Development of Irrigation in Wasatch County

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DEVELOPMENT OF IRRIGATION IN

WASATCH COUNTY

by

Craig Woods Fuller

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

History
ACKNOWLEDGMENTS

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Craig Woods Fuller
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ABSTRACT

Development of Irrigation in Wasatch County

by

Craig Woods Fuller, Master of Science

Utah State University, 1973

Major Professor: Dr. Charles S. Peterson
Department: History

A primary basis for settlement locations in the Great Basin by the Mormons was the availability of water. The settlement of Heber Valley was no exception.

Water became quickly involved in two important and determining factors (cooperation and self-reliance) in the development of Mormon society in general and Wasatch County's society in particular. Likewise, these two factors influenced the direction in the development of water as it was utilized by the Mormons to establish the "Kingdom of God" on earth. Cooperation and self-reliance in Wasatch County were changed as modifications within the county were made as well as by other factors introduced in the county.

Wasatch County farmers' irrigation systems and institutions are today, a product of these two important factors and the modifications made on them. Cooperation and self-reliance continue to be part of the agricultural way of life in Wasatch County.

( 165 pages )
CHAPTER I
EARLY IRRIGATION EXPERIENCES
OF THE LATTER-DAY SAINTS

Introduction

At a time when there is a growing concern for the need for more water in the Great Basin, it seems appropriate to investigate the Latter-Day Saints' early efforts to develop irrigation in the Great Basin. While it is generally understood that the Mormons made the "desert blossom like a rose," there is yet little information on how local Mormon communities succeeded in this effort. This thesis therefore, represents an attempt to give meaning to local Latter-Day Saints' and western farming experience in the development of water.

This is a narrative of the early experiences of Heber Valley farmers' in developing an effective irrigation system. The narrative begins with a brief survey of the Mormons' first experience with irrigation and their realization of the importance of water to the "Kingdom" they were attempting to establish. Furthermore, the thesis will review the earliest whiteman's experience with the Provo River--the major lifeline of Provo Valley. The thesis will conclude with a discussion of several federal reclamation projects in Wasatch County.

Provo Valley, better known as Heber Valley, provides a historical model for examining cooperation and conflict within a total experience which Charles L.
Stevenson called, "The Cradle of the American Irrigational System." Moreover, the model for this historical examination presents a number of significant factors which were part of the "cradle" and aided in the settlement of Utah and the West.

These factors include: First, the geographical location where a greater water supply was found than generally found in other regions of the Great Basin. Second, the irrigation experiences in Heber Valley which were in a part influenced by the "Gentiles" locally and later by the federal government's involvement in the county's irrigation development. Third, the religious influence found in the valley's irrigation history which today is part of the mutual irrigation companies' tradition. Finally, the struggle within various communities in the valley to subdue and harness individualistic self-reliant traits in favor of mutual cooperation.

Heber Valley settlers' irrigation experience is part of the larger Latter-Day Saint's story of the settlement of Utah which in turn is part of the saga of America's westward migration.

Mormon Migration--Part of the Westward Migration

America's westward movement was closely associated with the fortunes of the frontier farmer. As new frontier lands were made accessible by earlier explorers and fur trappers, the farmer moved in, breaking the sod, planting

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1Charles L. Stevenson, Utah Territory Irrigation Commission (Salt Lake City: Ackerman Print Co., 1894), p. 3.
the seed, utilizing available water, and harvesting crops at the end of the season. During the winter months, he erected a dwelling for his family out of local materials. As more farmers settled nearby, pressure for land increased the frontier farmer was spurred again to move to untouched fertile lands.

Other factors influenced the westward migration. Throughout much of the nineteenth century, land speculators promoted the frontier movement. Even after the government attempted to eliminate land speculation, promoters concentrated their efforts on securing favorable locations. Railroads, land grants, the discovery of precious minerals, and the cattle industry were a few of the other elements that stimulated westward movement.

The Mormon settlement of Utah was unique in many respects, as a force in the westward movement. Its basis was not a search for rich soil, or the need to develop a new and better economic system. Rather, the Mormon movement to the Great Basin was motivated by religious and social ideals.

In 1847 as they moved into the Great Basin, the region of their future settlement was still part of Mexico. What is now Utah provided the Latter-Day Saint people with a location whereby they might not be disturbed, a place where they might be able to establish the "Kingdom of God" on earth. It promised little however in the way of agriculture or other economic prospects. While it may be a myth, Jim Bridger's famous offer, "to give one thousand dollars for an ear of corn raised in the Great Basin," is indicative of how those who knew the region best regarded it.²

²John A. Widtsoe, Discourses of Brigham Young, Second President of the Church of Jesus Christ of Latter-Day Saints (Salt Lake City: Desert News Press, 1954), p. 481.
Early Recognition of Irrigation Importance

Even for the determined Mormons, Utah posed numerous problems. Some of these were social in nature. Many of the Saints were from the manufacturing cities of England and the East and had no experience in farming of any kind. Furthermore, Utah's climatic conditions presented unhospitable farming conditions for those experienced in agriculture but hailed from parts of the world where fertile soils and adequate rain simplified farming. At the time of their arrival in 1847, none understood the practical aspects of irrigation though several hundred who had observed irrigation in the southwest as members of the Mormon Battalion.

Earliest irrigation development came on July 24, 1847. One account has it that William Carter cut the first furrow from City Creek. Other accounts claim that it was George W. Brown and John S. Eldridge who were the first Mormon irrigators. In either case, this early recognition and development of irrigation became a major pillar in the colonization of Utah.

The Mormon's concern therefore, was how to offset the regions natural dryness. Streams flowing from the Wasatch Mountains to the east of Salt Lake Valley provided a limited water supply for agricultural development. Under the direction of the church, agriculture "became the first industry of [the] pioneers, 

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and irrigation was . . . its foundation. Proper irrigation management and distribution became the essential ingredient for the survival of Mormon colonizing efforts in the barren regions of the Great Basin.

Continuing influx of Mormons placed an increasing burden on all farmers to use the limited quantities of water and land wisely and profitably. The need for useable land and accessible water sometimes resulted in strained relations between individuals and communities. However, the common denominator for the eventual success of utilization of natural resources and the colonizing effort was the cooperative attitude found in Mormon theology. Cooperation eventually was, "... universally accepted because the settlers remained convinced of the inherent fairness as well as its practicability." Cooperation by all for the good of the whole came in time to be the prime factor for water deployment and use by the individual farmer. Furthermore, this cooperation in the early colonizing and irrigation efforts in the Great Basin was generally directed by local church officials.


5 For a brief resume of the subject of cooperation see, John A. Widstoe's Discourses of Brigham Young.


A growing population necessitated broadening the narrow green ribbons along the several mountain streams. By 1853 plans were underway to divert water to the Salt Lake Valley from the Jordan River. Brigham Young proposed to tap surpluses in Utah Valley by bringing water "around the point of the mountains to Little Cottonwood, from that to Big Cottonwood, and lead its waters upon all the land from Provo Canyon to Salt Lake City . . . " 8

However, these efforts were not sufficient to supply newly arriving immigrants with land and water. Consequently, because of the need for more suitable land and water, and the desire by the church to control the Great Basin, efforts were undertaken to settle other sections of the region.

**Mormon Colonizing Efforts**

Shortly after the settlement of the Salt Lake Valley, exploration and colonizing efforts were made up and down the Wasatch Mountain Range. The primary criteria for choosing a settlement site was the availability of water. An early settlement founded near an abundant source of water was Provo City. John S. Higbee and the others however, were not the first whitemen to recognize the importance the river would play in any colonizing efforts in the valley. The Escalante expedition in 1776 noted the importance of the river to any future settlement of the valley.

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8 Widtsoe, *Discourses of Brigham Young*, p. 485.
The settlement of Provo in 1849, the eventual exploration of the Upper Provo River, and the construction of a wagon road through the canyon several years later were important steps in the eventual colonization of Heber Valley.
Heber City, county seat of Wasatch County, is cradled in the heart of the Provo Valley 51 miles east and south of Salt Lake City. Heber, the first permanent settlement, is named after Heber C. Kimball. The valley is named for the Provo River which flows through it. The Provo River, lifeline of the valley, enters the Heber Valley from the north, passing through a narrow passageway called "Jordonelle," meanders in a southerly direction, and in its present location exists at the head of the Provo Canyon at Deer Creek Reservoir. The river, which is the main life line of the valley, spawned in the lakes of the high Uintah Mountains with additional tributaries from the Wasatch Mountain Range.

As far as the record delineates the first whitemen to be aware of the Provo River were the Spaniards Escalante and Domingues when they explored the region in 1776. Years later in the 1820's and 1830's the river was used as a source of food and pelts for fur trappers and traders. However, the first permanent use of the river was made by the Mormons.

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1 The Provo Valley, named after the Provo River, is known today as Heber Valley. In this thesis, I will use both names interchangeably.
The purposes of this chapter are to review briefly the river's earliest relationship with whitemen. Secondly, to discuss how the valley was settled by the Mormons. And finally, it will show that cooperative attitude was present in the earliest days of the valley's settlement.

**Exploration of Provo Valley**

The first party of whitemen to visit the region was the Domingues-Escalante expedition in 1776. Father Francisco Atanacio Domingues organized an expedition for the purpose of locating a suitable route from Santa Fe to Monterey. The expedition's search carried it into parts of New Mexico, Colorado, Utah, and Arizona. On September 21, 1776, the explorers entered a valley they called, "Ville de la Purisima." Today it is better known as the Strawberry Valley.\(^2\) Several days later they entered Utah Valley and for two days, September 24th and 25th, camped in Utah Valley.

In his journal, Father Escalante noted the importance of a large river the expedition called "San Antonio de Padua." It was later identified by the fur trappers and traders as the "Timpanogos River."\(^3\) The two day encampment

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\(^3\) Ibid. pp. 69-70; 184-185. See also Heber Howe Bancroft, *History of Utah* (San Francisco: The History Publisher, 1890), p. 15. The "Timpanogos" is better known today as the Provo River.
near present Spanish Fork provided the expedition with the opportunity to meet local natives and become somewhat acquainted with the geographical features of Utah Valley and other areas of the region. The Timpanogotzis as Escalante called Indians of the area, were part of a larger tribe called the "Yutas."

According to Walker, Chief of the Utes in the 1850's, Utah and Provo Valley were traditionally part of the Ute territory. The two valleys and the fresh water in them were vital to the existence of the local tribe.

Some fifty years after the Spanish expedition, whitemen once again returned to the land of the Utes. By 1825 fur trappers and traders were pushing into the Great Basin in quest of fur-bearing animals. Trappers and traders such as Peter Skene Ogden, Jedediah S. Smith, Thomas "Pegleg" L. Smith, Etienne Provost, and others became acquainted with the fur productivity of the region. Trapping and trading, they explored the region, occasionally wintered in it, came to know the Indians, and for a few years gained a livelihood from it. But what they could not know was that in twenty-five short years, the region would be coveted by a new breed of frontiersmen--the Latter-Day Saints.

The prime consideration for the establishment of Mormon settlements in the territory was water. Consequently, many of the early settlements were located along the western slopes of the Wasatch Mountains where water was easily accessible. In 1849, two years after the settlement of the Salt Lake Valley, a group of settlers under the leadership of John S. Higbee pushed south into Utah Valley, there to establish the settlement of Provo. Following the pattern explained above, it too, was located close to accessible water. Three
years later, the territorial legislature recognized the importance of the Provo River for both communities, passing a law dividing its waters, giving half to the residents of Provo, the other half to the citizens of Salt Lake City.  

Cooperation based on the needs of individuals was exhibited shortly after the division of the Provo River. Through cooperation, several canals were begun. John Crook and others, who were to be the first permanent settlers in Heber Valley, took part in the early developments of several of the cooperatively constructed canals. This was a vital experience in their understanding of irrigation.

With missionary zeal of the Church bringing new converts, expansion was necessary. Brigham Young exhorted the saints to seek out new areas for possible settlement. The prime considerations for colonization continued to be water and timber. In September of 1852, a small party of three Mormon explorers, Robert and William Gardner, and J. D. Parks, conducted an expedition to the Provo Valley and other areas located east of the Great Salt Lake Valley. Their purpose was to explore the region for new reserves of timber and water. The expedition entered Provo Valley from the north passing through the Jordan-elle following the Provo River southward. The expedition christened the Provo Valley, "Williams Valley," after a group that had explored the region five years ago.

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earlier. The expedition reported that, "... the Provo River is as handsome a stream for floating purposes as could be desired. ..." They also observed that there was more water in the Provo River than in the Weber. More important was the report of William Gardner, that the Provo River had a strong potential for providing irrigation water along its meandering banks.

Five years later another expedition entered the valley. During the summer of 1857, Charles N. Carroll, George Jacques, James Adams, and several others, having heard about the valley, decided to investigate it for themselves. From where they had been working at a sawmill in Big Cottonwood Canyon, they crossed the summit and followed a creek down into the valley returning late the same day. Brigham Young, hearing of the expedition, asked them if they had

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6Raty, p. 3, quoting Journal History of the Church.

7Ethel D. Johnson, Material presented to the Daughter of the Utah Pioneers in May, 1957. The small expedition was distracted from the Provo River's importance to unusual geological formation they found in the west portion of the valley. Gardner wrote:

"As we traveled down the Provo River our attention was attracted by mounds about the size of a coal pit to one that appeared to be a mile off, and we judged [it] to be a quarter of a mile across and sixty feet high. They all are about the shape of a coal pit, perfectly [sic] hollow. We supposed them to be a volcano as the surface of the ground for some miles was covered with this light stone the same as the mounds, but finding some of them full of water we concluded that the formation was made by water."

found any water. Their reply was that they had not only found water, but they had found hot and cold running water. From their description of hot and cold water, they had probably viewed the valley at the spot the Garner expedition referred to as "coal pits."

The information supplied by these two exploration parties indicated that colonization of the Provo Valley was possible. However, one more lock had to be unlatched before any further development could be entertained for the valley. The key was "easy" access to it.

As early as 1850, Captain J. Howard Stansbury had recommended that a fork of the Salt Lake-Fort Bridger road pass through Kamas and Provo Valleys by way of Provo Canyon into Utah Valley. The Gardner expedition had also written that they thought it feasible to construct a road through Provo Canyon linking Kamas Prairie with Provo. In 1855, a charter was issued by the territorial legislature incorporating a company to construct a road through the canyon and to regulate commerce on it. In part, the charter read:

9 Mrs. Lythe Tadge, an interview held in Midway, February, 1972.

10 General Johnston stationed at Camp Floyd--better known today as Fairfield--in 1859 became interested in the Provo Canyon as a possible shortcut from Camp Floyd to eastern army posts. In August 1859, General Johnston ordered his chief Topographical Engineer, Captain James H. Simpson to investigate the feasibility of constructing a road through Provo Canyon. Shortly thereafter, Simpson reported that the Mormons were already constructing a road in the canyon. For further details, see William H. Goetzmann's Army Exploration in the American West, 1803-1863, (New Haven: Yale University Press, 1959).
That Aaron Johnson, Thomas S. Williams, Evan M. Greene, and William Wall, with their associates and successors, are hereby constituted a body corporate and politic, for the term of twenty years, from and after the first day of April 1855... with the exclusive right of making a good wagon road from the mouth of Provo Canyon, in Utah County, to Kamas Prairie... 11

Nothing was done on the road until three years later when Brigham Young purchased 200 shares in the company. Construction commenced in the early summer of 1858. The road was sufficiently completed by November to permit travel on it the following spring. The church leaders felt that this would provide a shortcut for the movement of federal men and supplies to Johnston's army camped near Fairfield and would thereby remove much of the "gentile influence" from the heart of Zion. The road could also be utilized by settlers who wished to settle the hinterland of Zion.

The First Settlement—Heber City

During the construction of the canyon road in the summer of 1858, J. C. Snow, Utah County surveyor, and several others surveyed parts of Provo Valley for future settlement. The first plot surveyed was 1 1/2 miles square situated on the south side of the "north Field." 12 In October, Snow along with John Crook made another trip to the valley to survey additional plots of land. 13

11 Territory of Utah, Acts, Resolutions and Memorials, Passed at the Several Sessions of the Legislative Assembly of the Territory of Utah (1855), p. 127.

12 Journal of John Crook Book #4 MSS, Brigham Young University Archives. The "North Field" also known as the "Big Field" is today bordered on the south by the town of Heber, on the west by the Provo River, on the east by U.S. Highway 40, and on the north by a dirt road extending from the highway to the Provo River.

13 Ibid.
This second survey was located in the "West Field" near the area today known as the George W. Clyde's corner. By the fall of 1858, over 100 claims had been made for land although no permanent settlers had yet arrived in the valley. Each claim was for twenty acres.

The earlier explorers had reported that the valley was abundantly supplied with lush vegetation. To utilize this resource, a small group of ranchers from Utah Valley merged their stock into one herd and moved it to the Provo Valley in the spring of 1858. William Wall, George W. Bean, William Meeks, Aaron Daniels, as well as several others participated in this cooperative effort. Seeing the valley's possibilities, four of the ranchers decided to make the valley their permanent home. Wall and Bean chose homesites near the head of Provo Canyon while Meeks and Daniels settled further north and east in the valley.

During the winter of 1858, some of the Utah Valley farmers held meetings to determine the feasibility of organizing a company to settle Heber Valley. Some argued against the proposal reasoning that the valley was too high, thereby reducing the growing season. John Crook, who had spent part of the previous

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14 Clyde's corner was located near the corner of Main Street and Fifth North. West Field was the area west of Main Street and south of the North Field. Much of it is occupied today by the town of Heber.

15 Raty, p. 11. Also found in the Wasatch Wave, March 23, 1889, p. 2.

16 William Lindsay, "A Brief History of Wasatch County from its Settlement and Especially of Heber City," 1929, MS, Wasatch County Library, Heber City, Utah

17 Crook.
summer in the valley, argued favorably for its settlement. It was finally decided by some that in the spring of 1859, they would make the journey and settle the valley. Their purpose was to establish a permanent agricultural community. William Meeks, who had also spent the previous summer in the valley, was appointed to head the company and to secure it from possible Indian difficulties.

Late in April of 1859 the small company of farmers embarked on their new venture. The company included several wagons—a figure of three is frequently mentioned—and necessary draft animals. The company proceeded without incident until it reached the south fork of the canyon where a recent snowslide had blocked the newly completed road. After assessing the situation, it was decided to dismantle the wagons and cross the snowslide by foot, carrying the wagons over the slide. This necessitated making the first camp of their journey in the canyon.

The following day they reached the valley making a brief stop at William M. Wall's ranch-site. From there, they headed into the valley crossing Daniels

18There seems to be some dispute over the exact day of the departure of the company of farmers. John Crook wrote in the Wasatch Wave in 1889 that the company left on the last day of April which would make it the 30th. However, in his journal Crook wrote that the company left Provo on the 29th of April. Leslie Raty and James Mortimer, editor of How Beautiful Upon the Mountains both secondary works state the date for the departure of the company to be the 29th of April. Crook includes the names of: John Jordon, himself, Charles N. Carroll, William Giles, John Carlile, James Carlile, Jesse Bond, Henry Chatwin, Thomas Rasband, and a Brother Carpenter in the first company. In the Journal of William Lindsay, he lists the above names with the addition of George Carlile.
Creek near the Daniels' ranch-site. On the 2nd of May, they made their camp near the future home of John M. Murdock. While pitching camp, they noticed far off in the distance to the north, objects moving back and forth. Thinking that they were the only whitemen in the valley, several of the farmers decided to investigate. Drawing nearer to the activity, they soon discovered that they were not alone. William Davidson, Robert Broadhead, and James Davis were breaking the first sod in the valley. They had arrived two weeks earlier from Nephi; but because of the late snow, they were unable to commence plowing until the 2nd of May. Glad rejoicing was felt in the hearts of the two sturdy companies. Plans were formulated to merge the two groups and move their camp to a spring they christened the "London Springs," also known as the "John McDonald Spring." This spring is located a short distance north of Heber on the east side of the highway.

They immediately proceeded to construct a wickiup-like structure they called the "London Wickiup." This served as a dwelling for about thirty people. A meeting was held at the wickiup pursuant to choosing a permanent place for the settlement. John Crook and several others were dispatched on foot to explore the valley and find the plots which had been surveyed the previous summer. Upon their return, another meeting was called where it was decided to move the camp to what is now the northern portion of Heber.

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19 John M. Murdock's home is thought to have been located between Second and Fifth North streets on about Fourth West in Heber.

Shortly after the farmers arrival in the valley, William Meeks and Jesse Fuller, deputy surveyor for Utah County, visited the valley to resurvey parts of the land that had been surveyed the previous summer. Meeks and Fuller met with the settlers to draw-up legal contracts for individual plots. In these first land claims, there is strong evidence that Heber's first settlers accepted Brigham Young's edict to settle small plots of land. The Giles brothers, for example, took up twenty-five acres of land each, twenty acres of farm land and five acres of meadow. They paid Fuller $20 in gold coin for the certificates of ownership.22

Careful surveys, land settlements, and transactions were kept by the farmers of the valley. When additional settlers came in the summer of that same year, Fuller made another trip to Heber to survey more land. These new surveys were located to the east of Heber where water was easily obtained from several streams and springs. By the fall of 1859, some nineteen families had permanently located in the valley.23

22 Ibid. In his book, Great Basin Kingdom, Dr. Leonard J. Arrington indicates that the surveyors in the early days of the territory received a portion of the money paid to him, the remainder going to the county recorder for payment of recording the deed. p. 51. However, no Utah lands having been opened for entry by the Federal Government at this time, these were all squatters' claims.

Having established camp, Crook and the others set out to accomplish their objective, farming. Several of them commenced plowing on May 5th, 1859. At year's end, eighty bushels of wheat was reaped by the first settlers.

It was recognized that some irrigation would be necessary to expand farming activities. It is difficult to determine exactly who dug the first furrows. Years later, John Crook reported that he and Charles N. Carroll, the same Carroll that had explored the valley several years earlier, "... made a ditch about five blocks east tapped Spring Creek where George Blackley's corral is now." According to writings by Crook which appeared in the Wasatch Wave in 1889:

The first of November William B. Sessions and Robert Broadhead plowed a ditch for culinary purposes. It ran along the south side of the street beginning at Spring Branch, what is now known as Roger Horrock's property. It ran west to the slough by the field. This was the first water ditch made on a street line of Heber City.

Other Towns Established

The hunger for new land was continually present in the valley. By 1862, the population was estimated at nearly a thousand people. [Heberville, as it was often called,] was not the only settlement established in the valley. In 1859, a smaller settlement, Mound City--better known as Upper Settlement, was founded.

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25 Ibid.

26 Ibid.

at the base of the mountain range west of Heber by Sidney Epperson, Jeremiah Robey, Mark Smith, David Wood, and Jesse McCarrel. After selecting a suitable area for settlement, they set about clearing sagebrush from the land along a creek, later known as Snake Creek, and breaking the sod for planting crops.28

Snake Creek, from which the settlement derived its water for agricultural and early culinary water was named for dens of rattlesnakes located in the nearby geographical formed hot pots.29

Prompted by the first season's poor harvest, the earliest settlers of Upper Settlement set out to increase their yield the next year. The following spring a small ditch was dug to irrigate crops and to provide water for more land. The ditch was named the "Epperson Ditch," and was eventually enlarged and lengthened to a distance of three miles.30

By 1862, Upper Settlement was large enough to bear its own ecclesiastical organization, separate from the rest of the valley. On June 26th, Sidney

28Simon S. Epperson, Story of Sidney H. Epperson, Pioneer (Acron Printing Company, 1941), p. 34. Epperson gives the date of April 15, 1859 as the settlement of Midway or Upper Settlement. This, however, is in error since the first party of settlers from Provo didn't arrive in the valley until the first of May.

29Edward W. Tullidge, Tullidge's Histories, Containing the History of all the Northern, Eastern and Western Counties of Utah; also the Counties of Southern Idaho with a Biographical Appendix of Representative Men and Founders of the Cities and Towns; also a Commercial Supplement, Historical (Salt Lake City: Edward Tullidge, 1889). Vol. 11, p. 153. One pot is said to have harbored an estimated thousand serpents.

30Epperson, p. 36.
H. Epperson was appointed as the Presiding Elder. The ceremony was conducted under the direction of the Presiding Bishop of the valley, Bishop Joseph S. Murdock.

Two years later, Lower Settlement, located several miles south of Upper Settlement on lower Snake Creek near John van Wagonen's grist mill, was established and organized as a separate church branch with John van Wagonen presiding. Lower Settlement was situated near van Wagonen's grist mill which is located today just south of the J. Fred Price home on the Charleston-Midway road.

Increased Indian hostility in the valley in 1866 forced the settlers of Upper and Lower Settlements to seek protection. It was agreed that a new settlement be established midway between Upper and Lower Settlements, and that a fort be erected. The fort was named Fort Sidney, later changed to Fort Midway, hence the name of Midway.

To the south of Midway, another settlement was established early in the 1860's. Named Charleston, it was situated at the head of Provo Canyon and provided an excellent place for man and animals to rest from the arduous journey up the canyon. Charles Shelton, an early settler and entrepreneur of the valley, discovered that the river bottom near Charleston provided excellent feed for cattle and sheep. Others followed and settled near the head of the canyon. The year of 1862 was a popular year for the creation of independent settlements.

31 Charleston once proudly housed one of two railroad stations in the valley. The station no longer standing, was slightly north and east of Scrapsy's Cafe on the Charleston-Midway Road.
ecclesiastical units as Charleston, too, was organized into a separate branch that year. Nymphus C. Mudrock was sustained as the presiding elder.

To the southeast of Charleston, across a low range of mountains, Little Warm Valley was another excellent site for grazing purposes. It provided a natural corral for livestock. William Wall and several others erected a small fort in 1862 near a spring located at the head of Spring Creek. The Black Hawk Indian War of the mid-1860's forced the settlers of Little Warm Valley, to move to Heber. At the conclusion of the Indian disorders, many of the original residents moved back to the valley, renaming it Round Valley, and conferring the name of Wallsburg on the settlement.

Two smaller areas developed east of Heber in the 1860's. Lake Creek and Center Creek provided additional water for farming. Eventually some of the settlers of Center Creek were to divert water from the Colorado Drainage System to the Great Salt Lake Drainage System.

Continued pressure on land and water resources was the fountainhead for two additional communities founded south of Heber. Buysville, established in part by Edward and William Buys, was a direct result of farmers having poor access to water. The two brothers along with several others from Charleston moved to the banks of Daniels Creek near the mouth of a small canyon called Big Hollow. Shortly thereafter, a second community, Daniels, was established near the mouth of Daniels Canyon for the same purpose. In 1903, the two ecclesiastical wards were united, in effect unifying both of the communities' schools and governmental systems into one. The combined community bore the name of Daniels.
Several smaller areas of settlement were located in other parts of the region. Keetley, north of Heber, was established for mining purposes. Hailstone and the area of Bench Creek were small pockets of farmers located near sources of water.

**Emergence of Wasatch County**

As additional settlers added to the valley's population, the residents felt that they should be organized into a separate county. Under the leadership of George W. Bean, an early settler to the valley, a petition was made to the territorial legislature to establish a county separate from Utah County. On February 22, 1962, the territorial legislature responded officially establishing the county of Wasatch. 32 Although the legislature failed to define its boundaries, contemporary estimates placed the size of Wasatch County at 7,216 square miles. 33

County officials were quickly installed. John W. Witt was appointed Probate Judge, Joseph S. Murdock was elected to the territorial legislature, and James McNaughton was appointed notary public. 34 The first selectmen for the county were: Thomas Todd, James Luke, and John H. van Wagonen. 35 John M. Murdock was appointed treasurer-surveyor. 36

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33 Tullidge, p. 150
34 Ibid.
35 William Lindsay's Journal, p. 20.
36 Ibid.
Action was finally taken by the legislature in June of 1866 to define the boundaries of Wasatch and other counties. The boundaries of Wasatch included:

All that portion of the territory bounded south by Utah and Sanpete Counties, west by Utah and Great Salt Lake Counties, north by Summit of range of mountains south of the said summit to the points where the road leading to the Great Salt Lake and Rhode's valley crosses, thence south to Provo River at the high bluff below Goddard's ranch, thence along the channel of said river to its head waters, thence along the last named summit and south of Brown's Hole to the thirty-second meridian west from Washington City and east by said meridian is hereby made and named Wasatch County with county seat at Heber City. 37

During the years that followed, county boundaries underwent several adjustments. Residents resisted repeated attempts to reduce the county's size in favor of other counties. Indeed, threats to the territorial integrity of Wasatch County developed almost immediately after the boundaries were defined in 1866. During one of the heated debates that ensued, representative Abram Hatch from Heber, delivered a stunning speech on the floor of the territorial legislature.

Gentlemen, it seems our protest are all in vain, but we of Wasatch County, will have the satisfaction of being in similar conditions to the Savior, who was crucified between two thieves. 38

Hatch's two thieves were the counties of Summit and Utah, each of which was trying to acquire parts of Wasatch County. Hatch's brief oration temporarily halted the interloping counties, however, this was only a prelude

37 Territory of Utah, Acts, Resolutions and Memorials, Passed at the Several Annual Sessions, of the Legislative Assembly of the Territory of Utah, from 1851 to 1870 Inclusive. (1870). p. 208.

38 Lindsay, p. 20.
to the real battles yet to come among the three. Water-rights lay at the crux of this discord. Cooperation would be stifled and threats of legal battles and physical violence would follow over the contending claims to the Provo River by the three counties.

Writing several years after the settlement of the valley, John Crook reflected that an acute concern for water extended back to the earliest days of settlement. He wrote: "... many times through the [first] winter months ... [the] water question was raised."39

The following chapter will deal with factors and influence which molded relationships and practices by which farmer of Wasatch County developed and controlled water.

CHAPTER III

FOUNDATIONS FOR THE ESTABLISHMENT OF

MUTUAL IRRIGATION COMPANIES

Distribution of irrigation water in nineteenth century Utah was based upon a blend of self-reliance and cooperation. In time, this blend led to the development of an adequate legal base and to a strong association of farmers working together through mutual irrigation companies in supplying themselves with much needed water.

The aims of this chapter are several. First, it will discuss several features, including self-reliance and cooperation, which were the foundation for mutual irrigation companies in Wasatch County in the decades of the 1870's and 1880's prior to their legal incorporations. Second, the chapter will follow the developments of several irrigation projects prior to the formal organization of mutual irrigation companies, demonstrating that voluntary cooperation was present before the establishment of mutual irrigation companies. Finally, several large and important irrigation systems were constructed prior to the "legalization" of mutual irrigation companies which aided in establishing irrigation companies.
Adoption of the Beneficial Use Doctrine

Two major factors formed the Mormon irrigation system. First, the Mormon doctrine of stewardship established that everything belonged to God and that He granted man the privilege of subduing the earth for his own use and for building up God's Kingdom on earth. Second, was the physical environment of the Great Basin. Apparently, church leaders quickly realized that riparian rights (embraced in humid regions of the United States) was not the wisest policy to follow in the distribution, use, and management of Utah's scarce water resources.

The doctrine of appropriation and beneficial use seemed more practical and at the same time, met the theological demands of church doctrine. For several years only informal and ecclesiastical arrangements supported the emergent appropriations practices. However, in 1852 the first step toward a legal doctrine of appropriation and beneficial use was taken when a law was passed giving each of the county probate judges the authority to expedite the doctrine of appropriation. However, the law of 1852 did not abrogate the doctrine of riparian rights. This was not formally done until some years later.¹

By definition the doctrine of beneficial use and appropriation entitled each individual who desired the use of water an equal share according to his

¹George Thomas, The Development of Institutions Under Irrigation; with Special Reference to Early Utah Conditions (New York: The Macmillan Co., 1920), p. 120.
needs regardless of when he settled or the proximity to it. The latter feature was in contrast to the doctrine of riparian rights which was based on geographical proximity. Those located along sources of water had the entire use and control of it.

By the time Heber Valley was settled in 1859 the policy of beneficial use was well established in Utah. Nevertheless, local initiative to apply it in the valley appears to have been necessary and the first settlers met on several occasions during the first winter to define what kind of policy they would adopt. Out of these informal meetings, the farmers agreed to adopt the policy of beneficial use and appropriation.

This decision was later reinforced in 1862 when the valley was established as a separate county, and water came under the closer scrutiny of Judge John Witt under the 1852 law.

The Influence of the Probate Judge

Management and direction of irrigation development was directly influenced by probate judges for nearly twenty years in Heber Valley. The law giving to the county probate judge discretion in the management of water read in part:

The county court has control of all timber; water privileges or any water course or creek . . . in the distribution of water for irrigation, or other purposes. ²

²Territory of Utah, Acts, Resolutions, and Memorials, passed at the Several Sessions of the Legislative Assembly of the Territory of Utah (1855) Sec. 33, Chapter 1, p. 127.
It was assumed by the territorial legislature that the court would act on behalf of the public and would be best suited to control and adjudicate all local water problems. After the passage of the law, each potential water user was required to present to the court a petition explaining how he was going to use the water.

It was left to the probate judge to assess each petition and then decide whether to grant water rights to the individual. The probate judge possessed near omnipotent power over water. He was given no specific guidelines on how water should be used, only that it should be used beneficially. With such a wide discretion at his disposal, the probate judge was at the pinnacle of secular power in a farming county such as Wasatch County. Moreover, county probate judges were often appointed for their first term by merit of church position although nominated and approved by Governor Young and the territorial legislature. Thereafter, they were elected by franchised residents of the county. With the support of the church and the law of the territory the probate judge played a major role in the county's irrigation development until 1880. At that time, a law was passed removing from him a number of judicial powers among which was his control of water.

The first two county probate judges provide examples of how judges used their power in directing water affairs in Wasatch County. Judge John Witt,

3It is unclear how many terms an individual could be elected to the office of Probate Judge. The clause dealing with the term of office reads: "... they shall hold their office for the term of four years." Territory of Utah, Acts, Resolutions and Memorials, p. 123.
Wasatch County's first probate judge, maintained an even keel in directing the management of water. He attempted to adhere to the policies of the church and the territory seeing that water was used beneficially. Two examples show this concern. In March 1864, William Howard presented a petition for: "The control of said waters of Snake Creek from one half mile below the old saw mill extending to the head of Snake Creek Canyon."\(^4\) Howard's intent was to use the water as a cheap source of power to saw timber "from 10 inches upwards," from Snake Creek and Maple Canyons located west of Upper Settlement. No challenge was presented to Judge Witt from the farmers whose irrigating water was involved. Presumably, Howard had reassured the farmers that he would not hinder the farming activities of Upper Settlement by his diversion of water. Judge Witt granted the right to the use of the water specifying that Howard's use of it would not interfere with irrigation rights.\(^5\)

Not all petitions were passed on with such dispatch and favor. Joseph Allan presented a similar petition requesting that he be granted"... the privilege of controlling the Spring at the South Mountain at the mouth of Daniel's Creek Canyon..." for industrial purposes.\(^6\) After due consideration and analysis by Judge Witt, Allan's petition was denied. Witt apparently felt that Allan's use of water might interfere with its beneficial use down stream.

\(^4\)Wasatch County, Utah, Minutes of Selectmen of Wasatch County Feb. 1862-May 1889, p. 8.

\(^5\)Ibid.

\(^6\)Ibid., p. 10.
As seen by the two above examples, water was granted or denied according to the judge's personal discernment. With such authority, he was either denounced as a tyrant or praised by those receiving his sanction to the water.

Judges, while sometimes arbitrary in their rulings, were in the main, objective and honest. However, personal feelings, pressure from private and public interests, and other pressures undoubtedly marked many decisions.

Heber's second probate judge, Abram Hatch, wielded more power than his predecessor. Hatch, while holding office of probate judge was also bishop for the valley. There is evidence that he was not always circumspect in distinguishing between his personal interests and the public interests. Holding two important offices, he was able to influence an association of Heber farmers to relocate a canal to supply him with a cheap source of power for a newly constructed grist mill east of Heber. This was a matter of deep concern for some. Consternation over Hatch's selfish interests interfered with cooperation in the development of a major irrigation project.

Irrigation Districts

During the reign of the probate judges, another "institution" emerges which also made an important contribution to the development of irrigation in the county. With increased population and a hodgepodge of water rights and claims, a mood developed within the county and territory to establish some kind of organization, either formally or informally, to effectively guide individual farmers in their use of water.
With this in mind, several Heber farmers organized a loose federation for the management and control of water within certain geographical boundaries. On February 22, 1862, two water districts were established under the auspices of the county probate judge. Judge Witt, although not officially authorized to permit water associations, authorized these two districts, believing that this kind of association would foster greater communal and individual responsibility in the management and distribution of water.

The irrigation districts divided Heber Valley into two parts. The first district comprised, "All that portion of the county on the East side of [the] Provo River." The second district included, "... all that portion of country in Provo Valley on the West side of [the] Provo River...."

Although rather loose in its definition of boundaries and providing few organizational guidelines, irrigation districting of this period attempted to reduce the valley to manageable portions. It also provided organization on the local level to manage and solve local water problems.

For an individual to obtain water for any purpose in either of the two irrigation districts, it was necessary to present a petition to the court. Furthermore, the individual had to receive approval from those involved in water management in each of the districts. Under this arrangement, the probate judge received counsel in either granting or denying petitions based on the principle of beneficial use with the support of his decision from either of the two irrigation districts.

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7 Ibid., p. 1.
8 Ibid.
Three years after the districting took place in Heber, the territorial legislature took steps to consummate the "de facto" practice of districting. It passed the "Utah Irrigation District Act of 1865." The act authorized the county probate judge to grant those wishing to organize irrigation districts the right to do so. The major purpose for districting was to aid farmers in obtaining "unclaimed" waters to be used for the improvement of agriculture in each of the counties. With this went the hope that there would be improved management of water, increased cultivation of land, and greater productivity from the agricultural community.

The Irrigation District Act of 1865 for the first time outlined definite procedures for farmers to follow before a probate judge would accept their petition for districting. No less than three nor no more than thirteen trustees could be on a district's board of directors. Trustees were responsible for the location and construction of canals. Control of water and management of it, remained in the hands of the elected trustees who in turn were governed by articles of agreements and bye-laws. Any trustee could be removed from his position for incompetancy or misuse of office.

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9 Thomas, P. 120. The law is entitled, "An Act to Incorporate Irrigation Companies." However, in the text of the 1865 law, companies are always referred to as "districts."

10 Thomas, p. 117.


12 Ibid.

13 Ibid., p. 186.
All elected officials were required to file an oath of office and pay a bond to the county clerk for faithful performance of duty.\textsuperscript{14} Trustees elected from their own ranks a president who had the authority to make appointments, fill vacancies, and to generally oversee the governing of the irrigation district.\textsuperscript{15}

The act of 1865 further stipulated that the newly established irrigation districts or "companies" were legal entities, having all of the accompanying rights. All organized irrigation districts were permitted to construct canals, build dams, and otherwise secure unclaimed water for its members. Once constructed facilities were the property of the district, thereby benefitting all.

Prior to this law, cooperation often ended when a canal or irrigation ditch was completed. The 1865 law carried the idea of cooperation one step further, encouraging farmers to cooperate in the continued management of the canal and water it carried.

The territorial legislature reaffirmed the commitment that canal development be placed above the welfare and economic interests of the individual. If a farmer refused to permit a canal to pass through his property, appropriate steps were outlined whereby an irrigation district could secure a right of way through arbitration and just compensation.

Finally, to encourage districting, the territorial legislature exempted districts from taxation. This basic plan was later adopted in 1880 when the

\textsuperscript{14}Ibid.

\textsuperscript{15}Ibid., pp. 185-186.
territorial legislature authorized irrigation districts to incorporate under the corporation laws of the territory.

A year after the passage of the 1865 act, a second law was passed recognizing those who had organized irrigation districts prior to 1865 as legal districts. 16

The acts of 1865 and 1866 failed to stimulate further irrigation districting in Heber Valley. This failure lay in large part in the fact that outside influences diverted farmers away from farming activities.

Delays in Water Development

During the years prior to 1865, Indian tribes in the south and east portions of the territory resumed hostilities. Called the Black Hawk War, the Indian disorders of the 1860's interfered with any designs Heber farmers may have had to expand their irrigation systems.

During the height of the Black Hawk War, a number of raids were made by the Indians from the Uintah Basin forcing residents from outlaying settlements to seek protection in Heber and Midway. A county militia was formed and many farmers joined to protect their lives and property. As a result, farming and related activities were severely reduced for a time.

16 Territory of Utah, Acts, Resolutions, and Memorials, passed at the Several Annual Sessions, of the Legislative Assembly of the Territory of Utah, from 1851 to 1870 inclusive (Salt Lake City: Joseph Bull, 1870), p. 215.
However, from the standpoint of the whites some good did come from the Indian War. It provided some farmers with information concerning the Uintah Basin. On several occasions members of the county militia followed Indians into the basin, there to discover a potential source of water. Farmers from Heber Valley would in time tap this new source of water through diversion canals and a 1,000 foot tunnel.

By 1867, peace was restored and Heber farmers began to rebuild destroyed fences, damaged homes and barns, and to undertake the pursuit of farming.

However, difficulties with the Indians was not the only force hampering irrigation developments during this period. Shortly after peace was established, a call for manpower to construct the transcontinental railroad through the northern portion of the territory went out from Salt Lake City. This further delayed irrigation developments.

Brigham Young took contracts which employed many men of northern Utah. When the call went out for men, Bishop Hatch responded by calling men from the county to work on the railroad in Echo Canyon during the summer months of 1868. Many responded leaving their farms to neighbors, wives and children to tend. This together with the Indian difficulties slowed the growth of irrigation and irrigation districting.

However, some organization efforts and some construction did take place during the 1860's. Indicative of this progress was J. McNaughton's petition March 5, 1866, "praying for an irrigation district to claim unclaimed
water in the Provo River." The petition was granted and a new irrigation district, "Irrigation District number one in Precinct number one," was established. During the same decade, the Billy Mac Ditch," predecessor of the Wasatch Canal, was also constructed.

In a larger sense, the 1865 and 1866 acts brought several results. They provided guidelines for the farmers to follow in establishing irrigation districts. These guidelines and the policies adopted within these guidelines were the basis for the organization of mutual irrigation companies. The 1865 and 1866 acts also enabled farmers to organize for more effective management of irrigation systems. Finally, the two acts provided some guidelines for the probate judge to follow in granting petitions for water.

Cooperation in Early Canal Developments

As suggested in the early paragraphs of this chapter cooperation characterized the water development efforts of Heber settlers from the first. Although this cooperation was limited by personal interests and lack of formal organization, it was an essential aspect of early progress and thus merits our attention here.

During the decades of the 1860's and 1870's, some efforts were made to cooperatively secure water through loose associations. The first major effort was an attempt in 1859 to divert water to the land north of Heber known as the "big" or "north" field. John Crook wrote:

17Wasatch County, Minutes of Selectmen, p. 17.
Early in the spring of 1859 many parties went to work on the canal. The spring was late and very cold in the month of April. Ice formed in chunks in the water, wind blew cold from the north. We had to wear overcoats and mittans when working. I spent three weeks on this canal and got discouraged at the outlook, for water was being brought and channeled through a slide of loose rock [and] puddle[d] that part of the channel, I gave in despair, never receiving anything for my labor. 18

Several years later, some of the Heber farmers joined again to secure water. A meeting was called at the home of Thomas Rasband. It was decided to develop the small streams east of town rather than trying to divert water from the Provo River. At the meeting it was agreed that all would join, "...[to] perform all labor required to bring the streams all into one channel if practicable...".19

John Crook describes the spirit and process of this early effort.

In the morning [of March 20th] when all were ready with our implements, we proceeded East until arriving at the present site of A. Hatch & Co. mill pond. Here we divided our forces, Tho's H. Giles heading one party for Lake Creek. The other party to the Thorn spring where a ditch was plowed & cleaned out running west until we entercept another spring branch, now known as Broadhead's Spring. Tho. H. Giles party put a dam in Lake Creek & turned the stream into a dry channel which runs close by the Grist Mill pond & meandered through the sagebrush in a westerly course & down through Heber City, crossing main street at about the tithing office & Mark Jeffs store.20

18 John Crook, "Statement of Securing the Water Rights to Heber City," n.d. Handwritten Wasatch County Court House, County Recorder's Office, Heber City. The date stated by Crook is in error. The first group of settlers arrived in the valley in the latter part of April, 1859.

19 Crook, Statement.

20 John Crook, "Journal of John Crook," Brigham Young University Archives, Ms handwritten; found also in Utah Historical Quarterly, VI (April, 1933), pp. 1-62.
At the conclusion of the day's work, the two parties met at the grist mill, "to congratulate each other on the good work . . . accomplished." 21

During the Black Hawk War, a second effort was made to tap the Provo River, The Billy Mac ditch, as it was called, met only with limited success.

The efforts of John Crook and others in the 1860's were the foundations for a future and much larger canal. A number of events in the 1860's encouraged greater participation by the valley farmers in further developing irrigation systems. Peace with the Indians, completion of the railroad at Promontory in 1869, increased demand for agricultural staples, and a developing mining industry in Summit County aided in the encouragement of greater irrigation development. These developments and circumstances along with the earlier laws of 1865 and 1866 resulted in a climate of growth and development of irrigation in Heber Valley.

Out of this fertile environment and encouragement by the church to develop cooperation within the community, the Wasatch County Canal Committee, as it was called, met at the First District School House in March 1872. The committee originally consisted of John Lee, Earl Smith, Joseph Murdock, John Harvey, John Clegg, Joseph Moulton, William McDonald, John Muir, and Robert Broadhead. 22 Broadhead was asked by the others to chair the

21 Crook, Statement of Securing Water

22 Wasatch Canal Minute Book, March 1872-February 22, 1874, Ms handwritten, Possession of the Wasatch Irrigation Company's officers, Heber City. The term "Committee" apparently meant the whole association of farmers rather than a governing body or board of directors.
meeting. After the usual preliminary business, the committee reviewed earlier efforts made by Crook and the others to secure water from the Provo for the fields nearby. It was decided that a new cooperative attempt be made to divert part of the Provo River on to the nearby land. Much of the talk and plans centered on the theme of greater cooperation in such a project would be the key if it was to be successful.

Upon that subject, Broadhead mirrored the feelings of this new effort. As recorded in the minute book, Broadhead stated: "He wished to see all private or selfish interest laid aside and all take hold whole heartedly and accomplish the work." However, "private interests" remained a part of the proposed canal. Abram Hatch, a recent appointee to the office of Probate Judge and earlier sustained as bishop for the town of Heber, pressed in later meetings to locate the canal near his grist mill. Unable to cope with the combined powers of probate judge and bishop, the committee gave in reluctantly to Hatch's wishes.

Hatch was so intent on securing water from the canal that he hired Henry S. Alexander of Midway at $4.00 per day to level and survey the land adjacent to his mill even before plans were finalized by the committee.

Broadhead attempted to lessen Hatch's influence by suggesting that the canal be brought out as high as possible. Others in the committee, fearing repercussions, "... wished it where it would do the most good." It was

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24 Ibid.
25 Ibid.
finally agreed to construct the canal to Hatch's mill and to use the earlier
Billy Mac ditch as part of the Wasatch Canal system.

On March 28, 1872, work of surveying commenced at Hatch's grist mill. J. J. Shelton was retained by the committee as estimator for the project and to accompany the surveying party. His job was to keep an accurate record of the kind and amount of work that would be needed along the course of the canal. From his notes, work could then be divided among members of the committee.26 Shelton was instructed by the committee not to include the services rendered by Alexander near Hatch's mill nor the construction costs near the mill. Hatch had set himself off earlier from the cooperative development of the canal by surveying and constructing the canal near the mill at his own expense.

It is interesting to note the kind of instruments Alexander and the others had to use in the construction of Heber Valley canals. As a transit, Alexander either used a stovepipe or shotgun barrel. For a level, a large bottle was filled with water and marked with appropriate fall. The bottle was then hung on adjustable supports permitting the surveyor to adjust the legs to establish the proper fall.

26 J. J. Shelton kept accurate notes concerning the terrain the canal covered. Nearly every ten rod sections is described by Shelton. For example, sections 21 to 25 were found in the stone quarry east of Heber and required extensive blasting; section 36 in the same mile was earmarked as good soil. Furthermore, this author has a copy of what appears to be the original map of the Wasatch Canal. It shows areas where blasting and culverts were required.
The surveying party was followed by a team of horses dragging a go-devil in which to mark the line for the canal. A go-devil was a simple "A" shaped plow usually made out of wood. From a map drawn by William Buys and the notes kept by J. J. Shelton, it is observed that certain sections required greater utilization of blasting and fluming. Consequently, these areas required additional men than the average ten rod sections Shelton described as "good" or "very good" soil.

The initial survey conducted by Alexander was completed within a week. Construction commenced shortly thereafter. At Heber's Agricultural and Manufacturing Society meeting, held the evening of April 1st, the first contingent of workers was tendered to work on the canal. James Watson, T. S. Watson and J. G. Watson agreed to put in a day's work. Joseph Murdock responded by obtaining three men and two yoke of oxen for canal work.

Little progress was made during the early weeks of April. Heavy rains and late snow which had an earlier spring deterred work of John Crook and others also, hampered the committee's efforts. Progress was slowed further when additional blasting and fluming was required.

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27 More correctly, the Agricultural and Manufacturing Society was the Desert Agricultural and Manufacturing Society. In essence, it represented both church and state interests in the above two categories. The D. A. & M. Society was the territorial agent of all agricultural interest both locally and nationally. For a further discussion see Arrington's Great Basin Kingdom, pp. 226-227.

Work allotments were distributed by the committee's board of directors according to a man's capabilities and skills, the amount of water shares a farmer purchased in the canal, and the need for manpower. Shortly after work was begun on the canal, a resolution was adopted by the committee stating:

Any person completing fifteen average rods of the ditch (this being considered equivalent to $15.00 in currency) to the acceptance of the committee shall be entitled to the following provisions, i.e., The claimant is entitled when the present ditch is completed to water for 2 1/2 acres and oblige himself when called upon by the committee to do his proportion of enlarging the ditch, failing to do so, the 3/4 of the land which is unpaid, shall revert to the committee to be disposed of in enlarging the ditch. 29

The practice of subcontracting proved to be beneficial in several ways. Many who received work assignments and adopted the practice of subcontracting enabled other settlers to become involved in the project. It provided needed manpower for the construction of the canal. It proved to be helpful in permitting farmers to pay off debts to others by working on the canal. Finally, it provided a means whereby those who at the time of organization were unable to participate by working on the canal, they were given the opportunity to acquire water-rights in the canal as well as land located nearby.

Land Distribution by the Committee

The acquisition of land was a major stimulus for farmers to work on the canal. Land distributed by the committee was obtained in two ways. The

29 Wasatch Canal Minute Book.
1865 law contained a provision for organized farmers to obtain land which would be benefitted by construction of a canal. Section twelve of the 1865 law read:

If any part of the lands to be benefitted by the proposed ditch or canal are not legally claimed, then such lands may be appraised by the Trustees, and shall be held and the possessions of them sold by the Trustees, as opportunity may offer. . . . 30

A number of areas in the valley were not "legally claimed" because of the lack of sufficient water. As mentioned in the above law, land was made available for irrigation districts to use as they saw fit. It is not known whether the Wasatch Canal Committee availed itself of this opportunity. It is known from the minutes that the committee did control some land directly or indirectly and did indeed distribute land to those who worked on the canal.

The second method was through the Homestead Act of 1862. Under federal law, Utah Territory was not opened to settlement by the federal government until several years after the passage of the Homestead Act of 1862. However, prior to the act, the territorial legislature was granted land under its authority to establish municipal charters and by various other legal devices. It established large plots of land as a "city" thereby insuring "legal" claim to land ownership by the original settlers and to provide an orderly means of distributing land to newly arriving Mormon settlers. 31 Herdgrounds and other land franchises were also granted to individuals.

30 Utah, Session Laws 1919 and 1921. p. 186.

However, it was not until 1869 that a land grant office was opened in the Utah Territory thereby permitting settlement of land according to the provisions contained in the Homestead Act. It is likely that some of the land acquired by the Wasatch Canal Committee was obtained after the establishment of a federal land office.

Contained within the Homestead Act were several provisions which went contrary to the generally established land policy of the Mormons. According to the act, farmers were allowed to settle on land measuring 160 acres or 80 acres. General church policy was for farmers to settle small plots of land scattered at several locations within a settlement to provide each farmer with meadow, farm, and timber land if available. This policy was contrary to one of the stipulations and customs of homesteading—that land settlement be in contiguous acres. This is not to say that there were not large land owners in Utah, but a majority of Mormon settlers adhered to the above practice.

Heber Valley farmers adopted a policy to satisfy the Homestead Act. Individuals were selected to file under the Homestead provisions. Once title acquired by these individuals, they would in turn quit claim land to the other

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32 Thomas, pp. 32-33.

farmers who had established claims by previous use. However, to comply fully with provisions of the Homestead Act, land which heretofore had not been claimed because of the lack of water was included under the homestead filings. This land was acquired by the Wasatch Canal Committee under the 1865 law from those originally chosen to file on the land.

Most of the farmers chosen to file on the lands on behalf of the other farmers agreed to deliver heretofore unclaimed land to the committee. However, in at least one instance, influence was required to persuade a family to deed to the Wasatch Canal Committee some unclaimed lands. In March 1875, Bishop Hatch, "speaking on behalf of the Moultons," stated that they were "willing" to deed to the committee land they had been holding in trust.

Land obtained by the above methods was distributed by the committee's board of directors to those who had worked on the canal. Henry Alexander was appointed by the board of directors to survey the unclaimed lands adjacent to the canal and have the land ready for distribution.

In March 1874, the canal committee met as a whole to finalize plans for the distribution of land. It was agreed by all, that "lady luck" or the "will of God" would be instituted to equitably and justly distribute land to those entitled to it according to the 1865 act. Farmers drew slips of paper identifying the location of the land drawn. Some of the land distributed by the committee went to members of the "board of directors." The committee minutes

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34 Rollins, pp. 242-243 and Thomas pp. 32-33, 35.

35 Wasatch Canal Minute Book
identified Robert Broadhead as having accrued to himself, an equivalent of $84.15 in currency. For this amount, Broadhead received twenty acres on the east side of John Wing's homestead. At least seventy-two farmers are recorded on the committee's ledger book as having received land by this method.

Cooperative Efforts in other Communities of the County

In the winter of 1869-1870, Charleston farmers began developing water from Daniels Creek. However, their first attempt failed. A year later, Edward Buys and William Bromley, two recent settlers to the valley, and George Noakes, Joseph E. Taylor, John Eldridge, and David Walker agreed to try and divert water from Daniels Creek through a second canal. The desire by all six to acquire water-rights to Daniels Creek lead them to make a verbal agreement to develop a second canal.

The following spring, according to the previous agreement, the six farmers began working on the second canal. Each agreed to construct one and a quarter rods—or twenty feet six inches—per acre of land owned.

36 Ibid.
37 Ibid.
38 "Testimony of E. Buys in Regards to the Waters of Daniels Creek." Ms Handwritten. Original in the Wasatch County Court House, Heber City.
39 Ibid.
The success of the six in diverting water from Daniels Creek encouraged others to settle along lower Daniels Creek in an area known as Buysville. Shortly thereafter, farmers from Buysville agreed, "to organize into a company [and] . . . was then left to the officers with the consent of all parties. . . . to control the waters of the creek." 40

Buysville farmers were the first in the county to formally organize themselves into a formal "company." This they did sometime prior to 1886. 41 The basic outline for the organization of their company followed the structure proposed in the act of 1865. Among the company's specific objectives was to purchase from the citizens of Charleston, all the rights to Daniels Creek. 42

Stock was issued in the Buysville Irrigation Company amounting to $1,500 divided into shares valued at $10.00 each. 43 To prevent a monopolistic control of Daniels Creek or the adoption of riparian doctrine, no subscriber

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40 Ibid.

41 According to the records kept at the county courthouse, they were the first to file articles of agreement with the county clerk although no date is attached to the agreement.

42 Incorporated Records of Wasatch County, "Buysville Irrigation Company." Apparently the Buysville Irrigation Company was the predecessor to the Daniels Creek Irrigating Company which is discussed in Chapter VI. Both included within their objectives the purchase of water-rights to Daniels Creek from Charleston for the amount of $930.00

43 Ibid.
was permitted to purchase more than thirty shares or twenty percent of the
capital stock in the company. 44

The establishment of the Buysville Irrigation Company was the founda-
tion for later irrigation companies established in Daniels. One such company
which will be discussed in more detail in Chapter VI acquired one of the same
objectives as the Buysville company: "to purchase from the citizens of
Charleston, all the rights to Daniels Creek."

In other parts of the county, increased irrigation activities were being
pursued. A search was under way in the Daniels and Center Creek areas to
find additional water. In the same period, other irrigation districts were
organized.

The Wasatch Canal Committee also petitioned the court to enlarge its
district to cover,

... all that portion of country watered from the
Wasatch Canal, Lake Creek, Pole Canyon Creek, springs
and other waters within designated boundaries that is, west
of said canal to Spring Creek ditch, and William McDonald's
ditch north of Heber City and as far north as practicable, and
East to the base of the mountain or as far as needed for agri-
cultural purposes and south to intercept the portion of country
irrigated by the Center Creek waters and owned and cultivated
by the citizens of said creek settlement. 45

The decade of the 1880's brought increased irrigation activities, changes,
and the supervision and control of water. In 1880, the territorial legislature
passed a law removing from the county probate judge jurisdiction of all water

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44 Ibid.

45 County Selectmen, p. 142.
resources and placing it in the hands of county selectmen who were to act as ex officio water commissioners. Water resources remained with the county selectmen until 1897 when the State Legislature created the office of State Engineer.

Self-reliance coupled with cooperation were the underlaying elements which molded the outward developments discussed above in establishing the foundation for mutual irrigation companies.

The next several chapters will deal with specific mutual irrigation companies which have unique circumstance in the establishment and development of each.
CHAPTER IV

THE ESTABLISHMENT OF MUTUAL IRRIGATION COMPANIES

The 1865 law establishing irrigation districts had been an important step towards organizing farmers into incorporated irrigation companies. As discussed earlier, the act provided guidelines for bringing farmers into associations by which they could effectively utilize water resources. However, it was the act of 1880 that actually enabled farmers to organize as incorporated mutual irrigation companies.¹

The 1880 act is only one of several important elements which will be discussed in this chapter. Other topics include the continued influence of local Mormon Church leaders in water affairs, the evolution of the Wasatch Irrigation Company from the earlier association called the "Wasatch County Canal Committee," involvement with Park City mining activities, and the development of several Uintah lakes for irrigation purposes.

The 1880 Act

Prior to the passage of the 1880 act, a few companies in the territory incorporated according to the Water Law of 1865. In 1870 a general incorporation

act was passed but it was not until the passage of the 1880 law that farmers were permitted to incorporate under the provisions of the 1870 law. The 1870 law failed to include mutual irrigation companies. With the passage of the 1880 act, farmers in Wasatch County began in earnest to form mutual irrigation companies.

There are several reasons why the new law facilitated this organization. In the first place, it changed the relationship between water and land. In the past it had been assumed that when land was exchanged, water-rights associated with the land automatically changed hands as well. The 1880 law however, established water-rights independent of land ownership. It could therefore be bought and sold without being associated with specific parcels of land. In effect, it provided the opportunity to monopolize water. However, the practice of beneficial use and the law permitting farmers to incorporate coupled with the continued influence of local church leaders, deterred Wasatch County farmers from absorbing water-rights in the hands of a few.

Under the terms of the law, irrigation companies were given power to manage the conveyance of water through mutually owned and operated irrigation systems. This in effect removed direct control of water from the county probate judge and the elected county selectmen where it had been lodged previously. It further provided the association of farmers with a stronger hand in their own management and distribution of water.

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2Utah, Laws of the Territory of Utah Passed at the Twenty-Seventh Session of the Legislative Assembly (Salt Lake City: Tribute Printing and Publishing Co., 1886) See also Sessions Laws 1919 and 1921; Relating to Water and Water Rights.
Because of an increasing population and a multiplication of small independent and poorly managed canals, the act came at an opportune time for Wasatch County. The last quarter of the nineteenth century brought with it a decline in unutilized arable lands and by 1889, over half of the usable land in the county was being farmed. In a report appearing in the Wasatch Wave that year, it was stated that of the 23,000 acres of land in the county, 14,000 acres were under irrigation.  

The United States Census reported in 1880 that in Wasatch County there were 1775 people over the age of nineteen and nearly 3,000 children. This population represented a six fold increase from 1860 to 1880. That this growth pattern was general is evident in the fact that Utah Territory as a whole experienced a thirteen fold increase between 1850 and 1880. To accommodate further agricultural utilization of the remaining acres of land as well as the land already plowed, a greater and more effective means of management and control of water resources was urgently needed.  

The 1880 law aided in accomplishing just that. It provided an effective method for consolidating heretofore duplicated systems, a method for raising the

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3 Wasatch Wave, (Heber City, Utah), August 10, 1889, p. 2.


5 Ibid.

6 Ibid.
necessary funds for operations, and a legal organization to cope with new and varying problems. 7

Center Creek Irrigating Company

Although the law put greater emphasis on forming mutual irrigation companies by local farmers, water development continued outside formal legal incorporations. The 1880 law did accelerate organizational efforts in the form of new mutual irrigation companies. Even with the 1880 law, water conflicts continued to persist, but some legal basis for mitigation was now present.

A discussion of the Center Creek Irrigating Company in the years after 1880 will serve as an initial illustration of water development under the law of 1880. Even prior to the passage of the 1880 law, Center Creek farmers who held primary water-rights had moved to associate themselves more closely. Working under a sentence contained within the 1865 law, they met several times in December of 1879 and January of 1880 to formulate some kind of organization. At a meeting on January 10 they organized themselves into a company. William Richardson Sr., Joseph Thomas, G. H. Sweat, William Richardson Jr., and J. Goodwin were selected as the first trustees. 8

On April 21, 1880, the Center Creek farmers moved to accept bye-laws which in part read:

7Wells A. Hutchins, "Mutual Irrigation Companies in Utah." Utah Agricultural Experiment Station, Bulletin #199 (May, 1927), pp. 29-31

The company to be known as the Center Creek Irrigating Company, place of business as Timpanogos, Wasatch Co., Utah. The boundary of said district to comprise all lands belonging to or to be benefitted by said matters.9

The bye-laws also called for the appointment of a watermaster. G. H. Sweat was chosen by the trustees to serve in that capacity. His pay was set at fifteen pounds of wheat per each acre of land under his jurisdiction.10

The farmers further authorized the trustees to purchase 970 feet of lumber to be used in constructing a reservoir in Center Creek Canyon. It was suggested that those wishing to participate in the construction of the reservoir should purchase shares in it separate from the general subscription in the irrigation company. The price for each share was set at $10.00. Little if anything ever came from the company's efforts to construct the proposed reservoir.

Learning of the 1880 law and an effort to tighten the company's organization and control of water, Center Creek farmers met early in 1887 to reorganize themselves under the new law. The company was renamed the Center Creek Water and Irrigation Company. It carried on the same purpose as the Center Creek Irrigating Company, "to regulate and control the water of Center Creek."11

The thirty-nine original members of the earlier company joined the new company.

9Ibid.

10Ibid.

11Wasatch County, Utah, Incorporation Records of Wasatch County "Center Creek Water and Irrigation Company."
Center Creek Irrigation Company

While the main thrust of events as well as Utah's developing legal structure was for more group action in water development, strong individual effort continued to contribute and led to the establishment of another irrigation company in Center Creek and to a notable controversy. Organized in 1886—a year before the Center Creek Irrigating Company reorganized as the Center Creek Water and Irrigation Company but well after the former group had established primary rights on the creek, the Center Creek Irrigation Company followed the lead of James Lindsay in resourceful individual who had been developing reservoirs in Center Creek Canyon to impound unclaimed high waters.

Although Lindsay had been a stockholder in the Center Creek Irrigating Company he apparently felt that it did not meet his need for water. Therefore, he had decided to develop water independent of the company. Carefully studying Center Creek Canyon, he located six reservoir sites late in the 1870's and early 1880's. Each was positioned away from the main creek, but close enough that laterals could easily be run from the creek. This arrangement protected the earth filled dams from washouts during spring runoffs and substantially reduced silt filling. Each of the Lindsay reservoirs was located and developed independently of the others. So successful did they prove that the techniques developed by Lindsay later became a major means of storing high water runoffs.

This was not the only evidence of Lindsay's independence and ingenuity. Shortly after developing the reservoirs in Center Creek Canyon, he undertook one of the nations' earliest trans-drainage diversions. With his brother, Andrew,
and another farmer, George Muir, he drove a 1,000 foot tunnel to convey water from the Strawberry Valley to Heber Valley, thus bringing it from the Colorado Basin to the Great Basin. More will be said presently concerning this undertaking but for now, it is important to note that Lindsay typified the strong individualism which Wasatch County farmers continued to display even in times of increased cooperative effort.

Although the initiative for the canyon dams belongs to Lindsay a number of Center Creek farmers joined him in constructing the reservoirs. During the period of development Lindsay and his associates came to believe it best to organize a mutual irrigation company under the 1880 law. This they did, calling themselves the Center Creek Irrigation Company. With the canyon reservoirs, secondary water rights, and Lindsays initiative as its primary assets it was necessary for the Center Creek Irrigation Company to develop the physical and legal means of conveying their water to their farms. In terms of the physical means the creek bed already used by the Center Creek Water and Irrigation Company in bringing its primary waters was the only possible water course. The inventive Lindsay met this challenge by claiming that high water, later identified by the courts as secondary water rights, could be "floated" downstream atop primary water. With the emergence of the Center Creek Irrigation Company this became a major source of irritation and friction because of the difficulty in distinguishing and separating a substance that naturally intermingles with itself. Verbal and physical confrontations took place between the holders of primary and secondary claims, each company charging the other with using more water than it was entitled to. It was not until the advent of accurate water weirs and
greater understanding in the physical nature of water in streambeds that the difficulties began to subside. Even then, it took a major court decision to settle the water claims in Center Creek and along the Provo River. In the meantime, highwater users continued to believe that their water "floated" on top of the primary water users' water.

To pay the cost of each share of water as well as the annual assessment, each farmer was assigned by the Center Creek Irrigation Company board to work from ten days to two weeks at the different reservoirs each autumn. Much of the work required hand labor although some work was done with scrapers pulled by a team of horses.

The Lindsay reservoirs, now part of the Center Creek Irrigation Company's reservoir system, were located at the following places in Center Creek Canyon. Number one reservoir was at Hill Flat, number two at Cabin Flat, number three at Swedish Flat, number four at Beaver Flat, number five at Dry Lake, and number six at Willow Creek. After several failures, the irrigation company gave up efforts to maintain reservoirs at Willow Creek and Beaver Flat. The company did, however, establish another in the canyon called the Barnes Reservoir.


13 Curtis Muir, Private Interview held with Mr. and Mrs. Curtis Muir, Center Creek, Utah, March 22, 1972. There is no data found for capacity of each of the several reservoirs.
All of the reservoirs were fed entirely by high water from Center Creek Canyon with the exception of the reservoir at Dry Lake. It was partially fed by a small spring. The waters from the reservoirs were released beginning the latter part of July. Usually there was enough water stored in them to irrigate until the end of August. This was the crucial period when the crops reached their full maturity and when water was least available.

A year after the company's establishment, the stockholders saw fit to enlarge upon the purpose set down in the articles of agreement. Originally, the company's purpose was limited to water storage. But with the success of the company in that field along with the use of the natural channel to convey the water to most of the farmers fields, it was agreed by the twenty-nine farmers who comprised the company to broaden its powers to include the function of irrigation.14

By the turn of the century, the Center Creek Irrigation Company had established itself as a relatively sound institution. The original farmers were able to pay to the company via labor assessments the total purchase of their shares in the company. Further, there was little maintenance except on the reservoirs. Therefore, work done each fall and spring over and above the annual assessments was paid in cash. Wages for a team of horses and owner was $6.00 per eight hour day. A single hand was paid $4.00 for his work.15

14Wasatch County, "Center Creek Irrigation Company."

15Ibid.
Minor problems continued between the two companies. The final solution to these problems and the inefficiency of two companies using the same distribution system was the consolidation of the two companies in the 1960's.

**Charleston Irrigation Company**

As mentioned above, great strides were made beginning with the passage of the 1880 law to organize mutual irrigation companies in the county. One of these, the Charleston Irrigation Company provides an excellent opportunity to examine the organizational structure of a mutual irrigation company.

In February of 1883, twenty-nine farmers in and around Charleston presented to the county officials their petition for incorporation. Article One established the name of the company, and the place of business. It also stipulated the anticipated corporate life of the company—fifty years. Article Two outlined the basic purpose for the company; "...to remove waters from Spring Creek and the Provo River for the purpose of irrigating...". Article Three stipulated that the amount of stock in the company was to be 800 shares. The par value for each share was set at $5.00. Articles Four through Six dealt with the internal organization of the company which included voting procedures, and a time and place for stockholders meetings. Articles Seven and Eight described how the company was to receive revenue for its operation and

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further development. These two articles also stated that one-fourth of the total annual assessment was to be paid in cash, and the remaining three-fourths in labor. The articles further stipulated that if a farmer failed to comply with the mutually voted assessment, the board of directors was authorized to sell delinquent stock to pay the individual's assessment. The board was further empowered to deprive those who failed to pay their annual assessments the use of water conveyed in the mutually owned canals and laterals. When they joined the Charleston Irrigation Company, farmers submitted their claims to previously constructed canals and laterals to the company via a trust deed. Any additions to the canals, flumes, etc., automatically became part of the mutual irrigation company.

Articles Nine through Eleven dealt with the function and duties of the various officers within the company. Article Twelve protected personnel property of members from any indebtedness incurred by the company. Article Thirteen reaffirmed the subservience of the farmer to the Company's interest. In part it stated:

Each shareholder shall receive his distribution of water according to the amount of stock owned, but any stockholder failing to comply with this agreement and bye-laws shall forfeit all right to the use of water for irrigating until satisfaction be made.

Finally, Articles Fourteen and Fifteen dealt with the filling of vacancies, resignations, removal of officers, and the transfer of stock from one owner to another.

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19 Ibid.

20 Ibid.
The amount of money presented to the company by different members ranged from $2.77 paid by Ethan Brown to $278.00 by N. C. Murdock.\textsuperscript{21} Included in the list of subscribers in the company was the Young Men's Mutual Improvement Association of Charleston.

The model as outlined above was generally followed by the rest of the mutual irrigation companies in the county. Many of its features had been established earlier under the act of 1865 and later refined to fit the necessary legalities of the incorporation laws of the territory as spelled out in the 1880 law. Furthermore, there was a wide variation in the purchase of stock shares in the different irrigation companies.

\textbf{Wasatch Irrigation Company}

The largest of the county's mutual irrigation companies is the Wasatch Irrigation Company. Although not incorporated according to the 1880 law until 1896, its foundations as described in an earlier chapter began with the Wasatch County Canal Committee.

The Wasatch Irrigation Company has played a major role either directly or indirectly in association with other irrigation companies in most of the county's major irrigation developments. Fortunately, those who were chosen to maintain and keep the company's records and proceedings, took their task seriously and a near full record exists. From these records, a general investigation can take place which will permit a greater understanding of the overall

\textsuperscript{21}\textit{Ibid.}
development irrigation followed and suggest how the irrigation companies solved problems such as the construction of distribution systems.

The first phase in the development of the Wasatch Irrigation Company occurred in the 1860's when a small group of men calling themselves the Wasatch Canal Committee organized a loose association to coordinate the construction of various canals including that of the big ditch, better known as the Wasatch Canal. Operating under this association for some fifteen years, the Wasatch Canal Committee agreed to develop a closer affiliation in 1879.

In April of that year, Henry Clegg, John W. Wing, and W. P. Reynolds, representing the "committee" petitioned the Wasatch County probate judge to permit the committee to consolidate segments of previously constructed canals including the Billy Mac Ditch and the Wasatch Canal. Furthermore, the committee wanted a tighter organization in which to deal with mounting and potential irrigation problems and situations. In a letter to the court, the three petitioners stated more definitely their purpose:

... in order to more fully enable said committee to complete said canal (that canal started in 1869 by the big ditch committee) and furnish a sufficient quantity of water for all purposes, [we] ask your honors to declare [that part of] the county, extending as follows, ... from said canal west to Spring Creek Ditch west and south of Heber and west to Wm. McDonald's ditch on the north of Heber also the country lying east of said canal to the head of Lake Creek and south to Centre Creek to be an Irrigating District (company). In order that those owning said ditch or canal may incorporate under the Laws of Utah. ... 22

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22 Wasatch County, Utah, Minutes of Selectmen of Wasatch County, Feb. 1862 to May 1889, pp. 52, 55.
Several years after the petition was granted, the Wasatch Canal Company asked two attorneys to investigate the company's legality. In response lawyers A. C. Hatch and William Buys wrote the directors that they found the company to be lacking a number of elements necessary to make it a fully constituted mutual irrigation company under the 1880 law. Among the irregularities outlined by Hatch and Buys was the failure of the company to accurately describe the demarcation of its boundaries. Further, rather than acting as a public corporation which was the territorial legislature's intentions in the passage of several laws, the Wasatch Canal Company acted as a private non-incorporated irrigation company. The two lawyers advised immediate incorporation.

The company, apparently because of its success in meeting the problems of the farmers in irrigation matters, failed to follow the advice conveyed to it from Hatch and Buys until 1896. In January of that year these and other legal deficiencies were rectified. In the meantime, the company functioned as though it were a fully constituted and authorized irrigation company.

On July 14, 1879, the county court had permitted the Wasatch Canal Committee to change its name to the Wasatch Canal Company. Previous to 1879, the Wasatch Canal Committee had acted as an informal cooperative institution for the purpose of constructing canals only. Thereafter, the Wasatch Canal Company operated under the philosophy that the individual's rights to the use of water as

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24 Wasatch County, Minutes of Selectmen, pp. 52, 55.
well as the ownership of canals were to be under the joint control of the farmers through their subscription in the company. The Wasatch Canal Company in effect, moved from cooperation in construction of canals to cooperation, mutual ownership and management of canals and water conveyed in them.

This change in function resulted in an increasing effort on the part of the canal company to control all waters that lay in or passed through the area of its jurisdiction. Its new assertiveness maybe viewed through the company's relationship with John Lee. A member of the canal committee and a participant in the surveying and early construction of the big ditch, Lee refused on occasion to pay the company for water he was using from a nearby spring. As a result Joseph Moulton, member of the board of trustees, suggested that a committee be established to investigate Lee's uncooperative attitude. Lee's position was investigated and he was denied the use of the spring by the company. The canal company also took action to force Lee to pay for the water which he had previously used from the spring.

The action against Lee was not uncommon. Indeed the Wasatch Canal Company as well as other irrigation companies became increasingly distressed with any effort to establish individual rights to heretofore unclaimed waters.

The concern in all companies was to make sure that the individual farmer under company jurisdiction was using his water-rights to the utmost benefit for himself as well as for the rest of the farmers in the company. The companies also became increasingly powerful in regulating distribution and use of irrigation water. In the process they gradually took over some of the responsibilities heretofore conducted by the local county officials. In April of 1886 for example, a
Mr. Anderson petitioned the trustees of the Wasatch Canal Company rather than the county selectmen for the right to exchange certain waters claimed by him within the company's jurisdiction. A committee was established to investigate Anderson's petition and to report back to the trustees. Some eight months later, the committee reported recommending that Anderson's petition be denied. Concern that the water would be utilized to full benefit was the basis for the committee's recommendation that the petition not be granted.

Even in the years before the Wasatch Canal Committee was recognized as a legally constituted irrigation company, it maintained a high degree of control over waters under its jurisdiction. When damages were caused by the canal, the Committee took the necessary steps to rectify the difficulty. A committee was assigned to investigate the damages and report to the board of directors. If there was still a dispute between the committee and the petitioner for damages a third party was called to arbitrate between petitioner and canal committee.

During the twenty year period before 1896, great strides were made by the canal company in delivering increased amounts of water to growing number of farmers and citizens of Heber. Important in this process was an 1887 action by which the Wasatch Canal Company along with the East Ditch Company agreed to develop a vital link in what eventually became part of the Wasatch Canal system. The two companies agreed that the Wasatch Canal Company would pay for and build two-thirds of the proposed canal. The East Ditch Company was to pay for and construct the remaining one-third. Further evidenced in this transaction was a growing trend for irrigation companies to aid each other.

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The Wasatch Canal Company not only supplied water to agricultural interests, but it had the responsibility of providing culinary and city lot water for most of the city of Heber. But it never lost sight of the fact that its major interests were with delivering water for agriculture. This was demonstrated with the rate of assessments levied on city dwellers compared to the agricultural interests which it served. The residents of Heber were charged forty cents for water per lot—a lot usually measured one acre—while those concerned with farming were assessed only seventeen cents per farm acre for the same water.26

The differential continued throughout the remainder of the nineteenth century. At a mass meeting held in 1889, the board of trustees of the Wasatch Canal Company suggested to all present that the water tax assessment for lucerne lands be taxed at twenty cents per acre and city lots be assessed two and one-half times that of lucerne lands.

In the last quarter of the nineteenth century the Wasatch Canal Company involved in larger irrigation projects which required special financing. Important sources for supplementary capital were two Heber owned companies. A. Hatch and Company, a general mercantile establishment, was one such source of capital. Hatch had established a number of successful enterprises and through positions in and out of the church, had been able to accumulate what was in local terms a great deal of wealth.

A second major source of money was J. R. Murdock. Like Hatch, J. R., as he was "affectionately" called, had amassed a substantial fortune. To further

26 Ibid.
enable J. R. to become more involved with the economic development of the valley, he established a development company with himself as the primary stockholder and president. The Wasatch Real Estate Development Company's objectives were:

... to sell, lease, mortgage and in every manner deal in water, water rights, reservoir and canal systems ... [and] to buy, sell, hypothecate transfer accept and deal in stocks of other corporations, companies and individuals including bonds, notes, mortgages, and all evidences of indebtedness. ...\(^2\)

These two companies and several others became increasingly involved with the development and control of water in the county, remaining the primary source of capital until the establishment of a bank in Heber in 1904 and the advent of state and federal agencies in the twentieth century.

It is not known how much money either of the two companies invested in water in the county but it is known that several of the companies including the Wasatch Canal Company did obtain sums of capital from these two firms.\(^2\)

Increasing financial problems due to the Uintah lake project involved the local ecclesiastical leaders in the affairs of the Wasatch Canal Company and provides an example of the continued influence the church had on irrigation

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\(^2\) In Hutchins' "Mutual Irrigation Companies in Utah," supra., he suggests that large improvements in irrigation systems were financed by "short-term" loans from local banks, p. 30. However, in the case of Heber, the city did not possess a bank until 1904. It therefore, seems likely that people such as Murdock and Hatch acted as lending institutions in the county until the Bank of Heber was established in 1904.
What for the period were heavy investments through a series of legal difficulties, the company incurred an indebtedness of $1,654.49. The problem was how to pay off this sum. Apparently the board of directors and the members in the company failed to reach an agreement on how to solve this dilemma. The problem was raised at a high council meeting in Wasatch Stake in 1893. As usual, these and other church meetings were used as a forum in which to solve problems within the community.

Speaking at the high council meeting, President Abram Hatch asked the different bishops if they would not try to, "... use your influence and also vote for it to get a tax assessed at the next annual meeting for the payments of these accounts." Several of the high council men in attendance were opposed to President Hatch's interference in the Wasatch Canal Company's affairs. John McDonald stated that he was opposed to the Uintah lakes project in the first place. He continued by stating, "... he did not want to be obstinate [sic] in the matter and he would do as this council should decide though it should be against his feelings." The high council meeting adjourned without a final decision.

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29 Hutchins, supra. pp. 28-29 and Thomas, supra., pp. 78-82 both state that in many instances the Church would offer financial assistance to local irrigation companies either directly or through Zion's Savings Bank and Trust Company. However, in Heber the Church failed to aid the irrigation companies in financial matters until the depression when the Church offered to assist in several projects in the valley.

30 Heber East Ward, Wasatch Stake, "Reservoir Stock and Account Book," Ms Church Historian's Office.

31 Ibid.
The problem continued. President Hatch called another meeting of the high council and bishops to see if there was a way in which to solve the growing financial problem of the company. This time he asked the bishops and high councilmen to use their influence in passing a tax assessment to pay off only 75 percent of the debt which apparently was satisfactory to the lenders. The proposal by Hatch was agreed to by the high council and bishops.

Local Church Influence Persists

The Mormon Church continued to influence the finances of water development. The church also influenced the adjudicative process during these years. An example of this influence was exhibited at a High Priests meeting held March 30, 1883. Henry Clegg, member of the Wasatch Stake High Council and a trustee and watermaster for the Wasatch Canal Company, asked how he should deal with individuals withdrawing water from the canal without proper authority.32 The real issue raised by Clegg was whether the culprits should be brought before the secular courts or the local church officials.33

Bishop Forman in the meeting responded:

In a meeting in Salt Lake in which President John Taylor was present Brother Taylor put the motion before

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32 Church of Jesus Christ of Latter-Day Saints, Wasatch Stake "High Priesthood Quorum Minutes, 1879-1887," MS Church Historian's Office, pp. 111-112.

33 The question raised by Clegg may have been a reflection of apprehension of the legal system. The Poland Act was passed in 1874 strengthening the 1862 law transferring civil, criminal, and equity cases to federal judges in Utah Territory.
the meeting that anyone going to the law before the ungodly in regard to water should be cut off from the church which was sustained by all present. 34

Some in attendance at the church meeting in Heber agreed with what was said in Salt Lake. Others replied that perhaps a man should be redressed by the proper legal authorities. The issue raised by Clegg remained unsettled. Nevertheless, the threat of spiritual redress continued to be felt in the county through such discussion inside of church meetings.

Farmers and the Ontario Drain Tunnel

During the 1880's agricultural production in the territory was stimulated by a number of developments. One of the local stimulates was increased mining activities in Park City. This activity necessitated constructing a tunnel to relieve the deepening mines from increased amounts of water.

Plans for the tunnel were completed by mid-summer of 1887. Estimated at a cost of $400,000, it had a projected length of four and one-half miles and would enter the mountain at the 1,500 foot level. 35 The tunnel site was chosen three miles east of the Ontario Mine in Wasatch County. Camp Florence, named after the first lady to visit the tunnel, was soon established near its' portal.

34 "High Priesthood Quorum Minutes," supra.

Later the camp's name was changed to Keetley, after John Keetley the superintendent of the project. 36

Work at the tunnel was initiated on August 27th, 1887. In 1891 it was reported that the water force from the partially completed tunnel was so strong that it ripped up many of the railroad ties inside of the tunnel. It was estimated that there was over 20,000 gallons of water per minute flowing from its portal. 37

In a trustee meeting held in December of 1887, chairman Henry Clegg of the Wasatch Canal Company called to the attention of the board the possibility that the Ontario Mine drain tunnel might be a good source of water for the company. He suggested that they, "... ought to be on the alert and secure the right of the water that would flow from it." 38 Clegg's proposal was reiterated by President Abram Hatch at the same meeting. 39 However, it took seven years before the Wasatch Canal Company and R. C. Chambers of the Ontario Mining Company reached an agreement allowing the company to utilize water from the tunnel. Consumating its agreement to use tunnel water in 1894, the Wasatch Canal Company eventually shared this water with Midway and several other irrigation companies. 40 However, the water gained from the tunnel provided only

36 Ibid., p. 72
37 Ibid.
38 "Minutes of the Wasatch Canal Company," p. 47.
39 Ibid.
40 See Chapter V.
short term relief. With demand growing, the search for more water was continued by the company.

Uintah Lakes and the Wasatch Canal Company

The first week of August 1889, a meeting was called by the board of the Wasatch Canal Company to present a plan to develop untapped water in the Uintah Mountains which could be used late in the growing season when it was needed most. 41

Other companies including the Charleston Irrigation Company, and the Midway Irrigation Company were invited to join in the project. After much discussion, it was agreed that the Wasatch Canal Company would receive one-half of the water, Charleston and Midway receiving one-sixth each, the remaining one-sixth going to other interested parties.

At the meeting, John Crook made a motion that organization be established to regulate and control construction of the reservoirs. Based in part on Crook's suggestion, a company was verbally formed late in 1889. Called the Provo Valley Reservoir and Irrigation Company its objectives were to supply water to each of its member companies from cooperatively constructed reservoirs in the Uintah mountains. Indications are that the Provo Valley Reservoir and Irrigation Company was never formally established.

However, the new reservoir and irrigation company did function as if fully constituted. An executive board was constructed to direct the affairs of the company. Each participating company was represented. To meet the cost for the initial development, Bishop Duke, of the Heber East Ward and shareholder in the Wasatch Canal Company, suggested that an assessment be levied on each individual that would be benefitted by the water within the canal company. Acting on this, a levy of $1.50 was set for each city lot and $.75 per farm acre.42

Plans were put in motion immediately to begin construction and development of the lakes. It was suggested that two reservoirs be developed in the fall of 1889. Edward Buys was engaged as the chief engineer. His compensation was set at $4.00 per day with each company paying a pro rata amount of Buys' wages based on its share in the project.43 It was further agreed that an executive committee be established to direct the development and distribution of water from the lakes. The committee was composed of three representatives from each of the participating mutual irrigation companies and farmers from Woodland.

Work commenced immediately to transform Trial and Washington Lakes into regulated reservoirs. First, wooden headgates and pipes were placed at the

42Ibid. pp. 47, 49. It is difficult to determine how much money was raised through this initial levy because of the lack of accurate records concerning the acreage the lakes were to serve. One fact is clear, the Wasatch Canal Company did go into debt because of the Uintah Lakes.

43Ibid., p. 49.
base of the natural lakes to control the degrees of water. Second, the natural lakes were enlarged by building higher earth filled banks on top of the lakes' natural banks.

Each participating company assigned men and equipment to work during the fall of 1889. The Wasatch Canal Company supplied four teams of horses and twelve men to fulfill their assessment. It was also assessed $400 on wooden headgates and pipes. Henry Clegg and John McDonald, who represented the Wasatch Canal Company on the executive board of the reservoir and irrigation company, were authorized to borrow $400 to meet their first assessment. Collateral for the loan was the company's interest in the lakes as well as existing irrigation systems.

If the other companies furnished their portion of men and money as agreed upon, $800 and the time of eight teams of horses and twenty-four men were expended on the lakes in the fall of 1889.

Sometime the following spring, the reservoir company met with disaster. The two partially completed reservoirs were washed out in the high spring runoff. The farmers possessed little if any knowledge concerning the snow pack in the high Uintah's and knew little about constructing reservoirs. To further add to the fledgling reservoir company's difficulties, a legal battle was instigated by the residents of Salt Lake Valley. Their argument was that dating back to the

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44 Ibid., p. 51.

45 Ibid.
settlement of Great Salt Lake Valley they possessed a valid claim to the Uintah lake waters via the Provo River, Utah Lake, and the Jordon River. 46

The disaster at the reservoirs coupled with the legal difficulties put a financial strain on many of the Heber Valley farmers. However, most were willing to renew their efforts in developing the lakes at the head of the Provo although it was necessary to go outside the county to obtain additional financial support.

The additional financial support was found and developed by J. R. Murdoch. He was able to persuade a number of farmers and other interests in Utah Valley to back the Heber Valley farmers in their effort to win the right to the lakes. In return for their financial support, Heber agreed to share its prospective claim on the lake water with the Provo group.

A company was formed to unite the efforts of the Heber and Provo interests. By 1910, the legal difficulties over the lakes had been cleared and the Provo Reservoir and Irrigation Company was ready to begin construction and development of the lakes. Because of President J. R.'s leadership in obtaining the necessary funds to legally fight the people of Salt Lake, he was chosen to direct the renewed efforts in the lake developments. He along with Jesse Knight, Ed Luce, and Dr. George Brimhall, (the latter three representing the Provo interests) became the first board of directors for the Provo Reservoir and Irrigation Company. Under their direction construction was finally renewed.

46Salt Lake City, et al., v. Timpanogos Irrigation Company. #269 (1908).
The following is an account described to this author by H. Cardwell "Carty" Clegg of the first work force assigned to work at the Uintah Lakes.

On the 20th of May, 1910, three teams and about a half dozen men left for the reservoir sites from Heber. David A. Broadbent was the pusher for the first group of men. Others in the first party included, Elijah and David Hicken, Ed Perkins, John Day, myself, my father, and several others.

Our first endeavor was to construct a suitable road to the reservoir sites. Beginning in May we commenced to work on the road. It began at the Steward Ranch. The route for the road required the removal of large boulders and a number of fallen and dead trees. The mosquitoes were so dreadful that men were assigned to keep away the mosquitoes from those working on removing trees from the path of the road. As men removed the trees by the use of a two man cross-cut saw, two other men stood with pine boughs swatting the pesky insects.

At one location a bridge was constructed over Boulder Creek (now known as the North Fork of the Provo River). It took us until the 27th of June, 1910, to reach Trial Lake. The road which we built was designed to carry about a ton of freight. Once the road was completed, one additional project had to be accomplished before the actual work could begin at the lakes. For several days after our arrival at the lakes, we worked for the forest service cleaning old trees from the tributaries of the North Fork of the Provo and performing other conservation work in the area. Once this was completed the work on the lakes went forth with full force.

The mosquitoes continued to present serious problems for us at the lakes. Some of us including John Day and myself sought a means of escaping from the insects. We proceeded to build ourselves a small raft to float out onto the lake were we hoped we might be relieved from the insects. As we reached near the center of the lake, the raft overturned dumping us into the icy cold water. We had to swim to shore to

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47 A letter to the Forest Service from Joseph R. Murdock, President of Provo Reservoir Company and Director of the Timpanogos Irrigation Company writes: "We desire to cooperate with you in constructing the road and telephone line, as these improvements should be of much value to the Forest Service." 23 November 1909.

48 In a letter dated June 20, 1910, J. R. Murdock asked Mr. W. J. Pack, Uintah Forest Reserve Supervisor if the farmers will be allowed to use rock, earth and timber for the construction of the dams, road, bridges, and cabins. A day later, J. Carl Allred, Acting Supervisor writes to J. R. Murdock stating that they will be allowed to use all material at hand except that a special permit will be needed for cutting timber.
put on dry clothes. Once on shore we proceeded to rid ourselves of the wet clothes. Our naked bodies provided perfect targets for the blood sucking insects. Once again we were forced into the icy cold waters of the lake. Because of the cold water, we were at once forced to return to land where we again were subject to the mercy of the mosquitoes.

The bites on us were so serious that it prevented us from sleeping in the prone position that night. We therefore, wrapped ourselves in blankets and stood surrounded by three camp fires.

The mosquitoes were so thick that they would often darken the skies. The next morning it was decided that we would pull out and return to Heber. 49

Undaunted, a second and larger work force left from Heber shortly after the 24th of July 1910 when it was hoped the mosquitoes would have completed their breeding cycle.

Each of the lakes Trial, Washington, and Wall were assigned a crew of men, horses, and a superintendent. Each crew consisted of about twenty-five teams and a contingent of men. Comer Thronton was pusher at Wall Lake; John H. Clegg was boss at Washington Lake; and William Murdock was the supervisor at Trial Lake. Edward Clyde replaced Edward Buys as the superintendent for the entire project.

A meeting was called shortly after the arrival of the farmers at Washington Lake. The first decision was made as to what kind of pipe should be placed at the base of each of the reservoirs. It was agreed to use steel pipes.

Carty Clegg was appointed to haul the first sections of pipe to the reservoirs. Each section measured sixteen feet. It took Clegg several days to make the trip from Heber with each section.

After construction was completed a man was hired to tend the reservoirs during the summer months. In the early 1920's Carty Clegg was hired as water-master for the lakes and spent over fifty summers at the lakes regulating, and performing minor repairs. He was also required to make several trips to the lakes late each winter to measure snow fall and calculate the spring runoff. He in turn was required to file his report with the state engineer's office.  

The development of the Uintah lakes, involvement with the mining interests, and improved irrigation and agricultural techniques were some of the events which aided in the development of irrigation in the county and to several of the mutual irrigation companies discussed above.

Mining near the turn of the century became a major element in the development of irrigation in the county and in particular for one mutual irrigation company, the Midway Irrigation Company. For a closer view of the role mining had with the development of irrigation and the Midway Irrigation Company, we turn to the next chapter.

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50 The State Engineer's Office, created in 1897 by the State Legislature. Among other things, was required to keep records of snow fall, water content, and water flow for each of the drainage systems within the state. Clegg states that he used skies, and later an early version of a snowmobile to travel to the lakes.
CHAPTER V

FARMERS AND MINERS

As with the case with other irrigation companies, the major thrust for the establishment of the Midway Irrigation Company was to acquire water which could not be obtained on an individual basis. Furthermore, it was hoped that an association of farmers in the form of a mutual irrigation company would stimulate cooperation in the development of irrigation in the community of Midway.

The establishment and growth of Midway's mutual irrigation company is a reflection of strong individualism. Many of the problems which arose in Midway's cooperative irrigation efforts were due to individualism, which remains deeply implanted in the Midway Irrigation Company today. However, in other instances, this characteristic was an incumbrance to the growth and development of irrigation.

This chapter will be concerned with the interplay of individualism and cooperative interest as manifested in the establishment and development of the Midway Irrigation Company.

Early Contentions over Water

Strong elements of individualism were reflected in the earliest development of irrigation in Midway. Most early canals and ditches bear the names of farmers who dug them for their own use. Ditch names such as: the Epperson,
Kummer, Shelton, Bunnel, Huffaker, and Gurney reflects the independence of each. These and later ditches utilized several streams flowing from nearby canyons and the numerous hot and cold springs scattered throughout the settlement. As new land was opened, the canals were extended by individual farmers to meet agricultural needs.

These early ditches were also the mainstay for households, individual gardens, and corraled livestock. Apparent in the utilization of small ditch system is a strong preference for personal action as contrasted to cooperative effort. ¹

It is therefore not surprising that feuds developed over the upkeep of the ditches as well as how water should be distributed. Water conflicts often spread to other sectors of society. Most of the community life pivoted around the church. Consequently, church meetings became a forum in which to discuss the community's problems including water. John Watkins, for example, in a priesthood meeting voiced his fear of rising conflicts over the availability of water. He urged Bishop David Van Wagoner, "to attend some of the water meetings and pour a little oil on the troubled waters."² It was further reported that, "some of the brethren were interested in going to [the] law regarding the thing and spend money to sustain lawyers. . . ."³ Others felt those wishing to see water

¹Alma Huber, private interview held in Midway, Utah, March 1, 1972.
²Minute book of the Midway Ward, Transcribed by John Huber, in the possession of Alma Huber, Midway, Utah.
³Ibid.
disputes "taken to the law" should be advised that they "would lose the spirit of the gospel." ⁴

John K. Wintsch and John Huber reported that they had visited the whole district and had, "found some feelings [concerning water] and it seemed hard to reconcile them, as one party manifested a spirit of hatred which was hard to overcome." ⁵ Wintsch further added:

[We] found one case which [we] could not settle, as the matter was in such a condition as to make it impossible to adjust the water. One party had no standing in the church . . . and would not recognize any decision of the bishop. ⁶

John Watkins advised those involved in water disputes, . . . not to go to [the] law, but listen to the counsel of the priesthood and establish peace among us in accordance with the law of the church. I am willing to leave my affairs to the judgment of the priesthood but would rather do anything in the world than go to [the] law with my brethren. ⁷

The meeting ended with a short sermon dealing with the water problem.

What does Sutherland or any other lawyer know about our affairs. They set us a fighting each other and take our money. We should not have any hard feelings among [us] and not go to [the] law with each other, for the Lord forbid it. We can settle these matters among ourselves, without troubling Pres. Hatch or the apostles. The men who will go to [the] law will lose both money and perhaps, finally their standing in the church. The Lord [has] not given us means to spend in lawsuits with our brethren. We know this. Let every man who holds

⁴Ibid.

⁵Ibid.

⁶Ibid.

⁷Ibid.
the priesthood, a teacher, advise for peace and good will among
the people. 8

But church bonds not withstanding, Midway farmers were not dissuaded
from their hostilities towards each other and water disputes continued to grow
in number and intensity. It was realized by some that one possible solution would
be for the community to organize itself into an affiliation to regulate and control
all public water resources.

Midway Irrigation Company Organized

Peace and the removal of deep rooted bitterness through cooperative
effort came only gradually for Midway. Movement towards better times began
in the 1880's when a number of farmers owning land along the foothills west of
Midway jointly constructed a small canal bringing water from Snake Creek.
The cooperation enjoyed in the construction of the West Bench Ditch was the
first step towards community effort in the development of irrigation in Midway.

Beginning in May 1887, further evidence of a cooperative spirit was
evident in a series of water meetings held to discuss the formation of an irriga-
tion association. 9 A. J. Alexander was called to act as chairman and Attewall
Wootton was sustained as secretary. James B. Wilson made a motion and was
seconded by Moroni Gerber, "that the organization be incorporated into a 'solid
body' under the private incorporation act," of 1880. 10 It was carried by a vote
of sixty-six farmers in favor and eight against.

8 Ibid.
10 Ibid.
Nine months later the articles of incorporation along with the names of 128 subscribers were filed with the county clerk in accordance with territorial law. The purposes of the new company were to distribute water to the stockholders; divert water from Snake Creek; make and maintain canals, ditches, and "necessary appurtenances;" to build reservoirs around Midway, especially at Brimhall Lake; and to build a canal from the Provo River to Midway.

Several safeguards were incorporated into the articles of incorporation. One of the most important dealt with annual assessments which could not exceed ten percent of the company's total valuation in any one year. There could, however, be a higher assessment with a majority vote by the stockholders for that purpose.

The first two "elections" of the Midway Irrigation Company officers were unusual compared to the standard method used by other irrigation companies. At a meeting called to select the first officers for the company a committee was formed to nominate people for the office of directors. Sidney H. Epperson, W. J. Andrews, Fred Remund, Edwin R. Bronson, and Ulrich Probst met as the nominating committee with instruction to select only seven names to fill the vacancy of seven directors. The body of stockholders were asked to simply ratify the selections made on their behalf by the nominating committee. Directives notwithstanding, the stockholders refused to ratify the names placed before

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11 Wasatch County, Incorporated Records, "Midway Irrigation Company."

12 Midway Irrigation Company Book, pp. 4-8. See also Wasatch County Incorporation Records.
them. They required that a "more even distribution of officers from the various ditches" be nominated placed before them.\textsuperscript{13} The second round of nominations was approved by the stockholders. James B. Wilson, W. J. Andrews, Sidney H. Epperson, John U. Buhler, Elijah Alder, Charles I. Bronson, and B. Mark Smith were "elected" as the first board of directors for the Midway Irrigation Company.

The following year the mode of election was modified. Several of the stockholders believed that they had no real voice in the selection process. Samuel Hair, in particular, demanded that the nomination and election of officers be more democratic and open. Charles I. Bronson and others who were in power objected to Hair's proposal. However, Hair's suggestion took hold with other stockholders. To placate the rising efforts of Hair and his followers, a compromise was worked out. Two names were placed on the ballot by the selection committee for each vacancy on the board of directors. The compromise gave the stockholders a greater choice in the selection of officers, yet maintained a degree of control by the board of directors.

It is interesting to note that article six of the articles of incorporation did not accurately spell out how the election of officers was to take place. It simply read: "...there is to be elected from the stockholders 7 board of officers."\textsuperscript{14} Gradually, the nomination of directors fell into the hands of all stockholders.

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\textsuperscript{14}Ibid., pp. 4-8.
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Shortly after the company's organization a water and land survey was conducted by the company to determine who had valid claims to irrigation water in Midway. Each farmer submitted his claim to land and water to the irrigation company. Each claim was investigated by the company to determine the accuracy of each individual farmer's claim.

To assure appropriate utilization of water, the bye-laws stated that each share of stock:

"... shall entitle the holder to the judicious use of the water for one acre of land or one town lot and domestic use, so long as it does not conflict with the accrued rights of other stockholders."\(^{15}\)

John Murri is an example of how this was accomplished. Murri filed with the company claims to several different water sources. His first claim was to part of the water from the Gerber Spring. He stated that as early as 1881 he had used water from the spring to irrigate three-fourths of an acre of farm land. Because of his extended beneficial use of it and because his use did not interfere with others' water-rights to the spring, the company recognized his claim as a primary water right. For other claims held by Murri the company granted only secondary water shares. From Snake Creek he was given secondary water to irrigate thirteen acres and two city plots. He was also granted secondary water-rights to water from the Provo River.

Midway being a bi-lingual community, problems arose within the irrigation company over language. German speaking farmers asked that all proceedings

\(^{15}\)Ibid., pp. 8-13.
and company documents be translated. At first the request was refused. However, it was quickly decided that there should be a farmer appointed to act as official translator for the irrigation company and that all company documents be translated into German. John U. Buhler was sustained to this position. A translating committee consisting of two German speaking farmers, two English, and a farmer who spoke both languages was organized to translate all company documents. Godfried Buhler, Conrad Abegglen Sr., Ulrich Probst, Charles I. Bronson, and David Van Wagonen Jr., acted in this capacity.

The establishment of the irrigation company did not entirely eliminate friction between Midway farmers. One of the earliest crisis was how to manage and distribute water originating from different sources. In an early board of directors meeting, there were two proposals for controlling the ditches. One was to maintain the status quo permitting those utilizing the water from each of the ditches to govern it for themselves. The other proposal was for greater consolidation and direction by the company. In April 1888 a compromise was worked out between the two proposals. It was decided that several watermasters acting under directions from the board of directors be selected to distribute water from the several irrigation ditches. Chris Burgener was hired at $40.00 for the irrigation season to distribute water from Pine Creek, Mahogany Springs,

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16 From the census records of 1880 listing Midway's foreign born and comparing similar last names with the original subscribers in the Midway Irrigation Company, approximately seventy farmers were born in Switzerland who were original subscribers to the irrigation company.

and all ditches above the Gurney Ditch which derives water from Snake Creek. John Clayburn was hired for the same amount to regulate water from Thompson's Hollow and all ditches below the Bunnel Ditch. Charles Gurney was paid $55.00 to regulate and distribute water from the Gurney and Bunnel ditches as well as water from the Provo River.

**Outward Expansion**

As demand for water grew, new sources of water were needed to meet demands from all sectors of the community. One solution to the problem was for the irrigation company to investigate other possible sources of water outside the community. One such possibility was to develop the lakes situated between Midway and Park City.

In January 1888 a surveyor was hired "to survey the outlet of Cunningham's Lake with the view of draining the lakes to increase the flow from it." However, Elijah Alder and James B. Wilson reported that the survey was not necessary because of the impracticality of the project. They suggested that the company proceed with the development of Lake Brimhall located near Cunningham Lake. Accordingly, plans were prepared to develop Lake Brimhall.

Prior to the organization of the irrigation company, several farmers from Midway had done some preliminary work at Lake Brimhall. At the April 1888 meeting, the directors appointed James B. Wilson to investigate developments which had already taken place at the lake. Later in the month Wilson

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18 Ibid., pp. 21-22.
reported to the directors that the lake along with Evans Lake, both located in Pine Canyon north of Midway, could be profitably utilized.

The development of the two lakes partially filled increased water demands.

The remaining source which they turned to was the Provo River. A number of farmers living along its banks had used the water for their use but there had been no utilization of it by a large portion of Midway because of the lack of a delivery system.

At a board of directors meeting in September 1888, Charles I. Bronson, Elijah Alder, and James B. Wilson were appointed to make a preliminary survey for a river canal. In December the three reported that the river canal was a possibility but that it would have to begin further up river than originally intended. They suggested that the canal begin a half mile below the Wasatch Canal diversion dam—near the present River Road bridge—and follow the foothills southwestward to Midway. The three further suggested that the natural channel of Snake Creek could eventually be utilized as part of the river canal thus reducing costs.

In the spring of 1889, after plowing and seeding had been completed, work was begun. William Buys from Buysville was hired to make a detailed survey. Unforeseen problems soon arose. It was necessary to obtain right of way across a number of farms. Most farmers agreed to permit the canal to cross their land in exchange for a fair compensation and/or a share in the canal. They realized the importance the canal would have on the rest of the community. However, a reappearance of individualism was seen in the refusal of some farmers to permit the canal to pass through their lands or for the company to purchase a
right of way at a fair price. Neither the farmers nor the company were willing to make concessions. To overcome the impasse, it was agreed that an arbiting committee be established. It was further agreed that neither would reject the decision handed down by the arbiting committee.

The issue and even the canal itself increased in importance in the summer of 1889. In June, Midway agreed with the Wasatch Canal Company to send representatives to the head of the Provo River to investigate the feasibility of developing several lakes in the Uintah Mountains. 19

James Wilson, Theophilus Robey, Charles I. Bronson, and B. Mark Smith were appointed by the board of directors to accompany representatives from other valley irrigation companies to investigate the proposals made by the Wasatch Canal Company. On their return, the four Midway men presented to the directors a favorable report concerning the development of Wall, Trial, and Washington Lakes.

No time lost in searching for a man to represent Midway in the development of the lakes and to act as the assistant superintendent for the project. Midway further agreed to supply a proportionate share of manpower, money, and material for the development of the lakes. There was some heated discussion between the different irrigation companies over how much water each would receive, correspondingly how much each would spend in money, manpower, and material. Originally Midway wanted a third of the water from the lakes but had to settle for one-sixth. 20

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19Ibid., p. 59.

20Wasatch County Canal Company Minute Book, L.D.S. Church Historian's Office, Salt Lake City.
To meet their share, Midway levied several assessments throughout the summer and early fall of 1889. In August the company levied an assessment of 20¢ per farm acre and 40¢ per city lot and garden. However, funds thus raised proved inadequate. Later that fall a vote was taken by all stockholders to levy a 100 percent assessment on all unpaid stock. The assessment could be paid in cash and up to one-fourth in labor. The heavy expenses involved in the Uintah projects resulted in a shortage of finances to continue the Midway Irrigation Company's river canal.

In February prior to the Uintah Lake washout, Midway Irrigation Company agreed to sell additional shares in the company and that these new shares would have claim to lake water and water derived from the Provo River via the river canal. To prevent a monopolistic ownership of river and lake water, no more than forty shares could be purchased by anyone individual. Further, those wanting new stock had to undergo a land and water use survey conducted by the irrigation company.

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22 Generally when farmers joined an irrigation company they would pay only a portion of the value of stock. The balance was paid over a period of time. To obtain all available capital resources, the Midway Irrigation Company's board of directors decided to collect all outstanding money due to the company from the remaining amounts of unpaid stock.


24 Ibid., pp. 76-77.
The survey growing from this had greater impact than originally anticipated. It uncovered a number of misuses and neglect of water claims among established water users. One such case was with the Bonner brothers. For seven years they had neglected to use water for beneficial purposes. Consequently, they were refused additional water from the river canal or lakes. Other cases required harsher actions, "... according to the laws of the land." 26

The river canal decreased in importance in the spring of 1890. Several of the reservoirs that were built at the head of the Provo River collapsed because of spring runoffs and poor dam construction. The results to the Midway Irrigation Company was a partial retraction to development of water resources in the nearby Wasatch Mountains. Moreover, it was to be twenty years before any further development in the Uintah Mountains could take place because of legal difficulties arising over the water-rights to the lakes. In 1910 the legal difficulties between Heber Valley farmers and Salt Lake Valley water users was settled and Midway joined in a larger effort to develop the lakes. 27

**Socio-Economic Rivalry over Water**

Midway's envolvement in the Uintahs along with the construction of the river canal had cut the wrappings of isolation. No longer did the Midway

25Ibid., pp. 165-167.

26Ibid., pp. 109-111.

27See Chapter V for details of the development of the Uintah Lakes.
Company reflect its earlier introverted self-reliant character found in each individual farmer but it was willing to extend itself in its efforts to secure more water. The failure of the Uintah lakes was a hard psychological and economic blow to Midway. This was reflected in a partial return by the company to an inward self-development of water resources closer to Midway. However, even these sources were not totally isolated from outside influences. On the contrary, the Wasatch Mountain Lakes became a major source of outside involvement which would carry a bitter struggle for water between agricultural interests of Midway and mining interests of Park City to Midway's back door.

In the past, efforts to use and control water by gentile mining interests had met stiff resistance from the Mormons. The traditional policy for the use of water was primarily aimed at agricultural use. However, with increased mining activities and the demand for more water, mining interests saw the Wasatch Mountain lakes as a possible source of additional water and moved to exploit them about the same time as Midway turned its attention back to the same sources. Fortunately, steps were taken to find a solution to the conflicting demands before a serious confrontation developed.

Four days before Christmas in 1894, the board of directors was summoned by Attewall Wootton, president of Midway Irrigation Company, to work out an accord suitable to miners and farmers alike. Representing the Ontario and Daly Mines was R. C. Chambers. He presented a proposal which would permit both interests to obtain water, in effect, to have its cake and eat it too. He suggested that the mining interests pipe water from Silver, Silver Islet, and Brimhall Lakes. For their interest in those lakes Midway farmers would receive a
portion of water from the Ontario Company was digging near Keetley. Chambers' proposal was a windfall for most Midway farmers. At the same time, the mining interests could acquire a convenient source of water for steampower and domestic use. Although the mines had a great deal of water deep inside the tunnels pumps had not yet been developed to lift large amounts of water from deep depths. Moreover, the water from the Ontario Drain Tunnel could not be used in Park City because the drain tunnel and the water flowing from it was at a lower elevation and separated by part of the Wasatch Mountains.

A special stockholders meeting was called to vote on Chambers' proposal. Chambers was asked to attend and was bolstered with the presence of J. R. Murdock, prominent church man, who favored the Chambers proposal.

Briefly Chambers' plan was as follows:

The size of the stream at the tunnel is 5 feet by 22 inches deep. The mining concern seeks to exchange the water for the lake water which will be used to run machinery and for domestic purposes. The company is offered twice as much water as obtained from the lakes. The company is also prepared to build a ditch from Snake Creek to put water into the Wilson Ditch. I want you to be safe. Suppose the tunnel runs dry, you then would draw water from the lakes. 28

As it stood, the plan seemed to provide ample water and adequate safeguards. Chambers even offered to foot the expense for constructing irrigation canals to convey the tunnel water to Midway. In other words, the Ontario Company was willing to underwrite much of the cost for the river canal and several smaller canals in Midway.

Still the farmers were apprehensive and discussion was slow and cumbersome. John Huber was appointed to translate the proceedings into German for the benefit of the German speaking farmers. Finally an agreement was hammered out and a committee consisting of James Wilson, A. J. Alexander, and William Coleman was established to work out the details with Chambers. The three farmers reported the following agreement:

We the undersigned committee appointed submit the following proposition to wit: That in lieu of the privilege of using the waters of Brimhall, Island, and Silver Lakes, situated in the so called White Pine Canyon, now owned and used by the Midway Irrigation Company, the said Ontario Company, deliver at the head of their ditch, intersecting with the Provo River one third of the flow of water from the Ontario Drain Tunnel, which in no case shall be less than double the amount of water taken by the Ontario Silver Mining Company for the above said Lakes last named amount being delivered at the mouth of the Provo River Ditch, flowing into the so called Gurney Ditch. Further: That the said Ontario Silver Mining Company be to the expense of making, enlarging or changing all ditches necessitated by the proposed exchange of water, or in lieu thereof, a sum sufficient to indemnify the stockholder, which in our judgment should be at least $5000 to be paid to the Midway Irrigation Company.²⁹

A second committee was established to determine the expense of enlarging the ditches mentioned in the agreement. This committee took little time in reporting its findings. A majority report signed by Theophilus Robey, William Coleman, and Charles I. Bronson estimated that $4,000 would be sufficient to expand the ditches. A minority report submitted by A. J. Alexander and David L. Van Wagonen was also read. They felt that $4500 would be required. Both reports were presented to the stockholders on December 24th. One-hundred and

²⁹Ibid.
fifteen stockholders representing 3,183 shares accepted the minority report and signed the agreement worked out between Chambers and themselves.  

Work was begun in 1895 to enlarge the river ditch with Charles I. Bronson as supervisor and A. J. Alexander acting as general surveyor.

As work progressed fears that the Chambers agreement was not all that it should have been led to a growing controversy within the company. Several farms were located above the river ditch and were thus unable to receive any benefits. Further, the company had traded a major source of several farmer's water. To satisfy the demands of the latter, several proposals were made. Theophilus Robey reported that several possible reservoir sites could be developed in Pine Canyon to meet the company's obligations to deliver water to the farmers not under the proposed Ontario tunnel system.

Based on Robey's report, the Midway Irrigation Company joined the Midway's newly organized culinary water company (Midway Water Works Company) to develop Dairy Lake, Grass Lake, Grass Island Lake, and a fourth unnamed lake. However, the lakes failed to supply sufficient water for both uses.

The water problem became increasingly complex. James B. Wilson became more impatient with the company in their attempts to solve his and other farmers water situation. Wilson accused the Midway Irrigation Company of "selling him and the others down the river" in favor of the majority of stockholders.

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30 Ibid.

31 Ibid.
The circumstance created by the water exchange raised serious legal and ethical questions. Could a majority of stockholders obtain additional water at the expense of a minority of stockholders? If the company was correct in exchanging water for the benefit of a majority of farmers, was it the company's responsibility to supply additional water to those who lost water because of the exchange? Wilson and the others were not content in raising questions, their crops and livelihood were at stake.

In lieu of a company sponsored solution, Wilson offered several of his own. His most important proposal was that the company either build a canal from Snake Creek to his farm thereby providing him with needed water at no expense to him or the others found in the same situation, or the company should be willing to purchase his farm at a fair market price.

Wilson was supported in his efforts to obtain a just settlement by several members whose land was not effected. On two separate occasions Sidney H. Epperson stated he felt that several of the established farmers--Wilson and the others--had been robbed of their water rights because of the exchange of water with the mining interests of Park City. Charges and counter-charges were made but no immediate solution was reached.

A year later Wilson brought the question up again. A committee was organized to investigate possible solutions to the problem. However, its proposals were not solutions to Wilson's lack of water but rather for obtaining

\[32\text{Ibid., pp. 298-299.}\]
more water for the rest of the company. Even at this writing a solution has not been reached.

Other problems arose because of the agreement with the Ontario Company. Increasingly, quarrels occurred between Midway Irrigation Company and the Wasatch Canal Company--later the Wasatch Irrigation Company--over the amount of tunnel water each was diverting. In part this was caused by inaccurate measuring and faulty diversion gates. In an attempt to solve this the Midway Irrigation Company hired William Buys in 1898 to legally secure water which they believed rightfully belonged to them. The hiring of Buys and his subsequent investigation brought the feud to a head. As a supplier of tunnel water, the Ontario Mining Company was also drawn into the controversy as was J. R. Murdock who represented other farmers who were also using some of the tunnel water via the Wasatch Canal. Out numbered three to one and apparently in the wrong, the Midway Irrigation Company was forced to reduce its diversion of tunnel and river water.

The tunnel water arrangement was not the only water contest between the two economic interests. Prospecting for new ores continued southward along the Wasatch Mountains. One area of possible outcroppings was in Snake Creek Canyon, a major watershed of Midway. In 1897 a mining claim--Utah Star Mining Claim--was filed near Levigneur Spring at the head of Snake Creek Canyon. Concerned for its watershed, the Midway Irrigation Company initiated several meetings with mining representatives between 1899 and 1902 to persuade them to halt their mining activities in the canyon. However, the reports from

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33 Ibid., pp. 260-262.
the mining claim were favorable. Prospecting and mining continued in the
canyon. Consequently, several injunctions were filed to halt further mining
activities near sources of water, particularly at the Levigneur Spring.

Two events took place in 1902 which in part stimulated the farmers to
pursue further legal actions against mining activities in the canyon. The Utah
Star Mining Claim--better known as the Steamboat Tunnel--had driven a tunnel
deep inside the mountain. Near the 1,000 foot mark, the miners--some of whom
were also farmers from Midway--hit an underground reservoir of water at a
place in the tunnel called Buehler Switch. The mining company believed that
they had discovered a new source of water which could be leased to farmers in
Heber and Utah Valleys.

However, when water at Buehler Switch was released a number of springs
including the Levigneur Spring went dry. Midway farmers claimed that the
Steamboat Tunnel water was Levigneur Spring water which was being diverted
via the tunnel. Not suprisingly miners rejected this contention.

Moreover, the Daly West Mining Company, part owner in the Steamboat
Tunnel, filed a counter suit against the Midway Irrigation Company for diverting
mine water at the mouth of Snake Creek. Earlier the Provo Reservoir Company
had made arrangements to lease the tunnel water. Midway's continued use of
the Steamboat Tunnel water eliminated a source of revenue for the mining com-
pany as it eliminated a source of water for the Provo Reservoir Company. As
a result of Midway's actions, J. R. Murdock representing the reservoir company,
joined with the mining company to file legal actions against the Midway group.
In August 1910, a legal decision was rendered from Provo by Judge Christenson. After a lengthy and tense inquiry, the judge ruled that the mining company was the rightful owner to the water emanating from the Steamboat Tunnel. Judge Christenson further ruled that Midway Irrigation Company be prohibited from diverting water from Snake Creek except for three and one-half second feet out of the fourteen second feet flowing from the tunnel's portal.

Not surprisingly, Midway was deeply dissatisfied with Judge Christenson's decision. Ben Hair, watermaster for the Midway Irrigation Company, was instructed by the company to continue diverting water from Snake Creek. In the meantime, the Midway Irrigation Company filed an appeal with the State Supreme Court which reversed the ruling in 1915.

Sometime between 1912 and the reversal of the Christenson decision by the State Supreme Court, an unusual confrontation took place between several farmers from Midway and the miners involved with the Steamboat Tunnel. Ben Hair, acting upon instructions from the board of directors, continued to divert water from Snake Creek. This left farmers in Provo without water which the court had granted to the mining company.

Representing the Provo farmers, J. R. Murdock, along with Oscar A. Kirkham, J. A. McIlwee, and O. N. Friendly, representing the mining interests from Park City were determined to put a halt to the illegal actions of the Midway Irrigation company.

34 Mountain Lake Mining Company vs. Midway Irrigation Company, et. al., Utah Supreme Court No. 2583, 149 Pac 929 (1915).
35 Ibid.
Unclear and conflicting accounts veil the confrontation which took place between Ben Hair and Johnny Sulser, representing the Midway Company, and J. R. Murdock and the others from the Provo mining interests. Sulser was carrying a twelve gauge shotgun with him. Presumably the encounter between the two divergent forces was at the mouth of Snake Creek Canyon near the Glade Wilson farm. Hair was in the process of removing one of the headgates permitting a flow of water to enter into one of the irrigation company's ditches. Someone in the Murdock party told Hair and Sulser that they were tampering with water which the court ruled belonged to the mining company which in turn was being leased by the Provo Reservoir Company. Hair and Sulser responded with a threat that any tampering with the headgates would bring serious consequences. Even though Hair and Sulser were out numbered, Sulser had a balancing force—the twelve gauge shotgun.

Murdock believed that the shotgun was a bluff and that Sulser would not use it. However, Sulser wasn't about to let Murdock and the others "steal" water from the farmers of Midway. In the angry conversation that ensued, Sulser told Murdock and the others that he would blow their heads off if they tampered with the irrigation company's headgates. Ben Hair assured the miners

36 In my investigation of the incident and the picture found on page 102 I have found some variations concerning the confrontation. I have taken the liberty of trying to combine the different versions into what might be the logic and most accurate recurrence. Those interviewed concerning the incident are: Mr. and Mrs. Clark Bronson, Mr. Alma Huber, Mr. and Mrs. Ernest Kuhni, Mr. Guy Coleman, Mr. and Mrs. Earl Sulser, and Mr. Sam Burgi all of Midway. Mr. Fred Kuhni of Heber.
Ben Hair (left) and Johnny Sulser (right), show down with J. R. Murdock and the others over disputed Snake Creek water.*

* The picture was discovered several years ago in the Judge Mining Company Office in Park City. It was subsequently given to Mr. and Mrs. Ernest Kuhni of Midway, Utah.
that Sulser meant business and would do just that. Oskar Kirkam not wanting any blood shed, least of all his own, persuaded Murdock and the others that at least for the time being they ought to heed the actions and words of the two farmers. 37 Several who knew Johnny Sulser believed that he would have made good his word if Murdock and the others tried to change the course of the water. 38

Of course, the action taken by Sulser and Hair did not legally secure the disputed water. For this purpose the Midway Irrigation Company hired Dr. James E. Talmage, a noted geologist and a member of the Twelve Apostles, to gather data to support their claim in the case before the State Supreme Court. 39

On March 11, 1915, the Supreme Court rendered its decision. Through evidence and facts collected by Dr. Talmage and several legal technicalities, the State Supreme Court reversed the lower court's decision against the Midway Irrigation Company. Two Supreme Court Judges wrote:

37 Mr. and Mrs. Clark Bronson, Mr. Alma Huber, private interviews held in Midway, Utah, March 2, 1972 and March 1, 1972. Mr. and Mrs. Ernest Kuhni, private interview held in Midway, Utah, February 8, 1972.

38 Mr. Alma Huber, private interview held in Midway, Utah, March 1, 1972, Mr. and Mrs. Ernest Kuhni and Mr. Fred Kuhni, private interviews in Midway, Utah, February 8, 1972, and Mr. Guy Coleman, private interview held in Midway, Utah, March 1, 1972.

39 There may have been other reasons for obtaining Dr. Talmage other than his knowledge of geology. There may have been some attempt made by the irrigation company to counter the influence of President J. R. Murdock with the influence of Apostle James E. Talmage. In either case, through the influence or evidence of Dr. Talmage, Midway was successful in reversing an earlier court decision.
We have carefully examined the record and have been unable to find any substantial evidence tending to show that there has been an appreciable, or any, increase in the flow of the water in Snake Creek since the year 1900, but we find an abundance of evidence of the most conclusive character showing that there has been no increase in the stream.\(^\text{40}\)

The court ruled the so called "new" water found by the mining company was part of the watershed of the Levingneur Spring and other tributaries of Snake Creek which Midway had been beneficially using for over forty years. J. R. Murdock and his clients were not left high and dry. The Supreme Court granted to the Provo Reservoir Company all excess water over eight second feet claimed by the Midway Irrigation Company.\(^\text{41}\)

This was not the last confrontation between Murdock and the Midway Irrigation Company over Snake Creek water. Shortly after the Steamboat Tunnel was started, a second tunnel further down the canyon was begun. Its purpose was two fold. First, to relieve some of the water from the mines in Park City similar to the Ontario Drain Tunnel. And second, it was hoped that by chance new veins of ore might be found. In this situation Murdock saw another opportunity to secure water for the Provo Reservoir Company. The course of events paralleled the earlier confrontation with the Mountain Lake Mining Claim and the farmers of Midway.

In 1911 the Midway Irrigation Company agreed to permit the Snake Creek Mining Company to "float" water from the tunnel in the Snake Creek

\(^\text{40}\)Mountain Lake Mining Company vs. Midway Irrigation Company, 149 Pac. 929 (1915)

\(^\text{41}\)Ibid.
channel provided it would not diminish the flow of Snake Creek because of its mining activities or alter the flow of the creek in any way. 42

The Midway Irrigation Company was apparently unable to keep close tabs on activities at the Snake Creek Tunnel and in time realized that the water flow down Snake Creek had been altered. The Snake Creek Tunnel hit pockets of water which increased and then decreased the "normal" flow of water causing some damages to farmers' headgates and creating an abnormal flow of water. The mining company tried to take advantage of the "new" water they believed they had found by leasing it to those who needed it. The Provo Reservoir Company was once again the market for a cheap source of water.

In July 1912 a time when water became more important to farming activities, the Midway Irrigation Company demanded the restoration of the normal and unaltered flow of Snake Creek water. 43 The mining company was caught in a delemma. On the one hand they had promised the tunnel water to the Provo Reservoir Company. On the other hand, they had agreed that they would not alter the "normal" flow of Snake Creek. Six days before the agreement was to be signed between Murdock and George Lambourne, representing the mining company, Midway entered a formal protest with the water commissioner of the Upper Provo, George Barzee. John Probst and William Coleman were sent to Provo to find an amenable solution to the problem. Probst and Coleman reported


that the mining company was willing to give the Midway Irrigation Company first claim to the tunnel water. Midway stockholders refused to lease from the mining company which they rightfully believed was theirs.44

To settle the issue, Murdock and the mining company (which was incorporated in Delaware) filed a legal suit against the Midway Irrigation Company. This time, the case ended in the United States Supreme Court. On January 15, 1923, a precedent setting decision was handed down in favor of the Midway Irrigation Company.45 Like the State Supreme Court decision, the United States Supreme Court ruled that the mining company had not found any "new" water but had simply altered existing water conditions by the development of a tunnel.

Conclusion

By 1910 the Midway Irrigation Company was again willing to join with other irrigation companies in developing other sources of water including the Uintah Lakes. A number of events had transpired which aided in directing the development of the Midway Irrigation Company and irrigation as a whole. The need for water was a primary factor for harnessing the unique character of the individual farmer into a sturdy and resilient mutual irrigation company. The general trend towards mutual cooperation did not over shadow a dominate individual character found in Midway. Johnny Sulser's actions,

44 Ibid.

repeated court cases, and a pugnacious determination to hold on to what was theirs were collective examples of continued self-reliance prominent in both the individual and communial character of Midway.
CHAPTER VI

WATER, INDIAN LAND AND THE FEDERAL GOVERNMENT

The two recurring themes in the development of irrigation in Wasatch County are self-reliance and cooperation, both found in the cultural heritage of Heber Valley farmers. Over the years several elements impinged upon these two characteristics, namely: environment, human associations including the church, mining interests, and for the town of Daniels, which is our object here, direct contact with the federal government at a relatively early time.

In this chapter both themes will be examined in light of one localities effort at irrigation development. Self-reliance was spawned out of Daniels' critical need for new sources of water. Cooperation, which had been manifested since early times in the establishment of irrigation companies, was in effect, the prelude to a prolonged interaction with the federal government which saw the latter react at various times with hostility, passiveness and helpfulness.

Daniels Creek Irrigation Company

As discussed briefly in Chapter II, Daniels was an extension of a smaller settlement, Buysville. Daniels provided an easy access to water from Daniels Canyon.

Shortly after the settlement of Daniels a loose association of water users was established under the law of 1865 to regulate distribution of water from
Daniels Creek and to develop other sources of water.\(^1\) The latter requirement was partially satisfied by an exchange in which Daniels provided aid to the Charleston Irrigation Company, which still had some claim on Daniels Creek water, in return for "exclusive right to the water of Daniels Creek forever."\(^2\) Prompted by a continuing need for water which was accentuated by a severe drought in 1879 and by the provisions of the act of 1880 the Daniels Creek Irrigation Company was reorganized in the spring of 1880.\(^3\)

On April 15 a new set of articles of incorporation and bye-laws were signed.\(^4\) According to the articles, one of the purposes of the company was to purchase from the Charleston farmers water rights to Daniels Creek.\(^5\) It was

\(^1\) Notebook of the Daniels Irrigation Company Minutes Book, possession of the Daniels Creek Irrigation Company's Officers, p. 9.

\(^2\) Ibid., p. 20.

\(^3\) Concerning the severity of the drought, Governor George W. Emery wrote:

"This past season has been one of unusual drought and in consequence the crops of this part of the country are light; possibly one-half the usual amount of grain, vegetables, fruit, and hay have been produced here. During last winter very little snow fell in this Territory; the results have been a short supply of water and meager crops. . . . Horses, sheep, and cattle have suffered. . . . Mountain streams went dry early in the season, and farmers have realized this year for the first time that they have more land under cultivation than they have available water in the country to irrigate. George W. Emery's "Report to the Secretary of the Interior" October 29, 1879. Governor George W. Emery File, Utah State Archives.

\(^4\) Daniels Irrigation Company Minute Book, pp. 25-30.

\(^5\) Ibid.
agreed by both parties that the price for the water rights was $930.00. The purchase of the water rights was carried out in several ways. Work on the Charleston Canal by Daniels farmers was one such method. Through this method, the company garnered $241.83 in work credits which was applied to the purchase price and some water shares in the Charleston Canal. As other farmers in Daniels joined Daniels Creek Irrigating Company, they too participated in securing Daniels Creek water by working on the canal.

A second method in obtaining Daniels Creek water rights was through cash payments to the Charleston farmers. Approximately $636.36 of the $930.00 was paid by this method.

To provide an equitable distribution of Daniels Creek water, the articles of incorporation of the Daniels Creek Irrigating Company allowed a maximum purchase of thirty shares by any one farmer in the company. Furthermore, to insure proper and beneficial use of water obtained from the Charleston Canal and the newly acquired Daniels Creek water, the company’s articles included a clause permitting it to take steps to insure the proper use of water.

In April 1887, several amendments were added to the articles of incorporation. Their purposes were to enhance the company’s water rights to Daniels Creek and to the Charleston Canal. These alterations actually proved not to be

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6Ibid.
7Ibid., pp. 95-96.
8Ibid., pp. 95-98.
9Ibid., pp. 25-30.
10Daniels Creek Irrigation Company Minute Book, pp. 25-30.
amendments but rather were a new set of articles of incorporation. The company's name was changed to the Daniels Creek Irrigation Company. The company maintained the same objectives: "To buy from Charleston the water rights to Daniels Creek according to the rights of the earlier claimants . . . . [and] To control, regulate and if need be change the flow of the creek for better irrigational purposes." 11

Prior to the new amendments, efforts were underway within the company to expand its use of Daniels Creek by constructing a small canal to serve the lower farm areas of Center Creek. The canal called the "Oaks Ditch" eventually became a major distributor of basin water. To facilitate equitable water distribution from the creek and the new canal, William Broomly was hired by the company as watermaster for the 1887 irrigation year. His wages were twenty-five bushels of wheat. 12 Based on 1894 average wheat prices, his salary equaled $11.56.

Reinforcements in the company's purposes and objectives were continually made through the amending process. The second decade of the twentieth century brought a drastic alteration in the Daniels Creek Irrigation Company. In 1922, it along with the two other irrigation companies serving Daniels were consolidated into one company. One of the companies involved was the Strawberry Canal Company.

11 Wasatch County, Utah, Incorporation Records, "Daniels Creek Irrigation Company, April 22, 1887."

Strawberry Canal Company

With an influx of willing settlers to turn more soil and a sharp drought in 1879, water became more critical to Daniels. The drought having demonstrated just how precarious their water claims were, Hyrum Oaks, his son John, and William S. "Billy" Bethers decided to find additional water on their own. Their quest carried them to the Uintah Basin. By the early 1880's a good deal was known about the Uintah Basin and the other areas of the Colorado Drainage System. Such acquaintance as they had led Oaks and Bethers to believe that they could find means to bring water from it to Heber Valley.

Water for the Strawberry Canal, as their system came to be called, was diverted below the confluence of the Strawberry and Mill Bee creeks. The canal followed the contours of the canyon in a southwesterly direction reaching the summit of McGuire Canyon, tributary of Daniels Canyon. From there, the farmers planned to use the natural channels of McGuire Creek and Daniels Creek to float the basin water to Heber Valley.

Sometime in the fall of 1879, the three men began their work on the canal system. Realizing that they would be unable to construct the canal alone, they soon sought help among their neighbors and by the fall of 1881 they had enlisted support from forty-four farmers. The following spring plans were made to increase the effort to complete the canal system. This early phase of the project was completed in 1882 thereby translocating water from the Colorado drainage to the Great Salt Lake drainage system. Six years later in March 1888, Oaks and the other farmers joined in organizing a company--the Strawberry
Canal Company— to protect their interests and to better serve each other. A written set of articles of incorporation were drafted based on previously made verbal agreements. The Strawberry Canal Company was the first successful attempt in the county to divert water from the basin to Heber Valley, and indicates the continuation of strong individual initiative in water development.

In 1892 the canal company took additional steps to secure high water from the Basin for its use in the late summers. Sven Bjorkman, president of the Strawberry Canal Company in 1892, suggested to the board of directors that a meeting be called to determine the stockholders' feelings and attitudes concerning building reservoirs. Earlier, Bjorkman and several others had selected three reservoir sites in the Uintah Basin which they believed might be suitable for constructing reservoirs. The plans and specifications were presented to the stockholders for their consideration. The first reservoir site was located on Hobble Creek. Plans called for a twenty-four foot high dam with a lake covering an area two-hundred and thirty-one feet long. The second site was located on the right fork of the Strawberry with a lake 1050 feet long. The third site located near the second would have a dam forty-seven feet high and three hundred and eighty-seven feet long.

A vote of 197 for and 62 against was made at the stockholders' meeting for the project. Furthermore, the stockholders urged the company to

\[14\] Ibid.
\[15\] Ibid.
\[16\] Ibid.
commence immediately the construction of the three reservoirs. Walter S. Plummer was appointed supervisor for the reservoirs construction. Wages were set at $2.00 per day for a single hand and $3.00 for a farmer and a team of horses.  

Later in the year, the stockholders met again, this time to vote on an amendment to the articles of incorporation legally authorizing the company to build reservoirs. By a unanimous share vote of 250 1/2, article three of the company's constitution was amended. However, nothing was actually accomplished on the reservoirs by the company. Ensuing problems with the federal government prohibited the company from developing the reservoirs. Nevertheless, several farmers in the company became impatient with the company and the federal government and decided to build their own high water reservoir in the Uintah Basin. Sometime between 1892 and 1903 Bishop P. H. McGuire and John Anderson constructed a reservoir in the basin they called the "Highland Reservoir." Federal Government eventual involvement in the affairs of Wasatch County's irrigation development was by virtue that part of Wasatch County and later Duchesne County were part of the Uintah Indian Reservation, which the government was custodian of Indian lands.

In 1903 the company moved quietly to obtain the Highland Reservoir. Bishop McGuire and John Anderson were charged by the company with illegally

17 Ibid., pp. 137-138
18 Ibid., pp. 140-142
19 Ibid., pp. 152-153.
storing water which "rightfully" belonged to the company. Not wanting to arouse additional problems with the federal government, the two farmers and the cooperative agreed to quietly resolve the problem.

The company proposed that a three man arbitration committee be established to settle the dispute. However, John Anderson refused the company's offer of arbitration by committee. After some further negotiations between the two farmers and the company, it was decided that President William Smart, President of Wasatch Stake, would decide the settlement. Through President Smart's efforts, the company agreed to purchase the Highland Reservoir for $250.00 and an undisclosed amount of unissued capital stock in the company. The two farmers agreed, quit claiming their "ownership" of the reservoir to the company. 20

The turn of the century saw increased problems with the federal government over the company's "rights" to the basin water. The Strawberry Canal Company was not alone in its battle with the federal government. A younger company, the Willow Creek Canal Company also became enmeshed with the federal government over rights of way for a canal and diverting water from Indian land.

20 Ibid., pp. 162-164.
The success Oaks and Bthers had in developing the Strawberry Canal, encouraged three other farmers in the late 1880's to undertake a similar system to divert water from the Basin to Heber Valley. The leaders in this new effort, James Lindsay, Andrew Lindsay, and George Muir accomplished a greater engineering accomplishment by driving a 1,000 foot tunnel.

Like its predecessor, the Willow Creek Canal was initiated by strong willed individuals who were willing to expand their own time and effort in securing for themselves additional irrigation water. Their individual efforts coupled later with the establishment of a mutual irrigation company ultimately paid off.

The Willow Creek Canal began its diversion of Basin water at Willow Creek located lower in Strawberry Valley. From there, the canal crossed Bjorkman Creek via a wooden flume and following the sides of the canyon proceeded a short distance in the canyon crossing Strawberry Creek by way of another wooden flume. By the time the canal neared McGuire Canyon on the Basin side of the mountain, it was estimated to be two hundred and fifty feet short of traversing the summit thus prohibiting a free flow of water.

Prompted by an urgent need for water and efforts already invested, the Willow Creek Canal Company concluded to drive a tunnel through the mountains separating Heber Valley and the Uintah Basin.

Edward Buys was asked by George Muir and the Lindsay brothers to make the survey for the tunnel. When completed this survey permitted work
to go forth at both ends of the tunnel. Furthermore, the plans called for the tunnel to be large enough to permit a man to walk through it.²¹

Sometime around 1890, George Muir and Andrew Lindsay commenced work on the east side of the mountain. At the same time, James Lindsay began work on the tunnel's west end. Most of the work was carried out during the winter months after most agricultural activities had ceased. For protection from the cold and deep snow, they also built themselves a small cabin near the tunnel.

Most of George Muir's and Andrew Lindsay's work was in solid rock. Thus they used jack hammers, hand drills, and of course, Giant Powder. James Lindsay met with a different kind of problem. Much of his tunneling was in mixed composite of loose rock and dirt. To prevent cave-ins, he had to do extensive timbering in the tunnel. In this he was hampered by the inaccessibility of timber, the nearest available supply being over the summit on the Uintah Basin side of the mountain. Shoring and timbering deterred progress on otherwise easy tunneling.

By February 1892, George Muir and Andrew Lindsay had completed 129 1/2 feet and James Lindsay had tunneled in 158 feet.²² It was estimated that 460 feet of tunnel having yet to be completed. The remaining 250 feet of the 1,000 foot excavation were comprised of open cuts at either end of the tunnel.

²¹Bennett Lindsay, Private interview held in Heber City, March 30, 1972, and Mr. and Mrs. Curtis Muir held in Center Creek, March 22, 1972.

With this showing of success, increased support came from interested farmers in Daniels. In February 1892, forty-seven of them along with George Muir and the two Lindsays formed a canal company. Its objectives were:

First, to construct the Willow Creek Canal in Strawberry Valley at a distance of about five miles; second, to construct reservoirs in Strawberry Valley; third, to regulate the diverted water; fourth, to continue negotiating with users of the Daniels Creek natural channel to allow the company to divert water from the channel at various locations; and fifth, to construct canals and laterals in Heber Valley.²³

The Willow Creek Canal Company awarded the Lindsay brothers and George Muir the contract to complete the tunnel and prepare it for use.

The summer of 1892 saw other preparations being made by the new company. Two smaller canals were constructed in Heber Valley to distribute basin water to members of the company. One, was located in a section of Daniels called "Swede Town," which parallels Daniels Creek. The second canal ran northwest from the canyon and today is found near U.S. highway 89.

At the February meeting of the company, James and Andrew Lindsay reported that favorable progress has been made at the tunnel during the previous winter. According to Andrew, 412 feet had been completed at the east end of the tunnel.²⁴ Only about fifty feet remained to be completed.

²³Wasatch County, Utah, Incorporation Records, "Willow Creek Canal Company, 1 February, 1892."

²⁴Willow Creek Canal Company Minute Book, pp. 27-28.
The excitement felt by the farmers hearing this report was, however, somewhat tempered by a growing uncertainty concerning their "rights" to the Basin water. Shortly before 1893 meeting, William Buys reported to the board of directors that he had received word from Joseph L. Rawlins, territorial delegate to Congress, expressing the opinion that a special act of Congress would be needed to legalize the actions taken by both the Strawberry and Willow Creek Canal companies. The farmers of the community were aware that the land from which they were diverting water was not public domain, but was controlled by the federal government for the Ute Indians.

To obtain rights to this water, two lawyers, Edward Buys and A. C. Hatch were hired by the two companies. In the meantime, the Company continued to develop the tunnel and the diversion system in the Basin in hopes that Hatch and Buys would be successful.

On December 16, 1893, a report was submitted by William Buys and Preston H. McGuire regarding the expenditure and progress made on the Willow Creek irrigation system. In part, the report stated:

The total length of the tunnel is 844 feet, 524 feet of which is made under the contract between your company and George Muir, and the balance of 320 feet was run under a contract between a committee appointed previous to the organization of your company and James Lindsay, Andrew Lindsay, and George Muir. We beg leave to report the tunnel completed and in good condition and recommend that the same be accepted by the board. 25

The initial cost for driving the tunnel amounted to $3,241. Additional expenses including timbering, cleaning, cutting approaches, and other incidentals

25Ibid., pp. 41-44.
added $418.02 to the cost of the tunnel. 26 Of the total $3,659.02, $1,291.02 was expended before the formal organization of the Willow Creek Canal Company. The balance was appropriated by the canal company. 27 The total expenditure of the company by February 1894 for the construction of the tunnel and the canals both in Heber and in Strawberry Valleys was $8,334.50. 28 The final work done on construction of the canal and the tunnel plus enlargements of the diversion canal in the basin was completed by the first of February 1895. Between the report rendered by Buys and McGuire in the winter of 1893 and the annual stockholders meeting held in February 1895, an additional $2100 was spent by the company in payments for work performed on the canal and tunnel. 29

After its completion the tunnel continued to be a source of difficulty. Each spring it required a thorough cleaning to remove debris brought in by the flow of water as well as debris fallen from inside the tunnel. A number of times cave-ins in the tunnel compounded problems. The damages in the tunnel by cave-ins resulted in the diversion canal being washed out in the Basin. As a result extensive timbering was also necessary each spring.

In the spring of 1900 midst growing controversy with the federal government, the Willow Creek Canal Company undertook a major refurbishment of the

26 Ibid.
27 Ibid.
28 Ibid., p. 47
29 Ibid., p. 64.
tunnel. William and Zed Bethers were awarded the contract to supply 1330 feet of red pine for timbering and 2,000 feet of red pine for lagging. The cost per foot of wood for timbering was slightly less than two cents and the cost per foot of wood for lagging was slightly less than two and one-half cents. This was the last major improvement on the tunnel until 1931 when plans were prepared to improve the tunnel by putting in pipe.

Coping with the Federal Government

The confrontation between the federal government and the two canal companies in Daniels is unique aspect of Heber Valley's experience in developing water. It is the first time that a segment of the irrigation interests in the county had direct dealings with the federal government. Furthermore, the likelihood of interference from the government resulted in closer cooperation between the two Daniel companies than might otherwise have been possible. This cooperation eventually led to the consolidation of the two and a third irrigation company serving Daniels.

The first evidence of cooperative effort between the two companies was the hiring of William Buys and A. C. Hatch to secure rights to the basin water and to obtain rights of way for the canals on the reservation. Each company agreed to pay half the legal costs in the hiring of the two attorneys. The first

30Ibid., p. 146.
31Ibid.
bill was for $131.00. According to the agreement, the Strawberry Canal Company paid $65.00, the remaining $66.00 was paid by the Willow Creek Canal Company. 32

In February 1895, Buys issued a progress report. He wrote that he had made an application to the federal government for a right of way for both canals on the reservation. His proposal was based on an Indian Appropriation Act of March 1, 1889 which authorized the Secretary of the Interior, "in his discretion," to grant rights of way for the construction of canals, laterals, ditches, and dams on Indian reservations. Prospects under this act seemed stymied when Joseph L. Rawlins wrote Buys stating that it would take a special act of Congress to permit farmers to divert water from the reservation. However, Rawlins informed Buys that a precedent for such legislation existed in a provision made on the Umatilla Reservation in Oregon and was optimistic that an authorizing act could be passed for the Daniels farmers. But such legislation would have to wait until the next session of Congress.

The Umatilla legislation approved in February 1891, granted the Umatilla Irrigation Company a right of way to construct and maintain a canal,

$$\ldots$$ with water sufficient for purposes of agricultural and domestic uses and irrigation under such rules and regulation and on such terms as the Secretary of the Interior shall prescribe; and shall not divert or diminish the volume of water in said streams or exhaust either of them, so far as to impair vested rights, or to hinder, or prevent the occupants of lands on said reservation the full enjoyment

of said streams either for power, irrigation, or domestic purposes. 33

Shortly before Buys submitted his progress report to the two canal companies, rumors spread in Daniels that the federal government was contemplating opening portions of the Uintah Indian Reservation to white settlers. This prospect stirred some anxiety that the Daniels Companies would lose their unsecured claims to other whites moving in to take up homesteads. These apprehensions were alleviated in 1894 by a report from Frank J. Cannon who was by this time Utah's territorial delegate to Congress:

It is the opinion of our attorney that in the event of the reservation being thrown open for settlement before the bill passes, the continuous use of the water for years, a history of which is on the records in Washington will take precedence of any other claim. 34

However, concern over this question was premature for no action was taken to open any part of the Uintah Reservation until 1905 when President Theodore Roosevelt issued a presidential proclamation opening portion of it for settlement. 35

Meantime, Daniels farmers pursued the Umatilla precedent seeking legislation securing their claims and giving them a right of way across the reservation. In January 1895 another bill was introduced in Congress on their

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34 Strawberry Canal Company Minute Book, p. 54.

behalf. However, like previous attempts this bill failed to pass the House of Representatives. With its defeat, efforts to obtain legal entrance to the reservation subsided for several years.

Lacking legal authorization, the two companies continued to divert water from the reservation. They got by with this for a time but in 1902 they were challenged again. In June Acting Commissioner for the Office of Indian Affairs, A. C. Tonner, wrote to the Indian Agent at Whiterocks, Utah. Reporting that Cyrus C. Babb from the U. S. Geological Survey had recently completed an investigation of the Uintah Indian Reservation and there had discovered three canals being used to divert water from the reservation to Heber Valley. In his report to Tonner, Babb outlined the conditions and features of the three canals.\textsuperscript{36}

The first, called the Strawberry Canal, was three miles long with a capacity of 200 miners inches, its probable cost was estimated at $12,000.\textsuperscript{37} The second canal, the Willow Creek Canal, was seven miles long with a capacity of 60 miners inches, its cost was no less than $15,000. The Willow Creek system included a 1,000 foot tunnel estimated to have cost $3,000. The third canal, the Hobble Creek Canal, extended two miles with a capacity of 50 miners inches. The estimated cost for this canal was not reported.


\textsuperscript{37}A miner's inch is measured through an inch square orifice under a uniform and designated pressure.
Commissioner Tonner instructed the Indian Agent at Whiterocks to make an investigation into the authority or pretended authority by which farmers owning the three canals were diverting water from the reservation. Tonner further instructed the Indian Agent to determine if in his judgment these ditches upon the reservation should be allowed to remain open and the diversion of water continue or whether some action should be taken to stop the diversion of water from the reservation.38

Tonner also wrote that he felt that if there was no authority or just compensation to the Indians, that, "it would seem that these people, corporations should hardly be allowed to continue the diversion of the water. . . ."39

On July 1, 1902, H. P. Myton, U. S. Indian Agent at Whiterocks, wrote a reply to A. C. Tonner's inquiry. Myton wrote that neither the private individuals nor the companies involved in the diversion of water from Indian lands claimed to have any legal right to the water. However, he noted the irrigation companies did claim that:

... they [had] filed maps with the Interior Department some years ago, and Mr. Critchlow, who was then agent told them that if the department and the Indians did not bother them he would not do so.40

38 Letter from A. C. Tonner, Acting Commissioner of Indian Affairs, Washington, D.C., June 11, 1902, to the U.S. Indian Agent, Uintah and Ouray Agency, Whiterocks, Utah. Possession of Daniels Irrigation Company. Howard Duke, Heber City, Utah. All of the following correspondence are found in the Daniels Irrigation Company Research.

39 Ibid.

Myton continued:

I recommend if it is [at] all possible that you permit them to continue to use the water. I am sure that the water so diverted is in no way detrimental to the Indians, nor is it likely to be in the future. At the present time there is only one Indian family within fifty miles of any of the ditches. I think there is plenty of water left in the Strawberry Creek and I think all that will be needed to water land tributary to it. If we were to take this water away from these people it would ruin about eighty farmers.41

The Daniel farmers acted in good faith. But because of bureaucratic red tape and inaction by the government, nothing was done immediately to resolve the question and they continued to divert water. This period of inaction was short lived. In May 1903, a letter was sent to the Commissioner of Indian Affairs from Thomas Ryan, Acting Secretary of the Interior, stating: "Your attention is invited to the recommendations of the director, that no rights for taking water off the Uintah reservation be granted [or] permit[ed] . . ."42

Daniel farmers became deeply concerned with Ryans' contemplated action to prohibit their use of reservation water. Once again they appealed for political help, this time from Senator Reed Smoot, asking him to persuade the Secretary of the Interior to authorize use of reservation water.

On the home front, the legal representatives of the Daniels farmers approached the Indian Agency at Whiterocks for authorization to divert reservation water. However, their attempt met with little success. In a letter to

41Ibid.

42Letter from Thomas Ryan, Acting Secretary, U. S. Department of the Interior, May 21, 1903, to the Commissioner of Indian Affairs, Department of the Interior, Washington, D.C.
A. C. Hatch, Captain C. G. Hall, acting Indian Agent for the Uintah and Ouray Agency, Hall wrote:

I am not in the position to grant any concessions in regard to the continuance of the diversion of the water from the streams referred to and should I give such concession without proper authority from the Department I would be acting beyond my province. 43

Hall wrote further: "I am constrained to state that I will have to forbid absolutely the use of the water until such authority is had. . . ." 44

In response to Hall's letter, Hatch wrote the Secretary of the Interior asking him to cut through the red tape in Washington and obtain affirmative authorization for the Daniel farmers to divert water from the reservation. In his letter to the Secretary, dated April 7, 1905, Hatch reviewed the efforts that had been made by the Daniel farmers in securing water and their efforts to divert water from the reservation. Concluding his letter to the Secretary, Hatch wrote:

... that unless they are permitted to divert the waters pending the time before the restoration to the public domain of the said reservation, they will raise no crops this season, and some of them who have orchards will suffer irreparable loss by the drying up of ground and death of trees. . . . 45

43 Letter from C. G. Hall, Captain 5th Cavalry, Acting U. S. Indian Agent, Uintah and Ouray Agency, Whiterocks, Utah, April 4, 1905, to A. C. Hatch, Heber, Utah.

44 Ibid.

45 Letter from A. C. Hatch, Heber City, Utah, April 7, 1905, to the Secretary of the Interior, Washington, D. C.
On April 26, 1905, Hatch received from the Indian Agency at Whiterocks a letter containing a notification to all people along Daniels Creek, "not to put in crops this year because the water will be shut off and the diversion dams blown up." Hatch responded by sending a letter to Senator Smoot notifying him that although there had been previous threats to prohibit the farmers from using the reservation water, he felt this time the government meant business. He again pleaded with Smoot to aid their cause as it was becoming critical to the survival of many farmers in Daniels. Concluding his letter, Hatch indicated that there was no personal antagonisms between the Mormon farmers and federal Indian agents at Whiterocks. Rather the confrontation was with the federal government at the Washington level.

Sometime between a letter dated April 26, 1905, (informing Judge Hatch of the Agency's authorization to remove all vestiges of diversion dams), and a letter dated May 16, 1905, (from C. S. Carter, Indian Agent at Whiterocks, indicating that the Department of the Interior had decided to grant the Daniel farmers permission to divert water and maintain their canal systems), a contingent of U. S. Army Calvary was sent to destroy the diversion dams.

When the farmers received word from the Indian Agent via A. C. Hatch that this action was imminent, the stage was set for the confrontation between thirty mounted and armed soldiers and three unarmed but equally determined farmers.

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46Letter from A. C. Hatch, Heber City, Utah, May 3, 1905, to the Honorable Reed Smoot, Provo, Utah.
The following is an account of what took place when the two groups of men met at one of the diversion headgates.

The officer in command asked the farmers, "Is this the Strawberry Canal?" The three farmers replied that it was. The officer then ordered his men to dismount and stack rifles. He then ordered some of his men to remove the headgates from the diversion dam thereby shutting off the water to the Strawberry Canal. When this was accomplished, the order was given to unstack rifles and mount their horses. With little time wasted, John Lindsay Muir scurried down to the headgate and replace it in the diversion dam, restoring water to the canal. The officer replied, "It was my orders to shut off the water to the canal and I did." The soldiers turned and rode off.47

So ended the first and last physical confrontation between the farmers of Daniels and the United States Army.

The firm stand taken by the three and the long struggle through legal and congressional channels apparently softened the government's position. On May 16, 1905, Judge Hatch received a letter from C. S. Carter, Indian Agent at Whiterocks which gave the farmers the authority to use the water and to clean and maintain their diversion canals for a year. Carter wrote that Daniel farmers would be allowed to enter the reservation for cleaning the canals, but they were prohibited from enlarging or beginning new canals on the reservation.

In a letter dated the same day, Secretary of the Interior Ethan A. Hitchcock wrote to the Commissioner of Indian Affairs, informing him that he had instructed Captain Hall to permit the farmers to enter the reservation. Further, 47

47Interview held with Mr. and Mrs. Curtis Muir.
that this authority is merely a permission, under which no parties acquire absolutely no rights to the waters of any streams on the reservation, either at present or any future time. . . .48

The farmers had won their case for the 1905 irrigation year, but there remained the larger question of their right to the water.

Upon receiving instructions from Hitchcock, Hall wrote a letter to Hatch instructing him and the farmers to proceed with their plans of cleaning and repairing the canals. He further requested that Hatch supply him with the number of men that was to be involved, the length of time it would take to accomplish the task, and warned against, "engaging in any forms of prospecting" while on the reservation.

In compliance with Hall's instruction, Hatch wrote giving the information requested. The farmers were scheduled to begin cleaning the canals on May 28, 1905. It would take about thirty men two weeks to complete the work. Hatch also asked permission from Hall to allow a man to remain on the reservation during the irrigation season to repair minor leaks caused by squirrels and other burrowing animals. On June 3, 1905, Hall replied by stating that earlier authorization for the farmers to enter the reservation also included the authorization of one man to remain on the reservation for maintenance purposes. Hall requested that the man stationed on the reservation, "... keep in touch with

48 Letter from E. A. Hitchcock May 16, 1906, to the commissioner of Indian Affairs, Department of the Interior, Washington, D.C.
the troops and that he have in his possession some identification papers to show just who he is."\(^{49}\)

Hatch continued to push for permanent legal authorization for the farmers to have access to the reservation and the water. He wrote Senator Smoot asking him to make it known to President Roosevelt opened parts of the Ute Indian Reservation to white settlers. Some of this land was transferred to the control of the U. S. Forest Service. This meant that the Daniel farmers were required to deal with a new government agency in obtaining rights to the Basin water.

In May 1906 Hatch received word from Utah Senator, George Sutherland that he was preparing legislation to present to Congress, "... for the construction, use, maintenance and operation of public roads, highways, ditches, canals, and reservoirs on the forest reserves of the United States."\(^{50}\)

A cautious optimism was expressed by Sutherland regarding his bill. He wrote Hatch stating that the Forest Service might be opposed to it and if passed, the President might veto it. Furthermore, Hitchcock was opposed to the bill, but that he, Sutherland, would try some way of obtaining favorable legislation.

Shortly after 1906, a tacit agreement was obtained from the federal government to the permanent use of basin water.

\(^{49}\)Letter from Captain C. G. Hall, Acting U. S. Indian Agent, Uintah and Ouray Agency, Whiterocks, Utah, June 3, 1905, to A. C. Hatch, Heber City, Utah.

\(^{50}\)Letter from Senator Sutherland, May 26, 1906, to A. C. Hatch, Heber City, Utah.
This confrontation with the federal government was not the last. Rather it was the inauguration of future-positive actions by the federal government in aiding Heber Valley farmers.

The final chapter will concern itself with this positive action as well as pre-twentieth century involvement in water by the federal government.
CHAPTER VII
GOVERNMENT INVOLVEMENT IN WASATCH COUNTY

Territory and State Actions

As early as 1852 the influence of the territorial government was felt in local irrigation development. As discussed earlier, probate judges beginning in 1852 were an integral part in the development of irrigation in the territory and in Heber Valley beginning in 1858. In 1865 a territorial law was passed permitting farmers to organize into irrigation districts. The Act of Incorporate Irrigation Companies stated in part:

That upon the majority of the citizens of any county or part thereof, presenting to the county court that more water is necessary, and that there are streams or part of streams unclaimed or unused ... [it] can be of value to the interests of agriculture, the county court having jurisdiction may proceed to organize the county, or part thereof, into irrigation districts.¹

The act provided necessary tools to settle water disputes, defend primary and secondary water rights, and outlined bases for removal of water from individuals. A year later the territorial legislature added an amendment to the 1865 law extending the same benefits to those who had organized themselves into irrigation districts prior to the 1865 law.

In 1880 the territorial legislature replaced the 1852 statute dealing with the court's role in the management of water resources. The new law removed from the county probate judge control of water resources and placed it in the hands of elected county selectmen. The 1880 statute stated that the county selectmen should be ex officio water commissioners with authority to measure stream flow, to determine water claims, to record water certificates, and to distribute water accordingly. Furthermore, the 1880 statute provided a concrete definition of water classes. A primary water right was defined as unappropriated water used for beneficial purposes which had been used for a period of seven years.² A secondary water right was water which had been appropriated and used by primary water users for a part of a year, or when all excess water after determining it to be excess over a seven year period, could then be claimed as a secondary water-right.

The 1880 law permitted greater liberty for an individual to apply for a water use grant. No longer was the individual required to ask legal permission or post notices of his intent, but was simply permitted to divert water for beneficial purposes.

The 1880 act remained in effect until 1897. That year the State Legislature created the Office of State Engineer who was designated as the chief administrator for all water in the state. The 1897 law further defined the basis for

²Utah, Laws 1880 Chapter 20, Sec. 6 & 7. See also Wells A. Hutchins The Utah Law of Water Rights (Salt Lake City: State Engineer's Office, 1965) p. 36.
using water. In part the law read: "Beneficial use shall be the basis and the limit of all rights to the use of water in this state."\(^3\)

In 1903 and again in 1919 the state legislature adopted water appropriations statute. The latter law is the basis of Utah's present water policy and is contained in the Utah Code Annotated (1953). Moreover, the 1919 statute declared water the property of the state.\(^4\) The statute in effect reasserted the traditional Mormon doctrine that all water resources belongs to society and must be used for its benefit by those who, acting on behalf of society, is granted permission to use it.

**Federal Land Policies and Utah**

**Irrigation Development**

Indirectly, federal land policies influenced Wasatch County farmers' irrigation development. In 1862 the Homestead Act passed by Congress provided an opportunity by potential settlers to acquire tracts of land at relatively low cost. Moreover, the Homestead Act was an attempt to stimulate western settlement. However, as a means of giving individuals easy access to government lands the law had serious failures in the arid regions of the west.

Requirements stipulated in the act were in part a cause for the lack of interest in settling western lands. Those filing for land had to either file for

\(^3\)Utah, *Compiled Land Laws of the State of Utah*, 1897, p. 554.

\(^4\)Utah, *Utah Code Annotated (1953)* VIIB Title 73, Chapter 1.
one-hundred and sixty acres of surveyed land or a smaller acreage of eighty acres. One problem was that western land because of the unavailability of water or its inaccessibility was not conducive to orderly geometric settlement.

As discussed earlier concerning the development of the Wasatch Canal, the 1862 act provided an indirect means for the farmers of Wasatch County to obtain land through the Wasatch Canal Company.

After the Civil War, Congress again sought ways to encourage settlement of the west. In 1875 Congress passed a bill to aid in the settlement of Lassen County, California. It proved to be a success and in 1877 Congress passed the "Desert Land Act" which was an enlargement of the law of 1875. The Desert Land Act's scope covered all designated arid states and territories. The act permitted any citizen the opportunity to purchase arid land at a cost of twenty-five cents per acre with the provision that he conduct water onto the barren soil within three years of entry. The maximum amount of land anyone could acquire under this new law was one section or 640 acres. However, this new enticement met with little success.

The results of the Desert Land Act demonstrated to Congress that it would take more than cheap land to encourage settlement of public lands. However, it did indicate a growing recognition on Congress' part that land

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settlement had to be associated with local irrigation development. Nevertheless, it took several years before the federal government was willing to become actively engaged in the development of water in the west.

In the meantime, criticism arose within the executive branch of the federal government over western land settlement policies. Criticism took the form of a lengthy report submitted to President Rutherford B. Hayes and Secretary of the Interior Carl Schurz by Major John Wesley Powell.

Early in the 1870's Powell was granted funds from Congress to conduct topographic, hydrographic, and geological studies of the Intermountain West. Under his direction, several expeditions were carried out. Powell reported in his study a lack of understanding by the federal government concerning the conditions existing in the Arid States and the problems settlers were facing because of these conditions. He noted especially the need for a closer relationship between land development and water. Concerning water principles adopted by the federal government, Powell wrote:

The ancient principles of common law applying to the use of natural streams, so wise and equitable in a humid region, would if applied to the Arid Region, practically prohibit the growth of its most important industries. 7

Furthermore, the management of land and especially water was vital to equitable and proper development of the Arid States. Powell added:

The lands along the streams are not valuable for agricultural purposes in continuous bodies or squares, but only in irrigable tracts governed by the levels of the meandering canals which carry the water for irrigation. . . . Thus, practically, all value inheres in water, and an equitable division of the waters can be made only in a wise system of parcelling the Lands and the people in organized bodies can well be trusted with this right, while individuals could not thus be trusted.\textsuperscript{8}

In many respects Powell's suggestion resembled early Latter-Day Saint policies on the distribution and management of land and water which had been influenced by the geographic and climatic condition found in the Great Basin.

Powell suggested that the government adopt a land classification system based on the productivity and value of land as it is associated with water. This and other suggestion made by Powell remained dormant for several years.

Later, through the efforts of Carl Schurz, Secretary of the Interior and others, some of Powell's suggestions became the basis for government policies dealing with the development of the arid states. In 1894 Congress passed the Carey Act. Through its provisions, the federal government could donate up to 1,000,000 acres of public land to each state for the explicit purpose of reclaiming this donated land through the state's sale of these lands. As today, the federal government placed guidelines on the distribution of land and how money received from the sale of public lands was to be used by the individual states in reclaiming arid lands.

A year later, Congress passed another act aiding local reclamation development. The Reservoir Land Grant Act set aside public lands which could

\textsuperscript{8}Ibid.
be utilized by irrigation companies or canal companies in the storage and conveyance of water for irrigation purposes. 9

Although the above two federal acts had little direct impact on Wasatch County's development of irrigation, they did provide additional steps towards direct federal involvement in local irrigation projects.

As part of President Theodore Roosevelt's State of the Union message in late 1901, he included the following:

In the Arid States the only right to water which should be recognized is that of use. In irrigation this right should [be] attach [ed] to the land reclaimed and be inseperable therefrom. Great storage works are necessary to equalize the flow of streams. . . . Government should construct and maintain these reservoirs as it does other public works.10

The following spring Congress acted on President Roosevelt's message in the form of an early proposal. The Newlands Act, better known as the Reclamation Act of 1902, is the keystone of the federal government's involvement in local reclamation projects. As early as 1900 Nevada's Congressman, Francis G. Newlands and others pressed for a national reclamation policy. Much of the opposition came from eastern and midwestern farm states where farmers were fearful that farm prices would drop because of increased agricultural production in the arid states because of federally supported reclamation projects. Eventually, support for Newland's proposal came from eastern

9 Reservoir Land Grant Act. Statutes at Large, L, secs. 18-21, Vol. 28, p. 635.

commercial interests who saw a new market for their products and the support of President Roosevelt as indicated in his State of the Union message.

The Newlands Act of 1902 established a reclamation fund from the sale of public land in the arid states except for that land already set aside for public education. Money received from the sale of land would then be used to aid local reclamation projects. Under the act, homesteading continued with some modifications. Moreover, where it concerned money received from the sale of public land, the new law was retroactive to June 30, 1901. Repayment and the interest charged from money borrowed from the fund would eventually increase the fund whereby other reclamation projects could be funded. Utah took early advantage of the fund and in 1901 borrowed from it, $98,416.00 for local reclamation developments.11

The Newlands Act contained one other important provision. It established the Reclamation Service. The Reclamation Service was soon to play an important role in Wasatch County. Three important projects sponsored in part by the federal government have been established.

Bureau of Reclamation in Wasatch County

Shortly after the passage of the Newlands Act, State Senator Henry Gardner of Spanish Fork and John S. Lewis, while visiting the Strawberry Valley,

conceived of an idea to construct a storage reservoir on the Strawberry River for impoundment of water to be diverted via a tunnel to Utah County.

On December 15, 1905, after the establishment of the Strawberry Water Users' Association, Secretary of the Interior Ethan A. Hitchcock authorized the Strawberry Reservoir Project; setting aside $150,000 of federal money for initial work on the reservoir and a 3.7 mile tunnel. Begun in October 1906, the Strawberry Project's purpose was to divert impounded water from Strawberry Valley to Utah Valley through the Wasatch Mountains. The first irrigation water was delivered through the tunnel on June 27, 1915. The total cost for the project: 3.3 million dollars. ¹²

Although the Strawberry Reservoir is situated within the confines of Wasatch County it does not directly affect irrigation development in the county. It does show the foresight of George Muir and others concerning the value of basin water for the Wasatch Front and Heber Valley.

Outside of the county to the north plans were being made that provided an opportunity for Heber Valley farmers to acquire supplemental water. In the latter part of 1907 civil engineers Frank C. Kelsey and Willard Young made a preparatory investigation for locating a storage reservoir on the Weber River. The federal government became interested in the proposed project and in 1922

and in 1929 contracts for developing the project were made by the Reclamation Service and the Utah Water Storage Commission.

In 1924 engineers selected a suitable site for a dam and simultaneously proposed a nine mile canal be constructed above the reservoir to the Provo River via Kamas Prairie. The purpose of the diversion canal was to divert floodwater and excess water not needed for storage or required down stream be diverted to the Provo River where Heber Valley and lower river water users might be able to beneficially use the water.

The water users associated with the Weber River project eventually came to own Echo Reservoir except for the Weber-Provo diversion canal. The ownership of the nine mile 210 second foot capacity canal remained in the hands of the federal government. The canal was designed to be enlarged to carry more Weber River water when a storage reservoir could be built on the Upper Provo River. 13

As part of the Provo River project, Bates Reservoir was planned to impound the Weber-Provo diversion canal water and the Provo River. Some interest in the Weber-Provo diversion canal and the Bates Reservoir was exhibited by the Midway Irrigation Company and other Heber Valley irrigation companies. Midway farmers saw an opportunity to obtain additional water from the Weber River through active participation in the Weber River project.

However, the potential water rights obtained from the Weber were high water rights; what was needed was primary water rights in Midway and elsewhere in Heber Valley. Any empoundment at the Bates Reservoir was still a number of years away. Midway and the other Heber Valley irrigation companies withdrew their support for the Weber River project.

Beginning in 1931 a four year drought troubled parts of Utah. The drought reinforced a need to construct a reservoir on the Provo River. The Provo River Water User's Association was organized to win support from the federal government for the reservoir. On November 19, 1935, approval was made by President Franklin D. Roosevelt for the Deer Creek Project. Initial funding came from two sources; the Reclamation Fund and the National Industrial Recovery Act.

In December 1937 the Civilian Conservation Corps established a camp near Heber to prepare the reservoir site for construction. Actual work on the dam construction commenced in May 1938 and was completed in October 1941.

Several Heber Valley irrigation companies were asked to participate in the project. However, a majority of farmers in all of the companies that were asked rejected the invitation. Instead of becoming involved in federally sponsored reclamation projects, many Heber Valley irrigation companies opted for developing additional reservoirs in the Uintah Mountains near the head of the Provo River.

14 Midway Irrigation Company, Minute Book, pp. 110 ff.
In two of the three federally sponsored reclamation projects, Wasatch County mutual irrigation companies were invited to participate. However, strong self-reliance and independent character of a majority of farmers in the valley's mutual irrigation companies prohibited participation in the Weber-Provo Canal and the Deer Creek Reservoir.

There remains one other possibility which could supplement irrigation water for Heber Valley. Originally, a reservoir was planned on the Provo River near the Weber-Provo diversion canal. This reservoir site has since been replaced with another reservoir further down river at a place north of Heber called the Jordanalle. Not only would the reservoir store water from the Provo River and the Weber-Provo diversion canal, but it would also store water from the Ontario Drain Tunnel. Participation by Heber Valley farmers in the Jordanalle Reservoir would greatly enhance the agricultural production of the valley.

Conclusion

Wasatch County irrigation development has been a product of primarily two factors—cooperation and self-reliance. These factors as they have been involved in the development of irrigation often paralleled each other, sometimes being united. Throughout the latter half of the nineteenth century and on into the twentieth century, other factors, which in some cases were unique to Wasatch County, influenced these two primary factors which in turn was the basis for the development of irrigation in the county.

Chronologically, some of the other factors which in various ways influenced and modified the impact of cooperation and self-reliance as they
influenced the development of irrigation were: First, the social and religious posture of Wasatch County farmers. Second, the geographical location of the county and the availability of resources, particularly water. Third, the role of Probate Judges until 1880 when the direct control of water was removed from them. Fourth, the development of irrigation districts beginning in 1862. Fifth, the territorial legislature in 1880 legally permitting irrigation districts to incorporate under the general incorporation law of 1870. Sixth, greater state involvement through the establishment of the office of State Engineer. And finally, federal involvement beginning indirectly in 1865 with the passage of the Homestead Act, and directly in 1902, with the passage of the National Reclamation Fund and the subsequent establishment of the National Reclamation Service.

The adoption of these primary factors by the Mormon farmers in Wasatch County is unique in Western America's development of irrigation. Likewise, the institution of irrigation has had a deep and continuous impact on the lifestyle of the farmers located in Wasatch County and in the State of Utah.

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15For a lengthy discussion concerning the importance of Utah's mutual irrigation companies as well as the impact of Utah's irrigation development on the settlement of the West see George Lofstrom Strebel, Irrigation as a Factor in Western History, 1847-1890. (Berkeley: University of California, 1965). (Published Doctoral Dissertation)
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Appendix A

Testimony of E. Buys in regard to the

waters of Danils Crick
...
the maker. During another, the coach took me through the en masse

Chinese name on the clock. I promised J. H. to take care of this and made certain

that the coach, who is rather lazy, left me and took care of himself first. I

made sure he was safe. On the way back, I noticed a small child who looked

very tired. I asked him if he needed any help. He said no and continued

walking. I decided to follow him and offer some water. He accepted gratefully

and thanked me before continuing on his way.
Appendix B

Map of Heber Valley