

Historical Look at the Susquehanna River Watershed

by Sandy Lizlous

“Near the centre of the State of New York lies an ex [sic] district of country, whose surface is a succession of hills and dales, or, to speak with greater deference to geo definitions, of mountains and valleys. It is among these hills that the Delaware takes its rise; and flowing from the limpid lakes and thousand springs of this region, the nu [sic] sources of the Susquehanna meander through the valleys, until, uniting their streams, they form one of the proudest rivers of the United States.”

*James Fenimore Cooper, The Pioneers –
The Sources of the Susquehanna: A Descriptive Tale
(from the series, The Leatherstocking Tales)*

Thus begins James Fenimore Cooper’s Leatherstocking Tales: stories that center on upstate New York. The Leatherstocking Tales, while fictional, have a historical background and are set in the areas where Cooper lived – the Lake George region and Cooperstown.

The Susquehanna River begins at Cooperstown’s Otsego Lake, or what Cooper calls, “Lake Glimmerglass.” From there, it winds its way south into Pennsylvania, ending at Havre de Grace, Maryland, where it enters the Chesapeake Bay. The watershed drains approximately 27,500 square miles. The river itself is nearly 444 miles long.

“This little torrent, whose dark waters gushed over the limestones that lined its bottom, was nothing less than one of the many sources of the Susquehanna; a river to which the Atlantic herself has extended an arm in welcome.”

– James Fenimore Cooper, The Pioneers

Geologically, the Susquehanna River is considered the oldest or second oldest major river system in the world. Dating back to the Paleozoic Era (543 to 248 million years ago) there is evidence that the flow of the ancient Susquehanna was established early enough that it predated the formation of the Appalachian mountains over 300 million years ago. In other terms, the river was in existence well before Pangea (the super continent formed 225 million years ago) broke up and formed the Atlantic Ocean. Before the end of the last ice age, the Susquehanna was much longer than it is today. The Chesapeake Bay constituted its lower valley before it was flooded by rising waters (source: Wikipedia.com).

Photo: Lake Otsego, also called “Lake Glimmerglass,” is seen here traveling south by canoe moments from the Susquehanna River.

Scottie Baker, www.naturaproductions.com



“Before the Europeans, or, to use a more significant term, the Christians, dispossessed the original owners of the soil, all that section of country which contains the New England States, and those of the Middle which lie east of the mountains, was occupied by two great nations of Indians, from whom had descended numberless tribes.”

– James Fenimore Cooper, The Pioneers

The two Native American tribes that Cooper refers to are the Susquehannock, from which the name Susquehanna is derived, and the Lenape, now known as the Delaware. The Susquehannock are known to have lived all along the Susquehanna River from the north end of the Chesapeake Bay through Pennsylvania and into New York State. The name Susquehannock means “People of the Muddy River.” They were hunters, farmers and fisherman and are known to have traded with the early settlers at Jamestown, Virginia, as well as with the French and the Dutch. They are also known to have been aggressive and warlike, having been feared by surrounding tribes. They moved into the Susquehanna Valley around 1150. By 1763, however, decimated by war and disease, they became extinct.

The Lenape inhabited the river valley area in the 17th century, along a western boundary known as Lenapehoking territory. In the 18th century, William Penn, the founder of the Pennsylvania Colony, negotiated with the Lenape to allow white settlement in the colony between the Delaware River and the Susquehanna.

In the late colonial times, the river became an increasingly important transportation corridor with the discovery of anthracite coal by Necho Allen in the upper reaches of the Appalachians mountains.

Throughout America's past, the Susquehanna watershed proved historically significant, along with the fact the river was a major transportation route. Some of the noteworthy events that took place in this New York State watershed include the following:

Battle of Newtown

“The Expedition you are appointed to command is to be directed against the hostile tribes of the Six Nations of Indians, with their associates and adherents.”

– General George Washington's Orders to General John Sullivan

During the years preceding the Revolutionary War, settlers had been moving further west, settling in what is now the Chemung River Valley. The Mohawks, who were allied with the British Loyalist and Tory forces and trying to protect their lands, burned down settlements, took captives and would kill and scalp them.

General George Washington realized that something needed to be done to stop these attacks. In addition, he was well aware that the fertile lands occupied by some of the nations of the Iroquois Confederacy in the New York Colony were the bread basket of the British Army. The Cayuga, Mohawk, Seneca and Onondaga had allied to the British, whereas the Oneida and the Tuscarora allied with the Americans. Washington felt that if the British-allied Indians could be driven out of the colony and all their villages and crops destroyed, not only would the area be safer for white settlers, but a major British food supply would be stopped. In the spring of 1779, he ordered Generals John Sullivan, James Clinton, and Daniel Brodhead to commence a three-pronged offensive. Because General Sullivan commanded the largest body of soldiers (around 3,000), the offensive became known as the Sullivan Expedition against the Iroquois Confederacy (source: chemungvalley.org).

The Battle of Newtown, which was the most significant military engagement of the Sullivan Campaign of 1779 and played a crucial role in America's Revolutionary War, took place at the foot of a hill along the Chemung River just outside of what is now Elmira, New York.



Monument at the site of General James Clinton's dam at the source of the Susquehanna River at Otsego Lake in Cooperstown, NY. General Clinton joined General Sullivan in defeating the Tories and Indians at the battle of Newtown, near Elmira, NY.

General John Sullivan led the brigade of General Edward Hand, with that of General William Maxwell in reserve, into a charge against the Iroquois and Loyalists (led by Major John Butler and his son, Walter Butler).

Having already ordered the brigade led by Colonel Matthias Ogden to flank the enemy along the Chemung River to the west and having directed those led by James Clinton and Enoch Poor to secure the hillside on the eastern flank, the ultimate result was a resounding defeat for both the Loyalists and the Iroquois at their side (source: wikipedia.com).

Joseph Smith

“Immediately on our coming up out of the water after we had been baptized, we experienced great and glorious blessings from our Heavenly Father.”

– Joseph Smith, founder of the Church of the Latter Day Saints

The Susquehanna River is important to the Church of the Latter Day Saints. In 1829, Joseph Smith and Oliver Cowdery were translating the Book of Mormon along the banks of the Susquehanna River. Joseph Smith was living near Great Bend, Pennsylvania at the time.

On May 15, 1829, according to Section 13 of the Doctrine and Covenants, they were visited by the resurrected John the Baptist. Following his visit, Joseph and Oliver baptized each other in the river. Later that year, they were also visited near the river by the apostles Peter, James and John, as alluded to in sections 27 and 128 of the Doctrine and Covenants. Both events took place in unspecified locations near the river's shore in either Susquehanna County, PA, or Broome County, NY, (sources: dcsites.com; wikipedia.com).

Mark Twain

“It's lovely to live on a raft. We had the sky up there, all speckled with stars, and we used to lay [sic] on our backs and look up at them, and discuss about whether they was [sic] made or only just happened.”

– Mark Twain, *Adventures of Huckleberry Finn*

Another well known American author is also connected to the watershed. In 1870s and 1880s, Mark Twain and his family spent summers at Quarry Farm. During this time period, he wrote well known books, including the *Adventures of Tom Sawyer*, *The Adventures of Huckleberry Finn*, and *The Prince and the Pauper*. Mark Twain passed away in 1910 and is buried in Elmira (source: www.Elmira.edu).

Floods

No historical summary can be complete without mentioning the devastation caused by flood events in the Susquehanna River Watershed. While the floods have been devastating, they have resulted in improvements to weather forecasting and flood control structures. Some of these major floods include:

Whitney Point and Lisle, New York: During July 1935, a series of thunderstorms “trained” over the Tioughnioga River watershed. The resulting runoff devastated the Villages of Whitney Point and Lisle. Another flood hit in March 1936. As a result, President Franklin D. Roosevelt authorized the construction of the Whitney Point Dam on the Otselic River under the Flood Control Act of 1936.

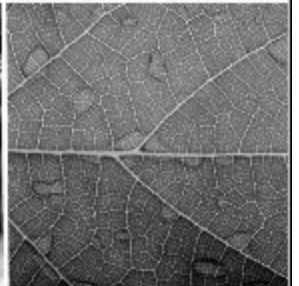
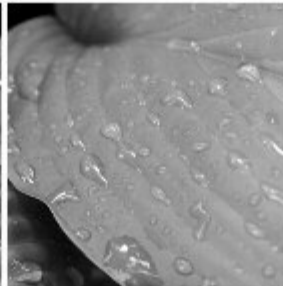
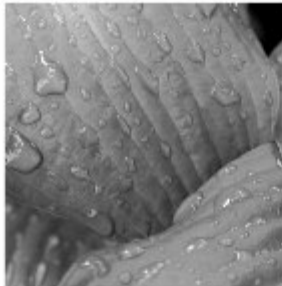
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Hurricane Agnes: In June 1972, the remnants of Hurricane Agnes stalled over the northeastern US, dropping up to 19 inches of rain in Pennsylvania. Agnes caused devastating floods in several states along the eastern seaboard. Some of the worst flooding in New York was seen along the Canistota and Chemung Rivers in the Susquehanna watershed.

June 2006: In late June 2006, up to 15 inches of rain fell in the upper reaches of the main stem of the Susquehanna and Chenango rivers, resulting in a 500-year flood event in the Binghamton and Endicott areas.

The history of the Susquehanna watershed is indeed a varied and fascinating one.

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Courtesy of NYSDEC

A truck ends up in the Painted Post WWTP clarifier after Hurricane Agnes



Courtesy of C&S Engineers

Left: The Susquehanna River floods the Binghamton-Johnson City Joint Sewage Treatment Plant during the 2006 summer flood.



Courtesy of NYSDEC

The Whitney Point Dam and reservoir today