

Wooden Water Pipe Reveals History of Town's Infrastructure

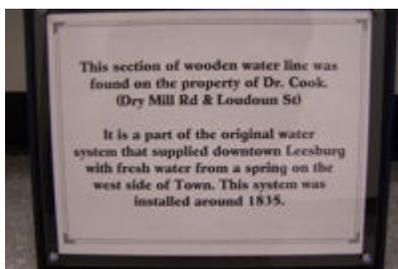
Small town finds evidence of early 19th century water system

Leesburg, a small town in Virginia, has unveiled an interesting piece of history. Last summer, employees at the Leesburg Utility Maintenance Division were alerted to the discovery of a 2.4-m-long (8-ft-long) log found on a resident's property on the west side of town. The log, with its hollowed-out center and tapered end, is a historic artifact that provides evidence of an early water system.

"We know from old records and town ordinances that there was a water system of sorts in the early 1800s," said Max Mellott, assistant superintendent of the Leesburg Utility Maintenance Division.



During the summer 2008, a wooden pipe was found in Leesburg, VA. The log pipe is tapered on one end so it could be driven into the next pipe, creating the town's first water system. Photos courtesy of Max Mellott.



Mellott is becoming an expert on the town's water history. For the past year and a half he has spent as much time as possible researching the topic. He has scoured the town council minutes from the early 19th century through present day to piece together the story of Leesburg's early water infrastructure.

Leesburg became the seat of Loudoun County in 1758, and was incorporated as a town and granted the status of a municipal corporation or a local governing body, by the Commonwealth of Virginia in 1813. Mellott speculates that the town built the first portion of its water system sometime between its incorporation in 1813 and its first record of a water system in 1832.

“The town became responsible for its well-being,” Mellott said. “They had to raise their own taxes and provide for the cost of being a town.”

Two records that verify the existence of a water system appear in 1832. The first was a contract for conducting a lottery to raise money for the water system signed by Leesburg Mayor Presley Cordell on Jan. 4, 1834. According to the *Loudoun Times-Mirror* article, “Original Water System Included Wooden Pipes,” published in July 29, 1965, by Penelope Osburn, 6000 tickets were offered for \$5 each and cash prizes were awarded.

“The town of Leesburg ... is authorized to raise by Lottery any sum of money not to exceed twenty-five thousand dollars, for the purpose of repairing or rebuilding the Leesburg Academy ... and with the residue of the said sum of supplying the said town with water,” according to the 1834 lottery contract.

The second documented evidence of a water system appears in an amendment to an act concerning hydrants and pumps in the town, which was approved on July 19, 1832. The act states that “it shall be unlawful for any person to obstruct in any way the passage of the water from the hydrants to the cisterns or in any of the logs or pipes, or to permit a tub or bucket to remain under the ... spout of any pump or hydrant longer than necessary to fill.”



The recently discovered log water pipe is not the first to be found in the town. Another piece of log pipe was found in 1965 and is currently in the care of the Loudoun Museum. This artifact was left square on the end and has a metal piece attached that is tapered on both sides. The metal portion of this pipe was driven into the end of another log to connect a portion of the water system, Mellott explained. The log pipe with a metal attachment belongs to a newer portion of the water system and it shows the progression of Leesburg’s water infrastructure over the years.

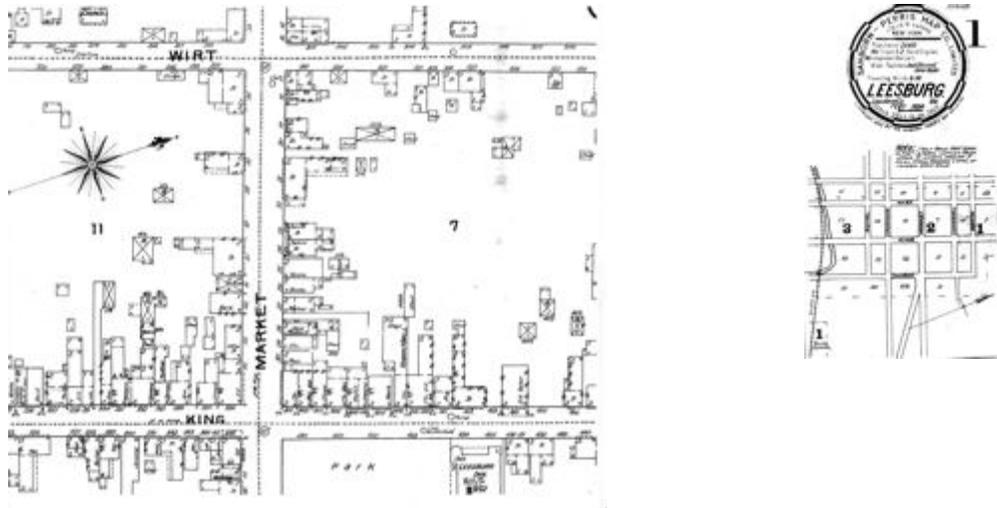
The log shown above was found in 1965 and is a portion of Leesburg's early water infrastructure. The log is fitted with a metal attachment that identifies it as a later addition to the water system already in place, according to Mellott. Photo courtesy of Pamela Stewart, Loudoun Museum.

For the newly unearthed log pipe, “they actually tapered the log itself,” Mellott said. This provides evidence that the log is a part of the town’s first attempt at a water system.

The main spring that fed the water system was known as Rock Spring, which is located on the western side of town, said John Creamer, utility maintenance manager of the Leesburg Utility Maintenance Division. The town also had a secondary spring near Rock Spring that would provide an alternative supply of water during droughts, Mellott said.

Water was transported through the pipes by gravity to supply a system of hand pumps and cisterns through the main streets of town. The system provided citizens with a somewhat dependable source of water, Mellott said. The town also had a few hand-dug wells.

During 1850 this system supplied water to a population of approximately 1700 people, and encompassed approximately 155,394 m². Details on the water system can be found in the 1894 Sanborn-Perris Map of the town. At that time Leesburg had a population of approximately 2000; two, 457-m (1500-ft) reels of hose; and 10 fire cisterns with an average capacity of 18,925 L (5000 gal). The cisterns were filled by 76-mm (3-in.) water mains stretching from the spring.



These excerpts from the 1894 Sanborn-Perris Map show details of Leesburg's water infrastructure as it was at the end of the 19th century. The street map, left, identifies the locations and size details of portions of the system. The map key, right, identifies what the system includes and shows the town boundaries in 1897. Images of the map were obtained from the Thomas Balch Library (Leesburg, VA.).

Mellott and Creamer said they suspect that the water system was meant to provide water to fight fires as well as drinking water. "One of the biggest fears that people lived with back in those days was fire," Mellott said. Pumps were located where residents could use them for firefighting, Creamer added. "Most water systems were put in for fire prevention."

The water system spanned a couple of thousand feet in length, Creamer said. "It wasn't huge but ... this gave them a reliable water source." The system could have evolved from a single pipe from the spring to a primitive pump or trough in town during the early part of the 19th century to the extensive system of cisterns and pumps seen throughout the town during the late 19th century, but they don't know for sure, Mellot explained.

The Utility Maintenance Division does know that the town had an early wooden pipe water system that evolved to a more advanced wooden pipe water system that was in use until 1906, when the town installed cast iron pipes.

Mellott's research revealed that when new council members or a new mayor was elected, each would be assigned a street and become responsible for routine cleanup, upkeep, and repairs, which included maintaining the water system.

“They had a water committee and a sewer committee, and ... a sanitation committee,” Mellott added. The council members would serve on these committees to monitor the water system conditions and the health and sanitation of the town. The committees also passed acts and ordinances for the protection of the town’s residents. One of these acts prohibited the use of water for washing tubs, wagons, or horses during a drought, Mellott said. Leesburg also created the position of superintendent of waterworks before the turn of the century, Creamer said.

Leesburg’s early water system is a unique for such a small town. And the history might have been lost without the interest of the town’s employees. “When you look at these old systems, the thought processes, and the people that were involved in them,” Creamer said, “it’s extraordinary.”

“We knew some of our stuff was pretty old, but nobody had even bothered to try to establish dates [pertaining] to when certain things were done,” Mellott said. “I’ve always liked history, so I just started going to the library.” Now that the division knows Leesburg’s background, when it digs something else up, it will be better equipped and interested in determining what it is, instead of throwing it away, he added.

— **Jennifer Fulcher**, *WEF Highlights*

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