

Ivins Canal

Photo from the L.M. Winsor Papers March 1935—auxiliary reservoir at head of the Santa Clara Bench
Photo: Special Collections & Archives Utah State University — Merrill Library

It is winter. It is the month of January 1862. Pine Valley Mountain is shrouded in snow. The rains begin. The Santa Clara River roars. What had been a narrow, placid stream easily crossed by foot was rapidly becoming a broad, deep, raging waterway. Loud splashes can be heard as gigantic chunks of earth fall into the river. The river's bank has been carved away as if someone took a sharply-honed knife to it. Any structure once standing on the bank has simply disappeared. People watch as their belongings float downstream to be buried in the mud and forever lost.

The Swiss pioneers reached Santa Clara on November 28, 1861. In order to meet their personal and agricultural needs, it was critical that the water supply be properly managed. They immediately started building a dam and a diversion. The work was completed on Christmas Eve of 1861. As they celebrated, rain fell softly. They were completely oblivious to the hardships they would undergo during this "Forty Day Rain". Among other things, they lost their diversion and their dam.

A visionary is defined as a "person with unusual powers of foresight." The history of the settling of Washington County presents us with various and numerous leaders who were imaginative and far-

sighted. In order to effect change that would elevate quality of life, these visionaries braved the terrain, drought, floods, disease, public ridicule, and, at times, even the despondency of their own people.

In the 1860's Ivins was an unsettled region known as the Santa Clara Bench. The visionaries at that time stepped up to the plate to ensure that the people would survive and that their descendents would thrive. Today, Ivins is a city of approximately 8,500 residents.

These men of vision include, but are not limited to, the following:

Leo A. Snow and Clarence S. Jarvis, civil engineers. These men are credited with filing an application in 1909 for thirty-second feet of water. They then conceived of a plan that would bring Santa Clara River water from the site of the old Shem [*Sham, according to the Shivwits tribe*] smelter onto the Santa Clara Bench. This diversion, consisting of brush and willows, was called the Shem dam. It was named after a prominent Shivwits Indian chief renowned for his kindness and his commitment to living in peace with the pioneers. Spring thaws and summer flash floods continually washed it away. Ground was broken for the canal in 1911; it was completed in 1914.

Bishop Edward R. Frei Sr. said that *John S. Stucki's family* "built nearly a seventh of that big canal, an undertaking for so few people of so little means." The canal was eight miles long.

Edward R. Frei, Sr. envisioned a reservoir that would store Santa Clara water instead of allowing it to flow further downstream. The reservoir was completed in May of 1918.

John G. Hafen and the Santa Clara Bench Board visualized a siphon that would transport water across Wild Cat Canyon. A particularly cold winter descended upon Washington County in 1927. In January of that year, water turned to ice in the flume. The trestle that carried water in the Ivins Canal across the canyon collapsed under the weight. All water to the town was cut off. The siphon idea worked; however, the flume collapsed again the following winter and was again repaired.

These early pioneers were confronted by many challenges.

While wrestling with water issues, they were, at the same time, having to deal with the Great Depression. The depression turned out to be a blessing for the Santa Clara Bench community. The Civilian Conservation Corps (CCC) created by President Roosevelt put people to work. Under the leadership of Luther M. Winsor, the Santa Clara Bench Irrigation Water Board was able to convince the government of

the need for a new diversion dam at Shem. The construction of the dam began in the spring of 1933.

Luther Winsor was the driving force behind the building of this dam. For that reason, it was named after him and is still known today as the Winsor Dam.

Luther Winsor received his engineering education in Logan, Utah. He built irrigation systems world wide. In one of his letters we read:

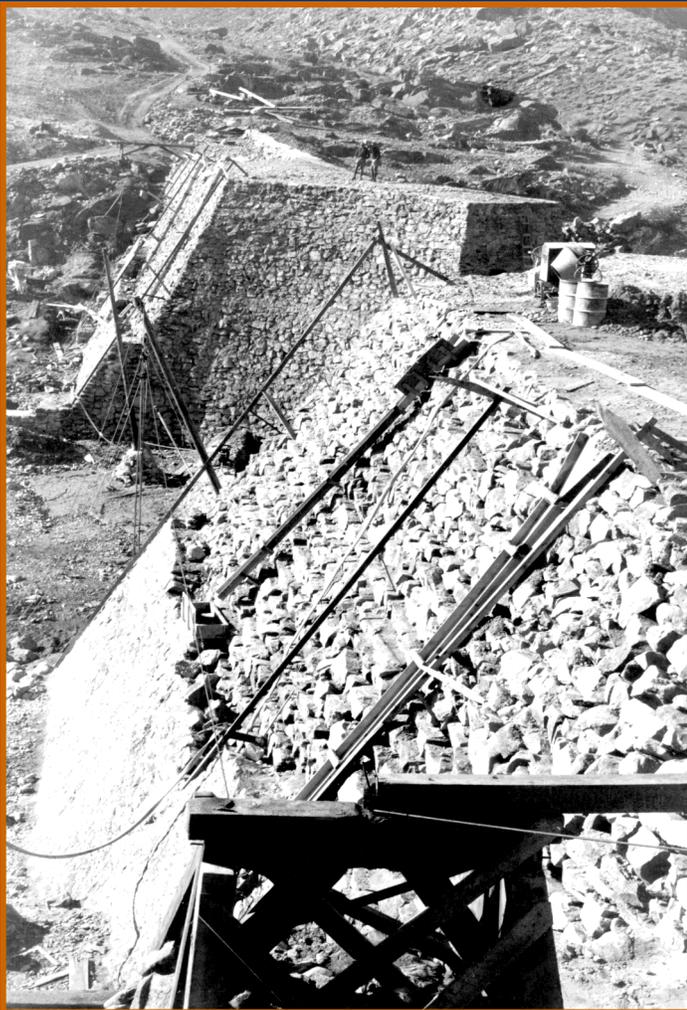
It was about 1933. The town of Ivins was in need of a diversion dam that would be permanent and one that would provide a means of keeping silt out of

their canal and reservoir. They had a "make shift" diversion that would wash out in times of flood. Furthermore they needed to divert the water during times when the flow was high in order to fill the reservoir. . . They could not afford to buy cement for building the dam. . . Result: I was called in for advice. . . I had made work programs for each of the counties in Utah when the Hoover



Excavation and beginning of south end of churning bowl
Photo: Special Collections & Archives
Utah State University — Merrill Library

Administration had set up funds for that purpose during the "depression." A cement plant had burned in the area North and West of Brigham City. . . Rains had caused a crust to form over the outer surface of huge piles of cement. . . Inside the cement was good. Therefore a project for Box Elder County was made to load a car of cement. The SPLA and SLRR transported it to Cedar City free. The people of Ivins hauled it to the dam site.



The photo above was taken from the L.M. Winsor papers. It shows Winsor Dam receiving a coat of veneer on its downstream face by C.C.C. workers—01/01/1935.

**Photo: Special Collections & Archives
Utah State University - Merrill Library**

The ordinary working man played a major role in securing water to the Ivins area. During the winter months, men and boys left home on Monday mornings with primitive tools and scant provisions to spend the week working on the canal. At times, inclement winter weather would delay their efforts.

Leo F. Reber wrote – “I worked on this canal for many days. . . I was only fifteen years of age but we worked hard, and instead of getting money we subscribed for water stock at fifty dollars per share. . . It was a very thrilling experience when the water was turned in the canal and it flowed through the

canal out on the large plot of land known as the Santa Clara Bench.”

Reuben Ence was president/water master of the Ivins portion of the Santa Clara Field Canal Company from 1942-1950. His son, *Quentin Ence*, reminisces about the early days of the Ivins Canal. “Every winter they had to spend weeks just keeping the ditch open so that during the summer they could run water in it . . . That’s where the drinking water came from – out of that ditch.”

Weston Hafen became president/water master in 1950. At that time, *Weston* changed the name of the company to Ivins Irrigation Company, since the charter had expired. *Weston* served the Ivins Irrigation Company for 25 years. His daughter, *Emma Hafen Fife*, recalls “he spent many hours cleaning out and repairing the canal with a shovel. He would stay up all night to catch flood water in the reservoir to prolong the growing season.”

Ivins Reservoir was completed in 1918. It is an off stream reservoir with a holding capacity of 500 acre-feet of water used for irrigation and recreation. It was modified in 1943 and again in 1986. In 1994 work was performed on the reservoir to bring it into compliance with the State of Utah’s safety standards. Cores were drilled all around the dam down to the bedrock. Concrete was then poured to reinforce the dam so it would not break.

Ivins Reservoir has been owned by the Washington County Water Conservancy District since March 15, 2004. In return for the reservoir, the Santa Clara Field Canal Company now has primary water.

According to *Mike Butler*, water master of the Ivins Irrigation Company, the Ivins irrigation system will eventually hook into the recycled water from *St. George*. The recycled water will tie into the bottom of the Ivins system at the lower end of town.

The Santa Clara Field Canal Company is in the process of putting in a metering system which would ensure shareholders of getting the amount of water to which they are entitled. Lonne Gubler, president of the canal company, says that eventually the canal company hopes to be able to make secondary water available to non-shareholders. This would be feasible in average water years. Secondary water use would be cost-effective to the non-shareholder and it would take the strain off culinary water use.

Timeline:

- 1861 – pioneers build a dam and a diversion
- 1909 – civil engineers Snow and Jarvis apply for water
- 1911 – ground is broken for Ivins Canal
- 1914 – canal is completed
- 1918 – reservoir is completed in May
- 1927 – ice breaks trestle and all water to town is cut off
- 1933 – Winsor Dam is completed

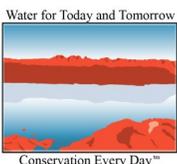
Many hardships were endured by the early settlers. Their grit and determination to forge a land where they could prosper continues to inspire us today as we endeavor to:

- develop our water resources innovatively,
- use our water supplies prudently, and
- manage our water projects intelligently

in order that Washington County may have *“Water for Today and Tomorrow™.”*



Ivins Reservoir Today
Photo: Doug Wilson



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WATER CONSERVANCY DISTRICT

Webpage
wcvcd.org