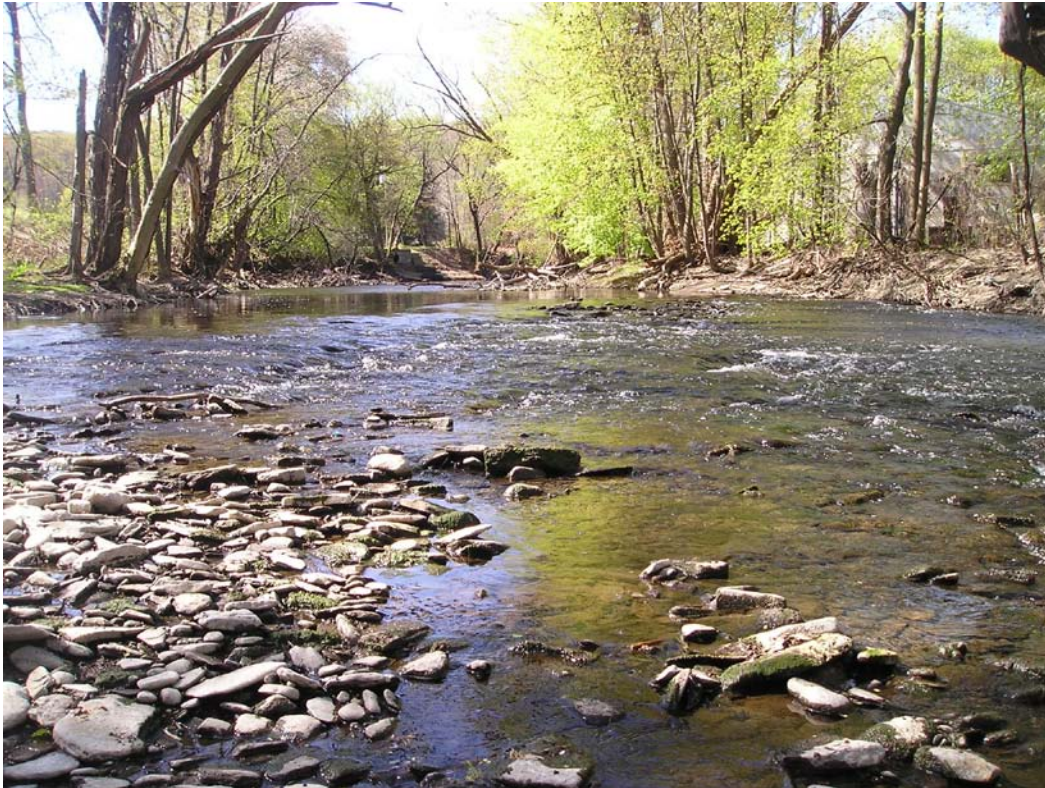


Chautauqua Watershed Notes
From the Chautauqua Watershed Conservancy
March 1, 2009

Wonderful Water

By Tina Nelson

For the Chautauqua Watershed Conservancy



Water leaves Chautauqua Lake on its journey to the Gulf of Mexico via the Chadakoin River. Please join the Chautauqua Watershed Conservancy in its mission to protect the quality of our water resources - among our region's most precious assets.

It had been cold and snowy for quite some time. Then warmer temperatures and rain came our way and the melted snow and rainfall turned Conewango Creek into Conewango Lake. Our corner of New York State is a wet place most of the time. Wintertime the mounds of frozen water are fun to slide on with a sled, tube, snowboard or skis. Springtime its cold liquid form rushes down our creeks creating sport for men and women who angle for the fish that thrive in cold roiling water. And there's an adrenaline rush for kayakers, canoeists and rafters who brave the challenge of white water. Throughout the summer the residents and tourists swim and boat in the water that has gathered via the watershed in the basin we call Chautauqua Lake.

Water is so ubiquitous around here we tend to take it for granted. Yet it is a precious and unique substance, perfectly suited to sustain life on earth. Water is a simple molecule: two hydrogen atoms and one oxygen atom bound together in such a way that one side of the molecule is slightly positive and the other side is slightly negative. This property, called polarity, is what makes water the "universal solvent." Water molecules' polarity can pull the molecules of certain substances apart so that they become evenly distributed;

in other words, the substances dissolve. In this way water dissolves necessary nutrients so that plants can absorb them. Water's polarity also causes water molecules to cling to one another, a property called cohesion. Their chumminess and gravity is why water flows.

From Chautauqua Lake gravity can take a gang of water molecules on a long journey. They flow first into the Chadakoin River, then Cassadaga Creek, then Conewango Creek, then the Allegheny River, which takes them all the way to Pittsburgh. At one time these waterways carried goods from Jamestown to Pittsburgh and helped sustain the commerce of Jamestown and surrounding areas before there were railroads. Pittsburgh, however, is not the final destination of our gang of water molecules from Chautauqua Lake. They still continue southwest by way of the Ohio River then south in the great Mississippi River until they flow out into the Gulf of Mexico.

It is possible that a molecule of water that made the journey from Chautauqua Lake to the Gulf could return to Chautauqua Lake. Because of polarity water molecules usually stick together as a liquid, but when heat gets them moving some of them break their bonds with one another and evaporate – break free to become a gas, part of the atmosphere. Let's say a water molecule that traveled to the Gulf did this. It might drift about as vapor for a while but eventually join other water molecules – condense – thus forming a cloud. In the cloud tiny droplets combine with others – remember water's cohesion – until the resulting drop gets heavy and falls. Then the whole cycle begins again. After numerous times around the cycle and many years our water molecule could return to Chautauqua Lake.

It sparks the imagination to think that maybe some of the water we skip stones on here powered James Prendergast's mill on the Chadakoin River two hundred years ago or was pushed about by the giant paddle wheel of a steamboat on its way to one of Chautauqua Lake's grand hotels a hundred years ago.

One hundred years ago people had little respect for the water that their business and pleasure depended upon. For, in fact, by the late eighteen hundreds Chautauqua Lake was quite likely a cesspool in the summer when all those grand hotels dumped raw sewage into its water. Hopefully today we are more grateful for our abundant elixir of life. The establishment of the Chautauqua Watershed Conservancy is testimony to a legacy of gratitude and caring. Protect and enjoy the water!

The Chautauqua Watershed Conservancy is a local, private, not-for-profit, tax-exempt 501(c)(3) organization with the mission to preserve and enhance the water quality, scenic beauty and ecological health of the lakes, streams and watersheds of the Chautauqua region. CWC relies on membership donations to undertake its conservation activities. Its annual membership campaign is underway. For more information or to support these efforts call 664-2166 or go to www.chautauquawatershed.org.