote a disturbing account of what had happened to the land. Erosion had been rampant, indicating an extreme loss of vegetation. The loss of vegetation and soil was so severe that bare rock was being exposed. Rainfall was quickly transformed into runoff and very little water was retained on the land. We can assume that springs declined or dried up and streams ceased flowing continuously. We might be able to imagine the condition of the riparian areas. We can also assume that sedimentation was greatly accelerated and water quality declined. This land could accurately be described as a watershed, but not a water catchment.

The question we must ask ourselves is – are our lands functioning more as watersheds or water catchments? As we consider the land and the water cycle, we would do well to revise our thinking, our management and our terminology to emphasize the catching water instead of shedding water.

Thanks to Wayne Elmore for passing along the quote and for educating many of us about catching water.
