

Water to a thirsty desert

Hurricane Canal's history shows power of perseverance



Hurricane Valley Pioneer Heritage Museum/AP
William Hinton is shown in 1952. Hinton worked as canal master for the Hurricane Canal for the longest period of time.

- Modern-day trail originated as pioneering effort to make Hurricane Valley livable through back-breaking labor, sweat and more than a few tears

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Lifelong Hurricane resident Glenwood Humphries said that in his youth the Hurricane Canal was the place to be during the summer.

"There was a bunch of us that would go to the canal to go swimming," Humphries said. "We all swam naked because we couldn't afford swim suits."

Not only swimming, scores of children in the area would tube down the canal. Humphries said one time his tube went flat and he ended walking home barefoot.

Despite two near-drowning incidents, Humphries continued to tube and swim in the canal. One place, called John's swimming hole, was wider than other places, with a handy rock for jumping into the canal.

"As soon as the snow melted off Pine Mountain, we would head to the canal to go swimming," he said.

Although the canal provided a cool swimming and tubing spot, that was not its true purpose. But for years

it looked like the canal would never get started, let alone finished.

It took nearly 11 years from start to finish for a project that many predicted would never be done, but the tenacity of the pioneers who settled the area was greatly underestimated.

As the early pioneers settled "Dixie," they sought places close to water resources needed for livestock, raising crops, and for drinking and bathing. But settlements along the Virgin River in the Zion Canyon area were fighting a losing battle against the river. Numerous floods were washing away the already limited supply of fertile land, so pioneers began looking elsewhere for places to live.

Many thought that the Hurricane Bench, as it was called, would be an ideal place to grow crops, but the lack of water and questions about how to get water from the Virgin River to the dry, parched land proved major obstacles. The possibility of a canal to bring water to the bench was looked at twice before three men, Levi N Harmon and John Steele of Toquerville and James Jepson of Virginia City - gave it a more thorough look.

On July 11, 1893, what would become the Hurricane Canal Company held its first meeting, and a committee of six was formed to investigate the possibility of a canal. Two feasibility studies showed that the canal was not possible. But three times was a charm and Isaac MacFarlane, who was chosen as engineer and did the surveys, proclaimed it possible, although he was one of the people who previously had declared it impossible.

On Sept. 1, 1893, 53 men signed the Article of Incorporation for the Hurricane Canal Company before work commenced on the canal in December 1893.

One hundred men subscribed to stock not to exceed 20 shares, one acre to a share. Men with grown sons could get 20 acres for each of them. A tax of 8 cents per share was levied for the cost of survey, 3 cents in

FOR INFORMATION

- Maps marking the trailheads are available at the Hurricane Valley Chamber of Commerce. 95 N. Main Street in Hurricane, or two are conveniently located at the trail heads. One is at the cell phone tower hill on state Route 59 and the other is at the historic marker at 200 North off State Route 9. Both are in Hurricane.
- Historic photographs and canal memorabilia are on display at the Hurricane Valley Pioneer Heritage Park Museum located at 35 West State Street in Hurricane. The museum is open Monday to Friday from 9 a.m. to 5 p.m. Admission to the museum is free although donations are appreciated.

cash and 5 cents in "available means." Wages for an eight-hour day were set at \$2 for good, fair work.

Work commences

The working survey laid out the route in four-rod stations (66 feet). Payment was made for the work done and not for the time consumed. The industrious were rewarded, and the slothful were paid only for what they accomplished.

Because spring and summer were dedicated to the planting of crops and fall for harvesting, work on the canal was limited to the winter.

Working in the Virgin River Canyon during the winter was cold. The winter sun only hit the canyon for a few hours and the water in the river was icy. Until a road was built down to the canal, all supplies - food, clothing and shelter - had to be carried in.

The men working on the canal would stay at campsites during the week only to return on the weekends for a change of clothing and food for the next week. Although the men slaved away building the canal in order to provide for their families, it was not only the men who labored on the canal. Women worked too - not on the canal, but at home, where they tended to the homestead and the children. It is only fair to say that the early women pioneers of the area toiled right alongside their husbands, even if not at the same site.

Five main camps housed the men along the Hurricane Canal - Robbers Roost, Chinatown, Sulfur Springs, Point of the Mountain and Gould's Wash Camp. Tales in many history books about the Hurricane Canal speak of the sulfur springs. Despite the washing of the men's clothing, the smell of sulfur rose up from the clothes while ironing and the clothes themselves, worn in the muddy river, were forever dingy despite repeated washing.

During the Depression, what could have been a disaster for the Hurricane Canal actually proved to be a blessing. Mining in Pioche, Nev., and Silver Reef shut down and a few miners drifted into Hurricane working for food and the promise of a horse and saddle in the spring to move on with. The miners, familiar with the use of dynamite, helped the pioneers with the substance many knew little about.

During the first two winters, 300 men worked in the canyon. By 1898, with funds dwindling, the work dragged on and only six men continued to work to tame the river and bring much needed water to the Hurricane Valley.

During the first two winters, 1894-95, the first diversion dam was constructed. Within one year, a flood destroyed the boulder dam: the boulders were

tossed about the canyon below like pebbles. A second dam using a pine log from Kolob was constructed but later destroyed. Hauling the log back up to the dam, workers reinforced it with wire and boulders. The third dam held for years. By the time the log dam failed again, concrete was available and a new dam was constructed in 1911 -12.

The cost in lives

Almost \$32,000 has gone into the canal, mostly labor. But by 1902, money for the canal was all but dried up and the last of the major work still needed to be done, consisting of nine tunnels to be blasted through sheer rock. Cash was needed for "giant powder" (dynamite) and lumber for flumes.

Money was so tight that at one point when blasting, Thomas Isom, a canal worker, picked misfired dynamite out of many a hole. "We had to do it. We couldn't afford to lose a single stick," Isom reportedly said.

James Jepson, president of the canal company, volunteered to make the trip to Salt Lake City to meet with leaders of the Church of Jesus Christ of Latter-day Saints - President Joseph F. Smith and the Quorum of the Twelve Apostles. The purpose of the trip was not to ask for money, but for the church to purchase 5,000 shares of stock, the money of which could be used to complete the canal. The church bought the stock and, two years later, the canal was completed.

Despite the hard, dangerous work on the canal, only two deaths were recorded during the time of the construction and neither death was a result of working on the canal. One worker, whose name is not recorded, left work to head back to camp because he was not feeling well. Later, it was discovered that the man never made it back to camp, instead being swallowed by the rapids of the Virgin River.

Another death was recorded in March of 1902. John Wolfe Isom Jr., the oldest son of John Wolfe and Mary Emma Wright Isom, was 16 years old when he met his demise. Isom's father had died in 1899 and John was working his father's share.

Walking along the canal one evening with another youth, a rock slide brought down boulders from the cliff side. One struck Isom in the head, killing him instantly.

Not all the tales of the canal are of work. There are stories about the pioneers playing the banjo and harmonica and singing and dancing at night when the work was over.

Water comes to the valley

According to historical documents, water first flowed through the canal onto the Hurricane Bench on Aug. 6, 1904. It was a muddy flow of water that came down the canal, but nonetheless beautiful for those who struggled for so long. A ceremony was held in observance of the momentous occasion, and there wasn't a dry eye in the house as the water flowed. It would be two more years before the Hurricane area was settled but the area quickly became known as the fruit basket of the state with its Elberta peaches, pecans, grapes and apricots.

Over the next three years, eight more miles of canal were built to ring the city.

Once the canal was completed, the work was not over. The pioneers had to maintain a constant vigil over the canal lest small cracks enlarge, ruining the canal wall and destroying the years of hard work.

Ditch riders were employed day in and day out while water was running. Anytime there was a storm, the rider had to go out to check for leaks. If a leak was found, the leak was stuffed with cedar bark and rags before it could take out a section of the canal. Twenty ditch riders in all rode on horseback along the canal to watch for leaks. Out of the 20, one was a woman. Dixie Lee, whose father Frank Lee was a ditch rider, often took her father's place as ditch rider. After the canal was completed, Frank became another fatality.

Frank Lee was the ditch rider in 1958. During one of his trips up to the canal, his horse was frightened, reared and threw Lee from its back. Injured, Lee was able to get back on his horse and ride to town but suffered a punctured lung and later died at the hospital.

The Hurricane Canal was used until 1990, when the Quail Lake Reservoir and pressurized irrigation lines made the canal obsolete.

The canal, built without government funds, is still a wonder of engineering. The builders had only a spirit level for accuracy and tested the pitch of the canal by dumping water in it. The drop from the dam to town is a quarter inch for every rod (22 feet) for the first four miles. The remainder of the canal drops an eighth of an inch for every rod.

The canal can still be viewed on the steep canyon walls. It was an irrigation canal supported by walls of rock and masonry winding its way along the mountainside high above the riverbed until, starting in the Virgin River Canyon, it makes its way out of the canyon and down into the fertile land of the Hurricane Bench - land that without water would be useless.

What was once an unproductive desert is now a blooming oasis and, although pressurized irrigation water has replaced the canal, the fruit trees and crops

would not exist except for the canal and the pioneers who worked on it. The canal has been called a man-made marvel, a prodigy of achievement partly due to the fact it was made by hand - with a pick, shovel, crowbar, hand-operated steel drill and wheelbarrow.

The Hurricane Canal today

Laura Thomas, a 25-year resident of Hurricane, doesn't have any ancestors that helped on the canal, but after claiming Hurricane as her home, Thomas became interested in the history of the area.

Once the canal was no longer in use, it quickly fell into disrepair. Wanting to save this important piece of Hurricane history, Thomas and a group of interested volunteers began restoring it as a trail. Starting in the spring of 1999, the two-year project was completed in November 2001 with the help of volunteers including two groups from AmeriCorps and grant money from Utah State Parks and Recreation and the Utah Humanities Council.

"The trail below the current diversion dam took 10 of us almost four weeks, working every day to make the trail," Thomas said. "We had a group of students from Hurricane High School start on the other end to meet in the middle."

The trail, for the most part, goes along the canal, using the ditch rider's path. But in areas where there are precarious drops, the trail goes inside the canal. A few of the tunnels, in poor condition, were permanently closed, but others remain open or have trails that go outside the tunnels for hikers who don't like the inky blackness.

Today, the Hurricane Canal Trail is 21 miles long and Hurricane resident Jerry Updike hikes it monthly to check for damage and trash.

Updike said the hikers and bikers who use the trail respect it and there have been few problems.

Updike also maintains a guest sign-in register. In the last two years, visitors from 35 different states have signed it.

"Two years ago, we had visitors from nine different countries and, last year, that was up to 11," Updike said. "The trail is getting more use all the time and it's exciting that so many people are enjoying the trail."