

The Hurricane Canal, 1893 – 1904 and 1904 – 1985

Why do we venerate the digging of a relatively small seven and one-half mile canal that was used for just eighty years then abandoned? Every farming community in the arid west depended on canals. What sets the Hurricane Canal apart from the others?

The Cotton Mission, beginning with Toquerville, was mostly settled between 1858 and 1865. All the villages occupied tracts where stream water was easily diverted but most of these were severely restricted in size. Rapid population growth coincided with torrential rains that Noah might savor and the villages along the upper Virgin lost approximately half their farmland. Young people and entire families loomed as the chief export; the future was bleak.

The Hurricane Bench, now known as Hurricane Valley, with its probably 4,000 acres of rich arable land was tantalizingly close to water and was yet so far away. A canal along a steep canyon wall composed of treacherously unstable rock subject to frequent slides would have to be dug by hand. About 1865, Mission leader Erastus Snow had a cursory survey made for a canal to water it. The negative finding was soon reinforced by Brigham Young's son, John who, after a brief survey, declared it to be unfeasible and left the area for good.

A privately financed canal to the LaVerkin Bench completed in 1891 was no doubt an inspiration and a guide to men like James Jepson of Virgin and John Steele of Toquerville who were young and brash enough to ignore the two early surveys as well as a more thorough one done about 1890 by LaVerkin Canal surveyor, Isaac McFarlane who recognized the nearly insurmountable problems posed by the unstable cliff sides. Undaunted, Jepson and Steel decided in 1893 to do their own study. They correctly determined that 2,000 acres could be served; they erred, almost tragically, by assuming that a canal was economically feasible.

Men whose judgment was swayed by desperation organized the Hurricane Canal Company and digging commenced January 1894. They apparently figured four years was ample to complete it. Five years though saw only fractional completion and the LDS Church was asked to buy stock.

Facts relating to the Hurricane Canal.

1857-1865. Dixie Mission villages settled beginning with Toquerville. Floods of early 1860's have already caused serious soil loss to "upriver" villages. The Hurricane Bench that is tantalizingly close to the river is recognized as only extensive arable tract in Dixie Mission. (St. George Washington Fields have only 1,660 acres.

Abt. 1865. Mission president Erastus Snow names Hurricane Hill and Hurricane Bench; has John McFarlane do quick survey and learns that the bench has over 3,000 acres of arable soil.

1870's. John Young is sent by his father, Brigham, to study Dixie and take leadership role. He concludes that a canal to Hurricane is not feasible and that without the Hurricane Bench, Dixie isn't worth his valuable time. He leaves.

1899-1901. LaVerkin canal and tunnel are dug by a land company headed by James Judd. LaVerkin Bench is envisioned as a farming venture, not a village. Expensive leakage problems threaten to bankrupt the company. Settlers are invited as a means of remaining solvent. While surveying for the canal, Isaac McFarlane surveys for a canal to Hurricane on the south side of the canyon.

McFarlane establishes that a canal to the Hurricane Bench could reach substantial acreage but that it would have to traverse near impossible cliff-side terrain and that digging such a canal would be economically unfeasible.

Spring 1893. James Jepson of Virgin and James Steele of Toquer decide to

do their own survey and study. They locate a logical diversion dam site and conclude that digging a canal would be feasible. (Note. They did not have to establish that a canal could reach, say, 2,000 acres. That fact was readily apparent to even a novice using the LaVerkin Canal as a referent) They invite Toquer and upriver men to meet in the canyon and to review their survey. Some recognize the enormous difficulties and return home. The majority agrees with Jepson and Steele and they begin organizational planning.

July 11, 1893. Toquerville. Preliminary organizational committee formed.

August 25 1893. Toquerville. Hurricane Canal Company was formed. Plans were to build fifteen-foot high diversion dam, seven and one-half mile canal. Shares set at 2,000. One share equal one acre of water. Many initial shareholders were from Toquer. As time passed, their membership dwindled and Virgin became the focus of membership and of leadership. (John Steele moved to Parowan not long after)

Late 1893. Canal board files for water rights, the filing fee being \$200.00 that would be forfeited unless water brought out onto land within four years. This of course was forfeited. \$200.00 was a LOT of money for them to throw away and they almost surely believed they would complete the canal within four years or they wouldn't have filed at that time.

(Costs. See pp 32, "Oasis")

Probably January 1894. Digging begins. MacFarlane has surveyed and marked off route into four-rod sections. Shareholders contract to do a section. Easy sections paid fifteen cents per yard, seventy-five for loose rock and gravel, one-dollar twenty-five per yard for rock. The most difficult sections cost a negotiated price. Work was done by hand using picks, shovels, crowbars, wheelbarrows and impact drills for penetrating rock prior to blasting. Men at first camped in open under wagon covers etc. Were very cold and miserable.

1890's:

1890; the Supreme Court upheld the Edmunds-Tucker act of 1888 giving the Federal government the right to confiscate Mormon Church property. The church was now basically bankrupt and was saved by loans engineered by Apostle Heber J. Grant who was respected by eastern bankers.

Panic of 1893; widespread unemployment, silver and copper production fell precipitously. Farm products fell in price. Tithing revenues crucial to the Church's financial health now dropped.

A bright spot: Unemployed Nevada, probably Pioche, and possibly a few Silver Reef hard-rock miners skilled at blasting came along who would work for pittance. (Silver Reef had mostly closed down by the late 1880's)

The canal in the 1890's:

Probably no work at all was done two of the winters, once because of "La Grippe" (flu) and the other killing spring frosts the destroyed fruit crops.

Unemployed miners taught the workers blasting skills but there was little of no money for proper explosives. Black Powder could be produced locally but it won't shatter rocks; a better way to break up limestone is to build a roaring fire against it and then dash cold water onto it. The desired product, Giant Powder a variant of Dynamite, could only be used as a last resort. If a charge failed to ignite, the precious blasting powder was dug out of the holes to be re-used.

January, 1895: First diversion dam built. It soon washed out and had to be replaced many times.

- A crude supply road was built that made bringing supplies easier, that made possible bringing wagon boxes etc for sleeping quarters and made occasional visits by wives possible.
- December 1898: Canal Board requests that the LDS Church buy stock of an unknown quantity in the canal. President Woodruff turns them down in spite of having approved a \$12,000.00 line of credit to a Sevier River irrigation project the previous year. (The Sevier River project was under President Woodruff's supervision. He was also no doubt aware that professional surveyors had declared the canal to be unfeasible)
- December 1901: Discouragement was rampant. Fewer than ten men remained at work. Expensive tunnels and flumes still needed to be done. Failure stared them in the face. They weren't alone; 90% of private irrigation companies across the west were in or near bankruptcy, which meant that sanctuaries were nowhere to be found. (Some people did move to the Hinckley-Abraham-Delta and other places) On the other hand, miles of canal had been dug and the Board owned valuable water rights. By now canal stock would be an attractive investment for somebody who had some spare capital.
- January 18, 1902: Board meeting, Virgin. Desperation rules. \$20,000.00 more will be required to complete the canal but they figure a \$5000.00 cash infusion will initiate new local effort both in labor and in cash to get the job done. A new request for church investment in that amount had been prepared but not yet taken to Salt Lake. Recently released board president James Jepson who was in the Virgin Ward Bishopric says, "I wish they would send me" to anxious group waiting outside. Alf Hall marches in, announces Jepson's willingness. Immediate assent. He takes petition for stock purchase signed by five ward bishops. With determination, he meets with President Joseph F. Smith and apostles. He creates strong positive bond and answers their extensive questions. Amount of tithing paid by the five wards the previous year was a few dollars over \$5,000.00 according to records in possession of an Apostle. President Smith had full support for purchasing the stock requested. The contract carried the stipulation that stock was to be purchased only as the shareholders produced the other three fourths of the necessary investment. (Slack letter)
- 1902- 1904: New life; new energy; work surged forward. August 6, 1904 water is released onto the Bench. In the meantime twenty-acre fields and one plus-acre town lots laid out. Allocations are made by drawing lots. It had been agreed that no man should own more than twenty acres and this is adhered to even though it means that some men who stayed on through the entire project had invested far more than others. We revere these men for their tenaciousness, their willingness to persevere in spite of cruel discomforts, sickness and seeing their families at grave risk. Equally laudable is how they continued throughout to put the common good at the forefront.
- 1906: First Homes.
The canal, eight feet wide at the bottom, ten feet at the top, four feet deep with a grade of one-fourth inch to the rod the first four miles and one-eighth inch thereafter had been doing its work and ditches had been dug, gullies filled in, soil settled by about three feet and crops planted.

TM Hinton built first home for his brother-in-law, Thomas Isom. Tom became ill so Hinton's lived in it while TM built a clone for his own family. (The one we still have) The initial home would be built back in the lot of rough lumber and would

have rock-walled cellar with outside access. Later when a permanent home was completed the first house became the granary and/or tool shed. One other similar house exists, the George Isom home that is on the Bradshaw Home Museum lot.
