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Figure 1. *Rock Creek Hollow, 1931. Courtesy Special Collections, J. Willard Marriott Library, University of Utah.*

“We Buried 13 Souls”

Identifying the Willie Handcart Company’s Campsite and Mass Grave after the Tragic Ordeal on Rocky Ridge

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INTRODUCTION

Rock Creek Hollow has long been recognized as the site of the Willie handcart company’s camp and mass grave after they crossed Rocky Ridge in a bitter winter storm on October 23, 1856. In 1933, leaders and members of The Church of Jesus Christ of Latter-day Saints built and dedicated a monument at Rock Creek Hollow, marking it as the burial place of the fifteen members of the Willie company who died from that crucible. In 1994, Gordon B. Hinckley of the Church’s First Presidency again dedicated the Rock Creek Hollow site (see page 11).

In the 1990s, some researchers began expressing the opinion that the historical sources either might not or do not support Rock Creek Hollow as the site of the Willie company’s camp and grave (see pages 12–13). These researchers submit that the site was instead four miles beyond Rock Creek Hollow, near the confluence of Willow Creek and the Sweetwater River. The alternate site is also four miles off the emigrant trail. This article examines

the interpretations that place the Willie company's camp and grave at both of these locations.¹

* * * * *

High on the plains of what is today central Wyoming, the Willie handcart company suffered two devastating setbacks on October 19, 1856. Members of the company were already worn down from pulling handcarts more than a thousand miles from Iowa City. They were also weak from having reduced their flour rations twice in the previous two weeks, trying to stretch their scanty supply until relief wagons from Salt Lake City could reach them. Despite rationing, however, they couldn't stretch their flour far enough. On October 19, it was gone—while they were still nearly three hundred miles from Salt Lake City. Compounding this crisis, the season's first winter storm blasted them late that morning. Starvation, exposure, and the sixteen miles they traveled that day tried them severely and chilled the last glimmer of life out of four of them.

Grinding hunger tormented the Willie company for the next two days. At the same time, a relentless storm lashed the people with winds and mired them in about a foot of snow. Threadbare clothing and bedding afforded meager protection against the elements. "The camp was hungry[,] naked[,] and cold," wrote Joseph Elder.² One of the company's subcaptains, William Woodward, recorded: "It was a sorry sight, over 400 people with handcarts, short of bedding, & to sleep on the cold ground. One thought is enough for a lifetime."³ Five more people died during those two days.

1. From 1856 through 1860, the Church implemented the "handcart plan" so converts who were emigrating from Europe could travel the overland part of the journey to the Salt Lake Valley for a fraction of the cost of using wagons and ox teams. The Willie company was the fourth group of handcart pioneers. Most of the company's five hundred members sailed from Liverpool in May 1856 and began the 1,300-mile handcart trek from Iowa City in mid-July. After the first 270 miles brought them to Florence, Nebraska Territory, about one hundred people decided to stay in that area and finish the journey the next year, due to personal circumstances and concerns about the lateness of the season. The company was led by forty-one-year-old James Willie, a devoted, respected leader who was returning home to Salt Lake City after nearly four years of missionary service in his native England.

2. Joseph Elder, diary, 22, Church History Library, The Church of Jesus Christ of Latter-day Saints, Salt Lake City (hereafter cited as CHL), history.ChurchofJesusChrist.org/overlandtravel/sources/14007398050676131255-eng.

3. William Woodward to Joseph F. Smith, 1907, Utah State Historical Society, Cache Valley Chapter, Historical resource materials for Cache Valley, Utah-Idaho, 1955–1956, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/16815168442284658700-eng. The

The first team of rescuers from Salt Lake City—a small group led by George D. Grant—finally reached the Willie company on October 21, bringing lifesaving food and clothes.⁴ Rescuer Daniel W. Jones said the condition of the people “would stir the feelings of the hardest heart. . . . They were out of provisions and really freezing and starving to death.”⁵ Recognizing the company’s “critacle condition,” rescuer Harvey Cluff felt that “this was certainly the most timely arival of a relief party recorded in history, for the salvation of a people.”⁶ Mary Hurren concurred, later writing, “They came just in time to save our lives.”⁷

The rescuers divided the next day. Because their team was so small, only several men and six wagons stayed to help the Willie company, while the other men and wagons pressed forward to search for the Martin handcart company and the Hodgetts and Hunt wagon companies—nearly one thousand more people who were also in desperate trouble about one hundred miles farther east. That day the Willie company toiled ten miles through the snow before stopping to camp near the base of Rocky Ridge. “The wind blew bleek and colde, and fire wood [was] very scarce,” wrote Levi Savage, another of the company’s subcaptains. “The Saints were obliged to Spread their light beding on the Snow, and in this colde State, endeavored to obtain a litle rest.”⁸ Two more people died.

The following day, October 23, was the most tragic of the Willie company’s journey. Although many people were at the point of collapse, they pulled

letter is in Woodward’s handwriting, but he did not finish or send it before he died in 1908. Its pages were filmed and transcribed out of order, creating some transcription errors. The excerpts quoted in this article are from the handwritten account.

4. A four-man express from Grant’s rescue team had ridden ahead and found the Willie company two days earlier, but they stayed only briefly, then hurried forward to locate the Martin handcart company and the two wagon companies that were farther back on the trail. Other than a few onions, they did not have food or clothing to help the Willie company. However, they provided the encouraging information that rescue wagons were not far behind.

5. Daniel W. Jones, *Forty Years among the Indians* (Salt Lake City: Juvenile Instructor Office, 1890), 64.

6. Harvey Cluff, *Autobiography and journals*, 3 vols., 1:20, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/44109. Quotations in this article maintain the spelling, punctuation, and capitalization of the original sources.

7. Mary Hurren Wight, *reminiscences*, in James G. Willie, *History*, 12, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/7464.

8. Levi Savage, *diary*, October 22, 1856, Harold B. Lee Library; digitized handwritten copy at contentdm.lib.byu.edu/cdm/compoundobject/collection/MMD/id/20223/rec/7.

handcarts three miles up Rocky Ridge and more than ten miles beyond in brutal winter weather. Rocky Ridge was the most rugged part of the trail, notoriously difficult even in good weather. Elevation gain, deep snow, piercing winds, and the long distance combined to exact a terrible toll. Some people were on the trail for at least twenty hours, and the last of them didn't arrive in camp until nearly dawn the next morning.⁹ Joseph Elder recorded: "That was an awful day[.] many can never forget the seens they witnessed that day[.] men[,] women[,] and children weakened down by cold and hunger[,] weeping[,] crying[,] and sum even dying by the roadside[.] it was very late before we all got into camp[.] oh how my heart did quake and shuder at the awful seens which surrounded me."¹⁰

By the time this ordeal was over, thirteen people had died, four of them children. "Some had actualy frozen to death," Levi Savage wrote.¹¹ All thirteen were buried in the same grave, and two more died and were buried at that camp before the Willie company resumed traveling on October 25.

Marking the Grave

For more than seventy years, this mass grave of the Willie handcart company was largely forgotten as a site of significance in the history of The Church of Jesus Christ of Latter-day Saints (hereafter "the Church"). That began to change in July 1930, when thousands of people from around the United States gathered at Independence Rock in Wyoming to commemorate the centennial of the Oregon Trail and to honor the pioneers who traveled it.¹² Among those who participated in the commemoration was a group of Church members under the leadership of Elder George Albert Smith of the Quorum of the Twelve Apostles. Church Historians B. H. Roberts and Andrew Jenson were part of Elder Smith's group, as was Ruth May Fox, who

9. Levi Savage wrote that the Willie company "commenced" their journey at 9:00 a.m. on October 23 and that the last people didn't arrive in camp until "just before daylight" on October 24. Sunrise was at 6:38 that morning (see "Riverton, Wyoming, USA—Sunrise, Sunset, and Daylength, October 1856," Time and Date AS, accessed November 19, 2019, timeanddate.com/sun/usa/riverton?month=10&year=1856).

10. Elder, diary, 22.

11. Savage, diary, October 24, 1856.

12. See John D. Giles, "Mormon Caravan to Independence Rock," *Improvement Era*, September 1930, 761; and "Utah Caravan to Rock Ceremony Leaves for Home," *Deseret News* (Salt Lake City), July 5, 1930, 1.



Figure 2. Part of the Trail over Rocky Ridge.

was president of the Church's organization for young women. All three had crossed the pioneer trail as children or youth in the 1860s.

After the ceremonies at Independence Rock, Elder Smith's caravan returned to Utah by following the trail through part of Wyoming as closely as possible. One member of the group, John D. Giles, reported that "careful study of maps and trail guides [had been made] in advance." He also said that the group had "been directed to inquire at Lewiston Mines, a deserted mining village [several miles west of Rocky Ridge], of one Charles Jackson, [about] the route to take to other points of importance along the trail."¹³ Jackson knew the area well, having lived there since 1885. Giles described "one of the most pleasant experiences of the journey" as follows:

As we made ourselves known, [Mr.] Jackson, a typical miner, 78 years of age, was overcome with emotion. He told us that for many years he had hoped that a party of "Mormons" would come that way as he had wanted to tell them something that had been on his mind a long time. It seems that some years ago he had read an account of the handcart companies passing that way. . . . The story, and especially that portion of it telling of fifteen of the Saints who died in one night at Rock Creek Hollow, being buried in one grave, so touched this hardy mountaineer that he could get no rest, as he told us, until he had searched out the grave, from the information he could secure, and had marked it with a crude stone monument. Having done this, he was anxious that our people should know where the grave was in order that the honor and recognition due these brave souls should be expressed in a permanent monument.¹⁴

13. Giles, "Mormon Caravan to Independence Rock," 761. Lewiston was located on Strawberry Creek.

14. Giles, "Mormon Caravan to Independence Rock," 761; see also "L.D.S. Pioneers Given Marker at Famed Stone," *Deseret News*, July 7, 1930, 1. Charles Jackson had been a trusted employee and assayer for Wallace Grosvenor, the last owner of the Hidden Hand Mines. Grosvenor was with Jackson when the grave was discovered. In a letter to Betty Carpenter Pfaff on October 30, 1967, Grosvenor wrote that he realized the site "was something unusual and notified authorities in Cheyenne." He continued, "We picked up everything we could without further digging and Charley was to turn them over to authorities for study. As you know there is a monument there now." Betty Carpenter Pfaff, *Changes* (Diamondville, WY: self-pub., 2018), 8. Copy of original letter from Grosvenor to Pfaff in possession of Jolene S. Allphin, courtesy Betty Carpenter Pfaff.

Showing his personal respect, Jackson said that after discovering the grave, he had returned each year on “Decoration Day” to cover it with wild iris and other wildflowers that grew in the area.¹⁵

With great interest about what they had learned from Charles Jackson, Elder Smith’s group drove four miles along the trail from Lewiston to Rock Creek Hollow. John D. Giles continued:

Assistant Church Historian Andrew Jenson was the official guide, and with the facts already in his possession and the information secured from Mr. Jackson, the grave at Rock Creek Hollow, known to the people in that vicinity as Emigrant Crossing, was located, and after carefully checking the surroundings, including the well-marked outlines of the old trail as it crosses the hollow and goes up the west bank, two temporary [wooden] markers were placed, one at the grave and one on the trail. Tiny mounds, here and there on the flat, bore mute evidence of other tragedies.¹⁶

The next summer (1931), as president of the newly formed Utah Pioneer Trails and Landmarks Association, Elder George Albert Smith led another caravan to Wyoming. At Independence Rock this group placed a bronze plaque specifically honoring the Latter-day Saint pioneers. Church President Heber J. Grant came to speak at the ceremony and dedicate the plaque. On the way home, members of Elder Smith’s caravan placed a temporary marker in Martin’s Cove and then proceeded to Rock Creek Hollow, where they camped and held services at the grave marker. Assistant Church Historian Andrew Jenson reported that “during some of the exercises there was scarcely a dry eye in the company.”¹⁷ Elder Smith spoke about this experience at a Relief Society conference the next year: “There are times and places when we seem to come nearer to our Heavenly Father. As we sat around the camp fire in that little valley of Rock Creek, where the Willie Handcart Company had met disaster, . . . it seemed to me that we were in the very presence of those

15. See John D. Giles, “Marking Pioneer Trails and Landmarks,” Church Department, *Deseret News*, July 1, 1933, 3; Harrison R. Merrill, “Marking the Handcart Trail,” *Improvement Era*, August 1933, 589.

16. Giles, “Mormon Caravan to Independence Rock,” 762; see also “L.D.S. Pioneers Given Marker at Famed Stone,” *Deseret News*, July 7, 1930, 1.

17. Andrew Jenson, “Over the Pioneer Trail,” Church Department, *Deseret News*, June 27, 1931, 6; see also Clarissa A. Beesley, “The Mormon Pioneer Caravan of 1931,” *Improvement Era*, August 1931, 573–75.

who had given their all that we might have the blessings of the Gospel. We seemed to feel the presence of the Lord.”¹⁸

In June 1933, Elder George Albert Smith led a third caravan to Wyoming. Since the trip in 1931, a stone monument had been built on the old highway across from Martin’s Cove, another one had been started at Rock Creek Hollow, and bronze plaques for these monuments had been manufactured in Salt Lake City. Members of the 1933 caravan anchored a plaque to the Martin’s Cove monument and then held a dedicatory service. The next day they went to Rock Creek, where members of the Lyman Wyoming Stake had placed a large block of quartzite. Elder Smith’s group mounted a plaque to the rock, added stones from the surrounding hills, and dedicated the monument.¹⁹ The text on the plaque reads, in part: “Thirteen persons were frozen to death during a single night and were buried here in one grave. Two others died the next day and were buried nearby” (see figure 3).

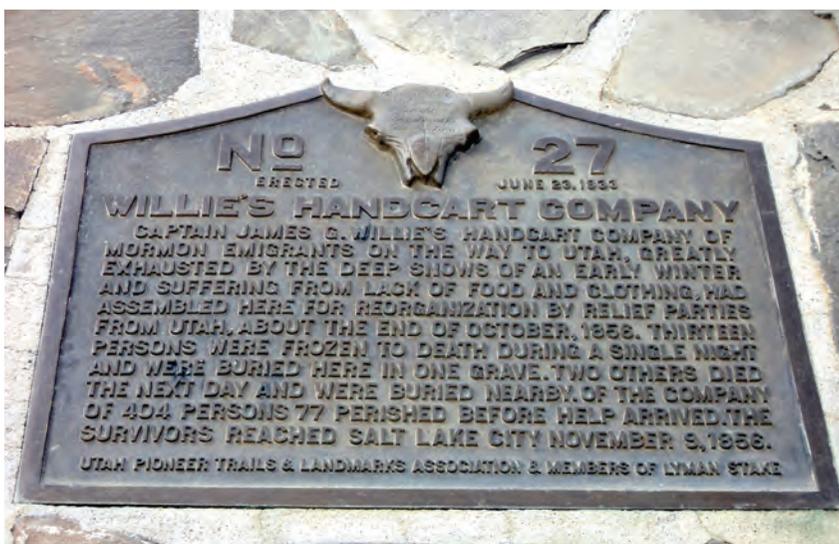


Figure 3. The Bronze Plaque on the Willie Handcart Company Monument in Rock Creek Hollow. Courtesy Jay and Peggy Bowden.

18. George Albert Smith, “To the Relief Society,” *Relief Society Magazine*, December 1932, 705–6; see also *Teachings of the Presidents of the Church: George Albert Smith* (Salt Lake City: The Church of Jesus Christ of Latter-day Saints, 2010), xxix–xxxi.

19. See Giles, “Marking Pioneer Trails and Landmarks,” 3; Merrill, “Marking the Handcart Trail,” 589; “Society Sets Markers at Historic Spots in Wyoming,” *Deseret News*,

Of this experience at Rock Creek Hollow, Elder Smith wrote in his diary: “[We] placed a bronze marker in memory of the Willey handcart company who lost their lives at this place due to cold and starvation. . . . Our camp fire and meeting were pleasant. Henry Giles, a descendant of the handcart company, offered the dedicatory prayer. Mr. [Charles] Jackson of Lewiston met with us.”²⁰

Interest Declines and Surges

During the next forty-five years, the monument at Rock Creek Hollow largely fell out of memory. Few people visited the site or knew where it was. It was remote, as it still is today, eleven miles from the nearest paved road.

Interest in Rock Creek Hollow started to revive in the late 1970s, when members of the Church’s Riverton Wyoming Stake began holding annual Pioneer Day celebrations there. Then in the early 1990s, Rock Creek Hollow gradually rose in the broader consciousness of Church leaders and members. Scott Lorimer had been called as president of the Riverton Stake in 1987, and after a remarkable series of events, he and his counselors discovered that temple ordinances hadn’t been completed for many of the Willie pioneers, including some who died from the Rocky Ridge crossing. Members of the Riverton Stake received permission from the First Presidency of the Church to perform these ordinances. During fourteen intensive months between August 1991 and September 1992, they researched the names of the Willie and Martin handcart pioneers and their rescuers and completed more than four thousand temple ordinances for them.²¹ The stake called this effort the Second Rescue—a spiritual rescue that was similar in many ways to the physical rescue of the late companies of 1856.

The Second Rescue sparked a surge of interest in the handcart pioneers, in their stories of faith and sacrifice, and in Rock Creek Hollow. Members of

June 5, 1933; John D. Giles to Howard R. Driggs, July 1, 1933, Howard R. Driggs Collection, Gerald R. Sherratt Library, Southern Utah University, Cedar City.

20. George Albert Smith, diary, June 23, 1933, J. Willard Marriott Library, Special Collections, University of Utah, Salt Lake City. The man who offered the dedicatory prayer, Henry Evans Giles (1859–1938), was the son of Thomas Davis Giles of the 1856 Bunker handcart company and Hannah Evans Bowen of the 1856 Hunt wagon company. The Hunt company was rescued along with the Willie, Martin, and Hodgetts companies in the late emigration of 1856. Thomas and Hannah married in 1857.

21. Julie Towne Espinosa and Riley M. Lorimer, “The Second Rescue,” *BYU Magazine*, winter 2007, 64, magazine.byu.edu/article/the-second-rescue/.

the Church's First Presidency and Quorum of the Twelve visited the site, and some of them spoke about it in general conference.²² The Church purchased 40 acres there in 1992 and later acquired another 120 acres. Between 1992 and 1994, members of the Riverton Wyoming Stake cleaned up mine tailings, beautified the grounds, and built campgrounds, fences, and amphitheaters.

On July 23, 1994, President Gordon B. Hinckley went to Rock Creek Hollow to dedicate it. He had first gone there in 1939, when he was twenty-nine years old and was photographing places of significance along the pioneer trail to use in a Church filmstrip. When he returned to dedicate the site in 1994, hundreds of people gathered for the services, which were held near the Willie company monument that Elder George Albert Smith's group had placed in 1933. Church members in Wyoming had rebuilt the base of the monument into a table style, keeping the original bronze plaque on its face.

"This is sacred and hallowed ground," President Hinckley said in his opening remarks. "The whole trail over which the handcart pioneers moved was sanctified by their lives, their sacrifices, their deaths, their sufferings, and their testimonies concerning the cause which they treasured more than

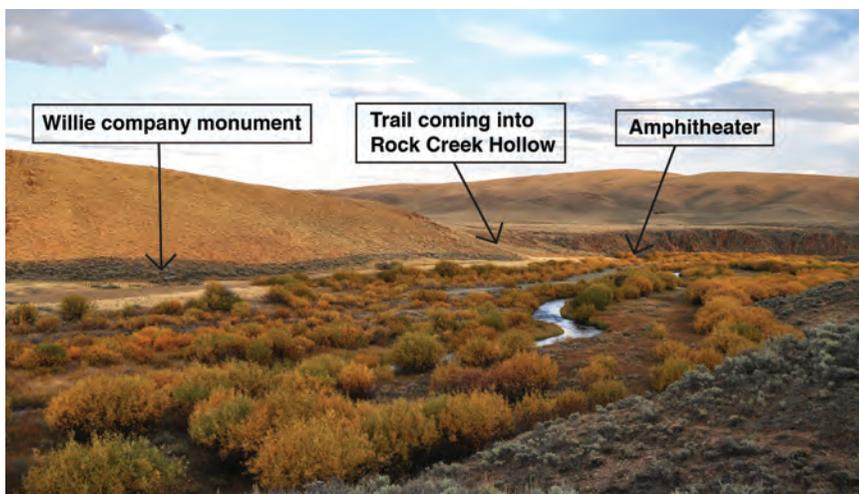


Figure 4. Rock Creek Hollow, 2016. The Willie company monument is in the fenced area on the left.

22. See, for example, Gordon B. Hinckley, "True to the Faith," *Ensign*, May 1997, 65–66; James E. Faust, "A Priceless Heritage," *Ensign*, November 1992, 84–85; and M. Russell Ballard, "Faith in Every Footstep," *Ensign*, November 1996, 23–25.

life itself. . . . How grateful we ought to be for their example. How tremendous [was] their heroism in the face of odds that are almost impossible to understand.”²³

After his remarks, President Hinckley offered the dedicatory prayer. The authors recognize that a dedicatory prayer is not traditional evidence for identifying a historic site, and the following excerpt is not quoted with that intent. Rather, it is included because it is the focal point of a significant event in the history of Rock Creek Hollow:

Our Father in Heaven, we are gathered on this piece of ground where the Willie company camped to try to gain a little strength from food supplied by the rescue companies. They camped here to rest from their labors for a very short time before continuing their long journey to the Salt Lake Valley. In one night, thirteen of that company died and were buried in a common grave, and two others died the next morning.

We remember them with appreciation and gratitude. We remember them with love and affection. We cherish their stories which have been told here this day. We feel in our hearts the great redeeming power of Thy Son, who saved them as He has saved all men through His atoning sacrifice. . . .

Now, acting in the authority of the holy priesthood, and in the name of the Lord Jesus Christ, and in behalf of all who are assembled here, and in behalf of the Church as a whole, I hereby dedicate this, the Rock Creek burial site of the Willie handcart company of 1856. We dedicate these graves as the final resting place for those who are buried here. We dedicate the surrounding grounds that they may be holy and sanctified as representing the long trail that these people traveled in their effort to reach their Zion in the valley of the Great Salt Lake.²⁴

After Rock Creek Hollow had gone largely unnoticed for decades, 42,000 people visited it in 1997, the sesquicentennial of the first Latter-day Saint pioneers’ journey across the trail. Tens of thousands of visitors continue to come each year, several thousand of whom reenact the handcart trek over Rocky Ridge and conclude their journey at Rock Creek Hollow. The Church also stations missionaries there during the summer. As a Church historic

23. “Trail of Handcart Pioneers Sanctified by Sacrifice,” *Church News*, July 30, 1994, 8, 11.

24. “Dedicatory Prayer for Rock Creek Hollow,” in *Blessings and Dedicatory Prayers of the Second Rescue*, comp. Riverton Wyoming Stake (self-pub., 1998).

site, Rock Creek Hollow has not only become well known; it has become a place of deep spiritual impact for hundreds of thousands of people.

Questioning the Site Location

In the 1990s, some researchers began to question whether Rock Creek Hollow had been correctly designated as the place of the Willie company's camp and mass grave. A few sources led them to believe that the camp and grave were instead near the mouth of Willow Creek at the Sweetwater River, four miles southwest of Rock Creek Hollow and the same distance off the emigrant trail. Four researchers have published either the possibility or the belief that the Willie company camped and buried their dead at this other site:

“The authors believe it possible that the Willie handcart company spent the night of Oct. 23 and the day and night of Oct. 24, 1856, at or near Willow Creek . . . rather than at Rock Creek.”²⁵

“The Willie company climbed Rocky Ridge and pushed sixteen miles to the Sweetwater River below the mouth of Willow Creek. There they buried fifteen people.”²⁶

“The mass grave containing thirteen persons who died on October 23 is near the confluence of Willow Creek with the Sweetwater River, not on Rock Creek.”²⁷

“The location of the tragedy . . . was not at Rock Creek. . . . The mass grave was dug at their Willow Creek camp site.” This author later moderates

25. LaMar C. Berrett and A. Gary Anderson, *Sacred Places: Wyoming and Utah* (Salt Lake City: Deseret Book, 2007), 102. The possibility expressed in this sentence is not consistent with the book's identification of Strawberry Creek as the place where the late-night wagons stalled before the Willie company's October 23–24 camp; see Berrett and Anderson, *Sacred Places*, 96, 97, 101. That would support the camp being at Rock Creek Hollow (see pages 27–36 in this article).

26. Lyndia McDowell Carter, “Rescuing the Martin and Willie Companies,” in *Mapping Mormonism: An Atlas of Latter-day Saint History*, ed. Brandon S. Plewe and others (Provo, UT: Brigham Young University Press, 2012), 109. The distance of 16 miles mentioned in this sentence comes from two Willie company sources, but it is not an accurate measure of the distance from the October 22 camp to the Willow Creek site. That distance is either 17.5 or 18.75 miles, depending on which off-trail route the Willie company would have used if they had gone to that site (see pages 15–18 in this article).

27. Gary Long, *The Journey of the James G. Willie Handcart Company* (self-pub., 2009), 81.

his statement, saying that “the arbiter of the long-term interpretation of the controversy will likely depend on credible historical and forensic evidence in the future.”²⁸

While some of these statements adopt a tone of certitude that the Willie company’s campsite and mass grave were near the confluence of Willow Creek and the Sweetwater River, the sources do not justify such conviction. The information in them is neither complete nor consistent enough to support a definitive conclusion about the location. However, after doing an in-depth, contextualized analysis of the sources, as presented in this article, the authors believe the weight of evidence strongly supports Rock Creek Hollow as the correct site.

This article consists of four sections, each of which addresses a primary issue that has generated differences of interpretation about whether the camp was at Rock Creek Hollow or Willow Creek:

1. *Mileage.* This section analyzes the records of (a) the mileage the Willie company traveled on October 23 (the day they crossed Rocky Ridge and reached the campsite in question), (b) the mileage that rescuer Redick Allred traveled to reach the Willie company on October 24, and (c) the mileage the Willie company and Allred traveled on October 25 (the day they left the camp where they buried fifteen people).
2. *Creek crossing and steep hill.* This section examines the accounts of the Willie company’s last wagons stalling at a creek late on the night of October 23. Although the sources do not name the creek, they indicate that it was about four miles from camp, which is useful in examining the camp’s location. This section also analyzes a statement from William Woodward that the creek crossing was followed by a “steep hill.”²⁹
3. *Place name.* This section compiles and evaluates the place-name information from the Willie company sources about the location of the camp and grave. It also puts this information in context with other diaries from the pioneer era.

28. Melvin L. Bashore, “The 1933 Willie Handcart Company Marker at Rock Creek Hollow,” *Mormon Historical Studies* 16, no. 1 (Spring 2015): 93–94, 95.

29. Woodward to Smith, 1907.

4. *On-the-ground analysis.* This section provides (a) an overview of the condition of the Willie company and the effects of the weather on the day they crossed Rocky Ridge, (b) a comparison of the Rock Creek Hollow campsite and the alternate site on Willow Creek, and (c) an analysis of the postulated off-trail routes to the Willow Creek site and the postulated routes back to the trail.

I. MILEAGE ANALYSIS

Three members of the Willie company—William Woodward, Levi Savage, and Alfred Gadd—kept diaries through all or most of October 1856. Woodward, who kept his own diary through early October, began keeping the official Willie company journal on October 1.³⁰ All three of these diarists recorded mileage information that is relevant to the location of the Willie company’s campsite on the nights of October 23 and 24.³¹ Redick Allred, a rescuer, also provided mileage information in his diary that is relevant in analyzing where the Willie company camped. This section examines how these mileage records can help assess the location of the camp and grave.

The following analysis acknowledges three primary limitations when using the mileage information from these diarists. First, there is no evidence that the Willie company had any kind of odometer, so the mileages were estimates. There are indications that the company had William Clayton’s *Emigrants’ Guide*, which had been published in 1848 and measured distances with good accuracy to the quarter-mile, but if the Willie company diarists consulted Clayton’s trail guide for mileage, they did so inconsistently, as their daily estimates often varied among themselves by at least two miles and sometimes by much more. In contrast to these frequent variances, the two diarists who estimated the Willie company’s total mileage on the day they crossed Rocky Ridge recorded identical distances (see the analysis for October 23). These two diarists also differed by only one mile in the distance they estimated traveling on the day the company left the October 23–24 camp (see the analysis for October 25).

30. See the end of appendix to Willie company journal, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/7439. See also William Woodward to Albert Jones, September 12, 1906, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/71189.

31. Levi Savage didn’t record total mileage for any of the days that this study examines, but the limited information he provided is analyzed in footnote 34 and in the “Creek Crossing and Steep Hill” section.

A second limitation is that the diarists didn't provide information about their route to the camp. This omission is understandable if the campsite was at Rock Creek Hollow, since it is along the well-established emigrant trail, which was traveled by hundreds of thousands of people. Conversely, reaching the Willow Creek site requires traveling three or four miles off the trail, depending on the route. None of the sources mention leaving the trail, so proponents of the Willow Creek site have proposed two possible off-trail routes to reach it and three possible routes for returning to the trail. All of these yield different mileages (see the analysis for October 23 and 25).

A third limitation is that the diarists had little to no experience on the emigrant trail. Alfred Gadd was a nineteen-year-old Englishman, traversing the trail for the first time. Levi Savage had extensive trail experience with the Mormon Battalion a decade earlier, but he was also traveling the emigrant trail for the first time. The third daily diarist, William Woodward, had crossed the trail going west only once, five years earlier, when he was eighteen.³²

Other factors that likely affected the diarists' mileage estimates were the conditions on October 23. That day the Willie company traveled the most difficult part of the trail in a winter storm while in a state of debilitating hunger, illness, and fatigue. All three diarists also traveled many hours in the dark.

October 23, 1856

Of the diarists, only William Woodward and Alfred Gadd estimated the total mileage traveled on October 23. Woodward said it was “about 16 miles,” and Gadd wrote, “we went sixteen miles.”³³ Measuring from the last camping area near the base of Rocky Ridge, where the trail leaves the Sweetwater River to begin climbing, these estimates don't correspond with the actual distance to either Rock Creek Hollow or the Willow Creek site. Following is an overview of the possible routes and distances to these places, as well as the variances from this sixteen-mile estimate.

32. Woodward had also crossed the trail once going east, on his way back to England to serve a mission in 1852.

33. James G. Willie Emigrating Company journal, October 23, 1856, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/7439; Alfred Gadd, diary, October 23, 1856, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/55089. The library maintains two typescripts of Gadd's diary, provided by different descendants, with minor differences in transcription.

Base of Rocky Ridge to Rock Creek Hollow

The distance between where the trail leaves the Sweetwater River to begin climbing Rocky Ridge and where it reaches Rock Creek is 13.5 miles (see the red route on map 1).³⁴ The estimates from Woodward and Gadd that the Willie company traveled about 16 miles that day would put them 2.5 miles past Rock Creek Hollow. However, an overestimate of 2.5 miles or more has many precedents in these diarists' records, even when the people weren't traveling for twenty hours through conditions as grueling as those of October 23.

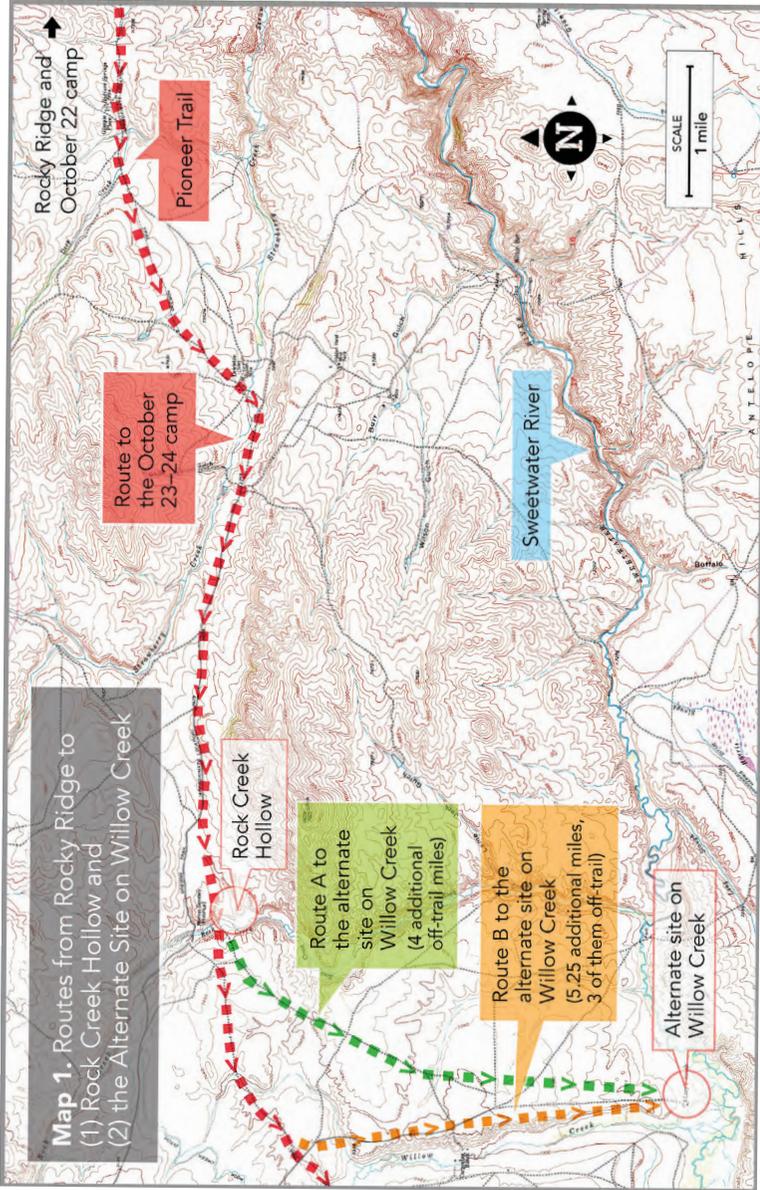
Base of Rocky Ridge to the Willow Creek Site via Route A

As noted earlier, proponents of the alternate site on Willow Creek have postulated two possible routes to it. Both of these follow the trail from the base of Rocky Ridge until it reaches Rock Creek. Route A then crosses the creek, leaves the trail, and continues another four miles over a vast, trackless plain to the Willow Creek site, which is near the creek's confluence with the

34. William Clayton measured this distance as 13.25 miles. See *The Latter-day Saints' Emigrants' Guide* (St. Louis: Republican Steam Power Press—Chambers & Knapp, 1848), 16, archive.org/details/latterdaysaintse00clay. United States Geological Survey (USGS) topographical maps, Google Maps, and the Delorme Topo North America mapping software give about the same distance as Clayton (13.5 miles rather than Clayton's 13.25). This article uses 13.5 miles. The place referenced in this section as the "base of Rocky Ridge" is called "Road Leaves the River" in Clayton's guidebook, and Rock Creek is called "Branch of Sweet-water."

Most proponents of both the Rock Creek and Willow Creek sites interpret the historical sources as placing the Willie company's October 22 camp near the base of Rocky Ridge, where the trail leaves the Sweetwater River to begin climbing the ridge. However, Levi Savage's diary raises the possibility that he camped two miles east of that location. This camp, he wrote, was "at the foot of what is called the Rocky Ridge." Levi Savage, diary, October 22, 1856. His reference to the "foot" of Rocky Ridge could have been where the trail leaves the river, or it could have been two miles east, where the "Foot of the Ridge" or "Rocky Ridge" Pony Express, Stage, and Telegraph Station was established a few years later. That site became more commonly known as St. Mary's Station.

Levi Savage gives another possible indication of this camping place by recording that the next day's "ascent [to the top of Rocky Ridge] was some five miles long." The distance from where the trail leaves the river to the top of Rocky Ridge is only about three miles, so Savage either overestimated by two miles, or he camped two miles east of where the trail leaves the river to begin climbing the ridge. If the latter is true, the total distance he traveled to Rock Creek Hollow on October 23 would have been 15.5 miles, close to the 16 miles that Woodward and Gadd estimated. The first two miles from that starting point are flat, however, so if Savage started there, it is not clear what he meant when he said, "The ascent was some five miles long." Savage, diary, October 23, 1856.



This map shows the last several miles of the route from Rocky Ridge to Rock Creek Hollow (in red, following the pioneer trail). It also shows two postulated routes and additional distances to the alternate site on Willow Creek (the off-trail parts are in green and orange). With the exception of the pioneer trail, none of the other routes or roads on this map existed in 1856. The pioneer trail is the only one shown on Frederick W. Lander's 1858 government survey map of this area (see appendix 2). See map 3 on page 29 for a satellite view; see map 4 on page 64 for an expanded view of the left part of this map.

Sweetwater River (see the green route breaking off the trail on map 1). This route is mapped in *The Journey of the James G. Willie Handcart Company* and, on a smaller scale, in *Mapping Mormonism: An Atlas of Latter-day Saint History*.³⁵ Via this route, the distance from the base of Rocky Ridge to the Willow Creek site is 17.5 miles, so the 16-mile travel estimates from Woodward and Gadd would place the Willie company 1.5 miles short of it.³⁶ Nevertheless, proponents of Route A assert that its mileage favors the Willow Creek site because its variance from the diarists' estimate is 1.5 miles, while the variance for Rock Creek Hollow is 2.5 miles.

Base of Rocky Ridge to the Willow Creek Site via Route B

Route B crosses Rock Creek, continues along the trail for another 2.25 miles to the Willow Creek crossing, then leaves the trail and follows the creek south for an additional 3 trackless miles to the alternate site (see the orange route breaking off the trail on map 1). From the base of Rocky Ridge, the total distance is 18.75 miles.

A minority of proponents of the Willow Creek site favor this longer route because of the difficulty of staying oriented on Route A. Theoretically, Route B would have helped the people stay on track if they had left the trail for the alternate site, since it follows Willow Creek (see the analysis on pages 62–65). However, the route is not a better match for the mileage than the route to Rock Creek Hollow. Route B's distance of 18.75 miles would mean that Woodward and Gadd both *underestimated* how far they traveled by 2.75 miles. The distance to Rock Creek Hollow would mean they *overestimated* by 2.5 miles. Given the difficulty of pulling handcarts that day, overestimating the distance is much more likely.

October 24, 1856

Because the last members of the Willie company didn't arrive in camp until nearly dawn on October 24, they didn't travel any farther that day. "It was concluded to stay in camp today & bury the dead as there were 13 persons

35. See Long, *Journey of the James G. Willie Handcart Company*, 79; Carter, in *Mapping Mormonism*, 107.

36. Long, *Journey of the James G. Willie Handcart Company*, 79, gives 16.25 miles as the distance. However, the distance is 17.5 miles according to USGS topographical maps, Google Maps, and the Delorme Topo North America mapping software.

to inter,” William Woodward wrote.³⁷ Among the dead was Alfred Gadd’s ten-year-old brother, Samuel, the family’s third loss of life in three weeks.

That morning the Willie company received help from another small group of rescuers, led by Redick Allred. In his diary, Allred recorded traveling fifteen miles from his camp to reach the company.³⁸ That information is helpful in analyzing the location of the Willie camp.

Redick Allred was part of the first rescue team, led by George Grant. Nearly a week earlier, on October 18, Grant’s men had crossed the Continental Divide at South Pass and reached the westernmost camping area on the Sweetwater River, about two miles east of the pass.³⁹ When Grant and most of his team continued east the next day, he left Redick Allred and some men and wagons at this camp and assigned Allred to establish a relief station to help the handcart companies as the other rescuers found them and brought them toward Salt Lake City.

On October 22, the day after Grant and his team reached the Willie company, rescuer William Kimball sent an express back to Redick Allred’s camp near South Pass, some forty miles away, to request that he hurry forward with help.⁴⁰ The people were destitute, the rescuers were few, and Rocky Ridge loomed ahead.

Riding hard as they backtracked to Allred’s camp, the express arrived the next day and reported that members of the Willie company were “in a deplorable condition.”⁴¹ Early the next morning, Allred and some of his men rushed to help, arriving at the Willie camp just hours after the last people had come in from crossing Rocky Ridge. Allred described the day as follows:

“I took 6 teams and met them 15 miles below in such a hard west wind that they could not travel facing the drifting snow even if they had been

37. Willie company journal, October 24, 1856.

38. Redick Allred, diary, October 24, 1856, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/27548. Allred spelled his name both “Reddick” and “Redick.” The latter spelling is used in this article.

39. For people traveling from the west, this camping area is where the trail *first* approaches the Sweetwater River (the river is about four-tenths of a mile north of the trail). For people coming from the east, this camping area is the *last* time the trail approaches the river and the only time it comes close to the river after the last (or ninth) crossing. This was a well-known place to camp, providing the only reliable water between the last crossing of the Sweetwater and Pacific Springs.

40. See Allred, diary, October 23, 1856.

41. Allred, diary, October 23, 1856.

ready for duty. I found some dead & dying[,] laying over the camp in the drifting snow that was being piled in heaps by the gale & buerrying their dead. We set in with the rest to make them as comfortable as posable & remained in camp till [the] next day.”⁴²

How does Redick Allred’s record of traveling fifteen miles help assess the location of the company’s camp? He didn’t indicate his route, but there are four possibilities to consider.

Allred’s Camp to Rock Creek Hollow

Allred’s record of traveling fifteen miles matches the distance from his camp to Rock Creek Hollow, staying on the trail (see the red route on map 2).⁴³

Allred’s Camp to the Willow Creek Site via Route X

If Allred had gone to the Willow Creek site, the easiest, most direct route would have been to follow the trail to the last crossing of the Sweetwater River (8 miles from his camp), then leave the trail and travel 4 trackless miles along the river to its confluence with Willow Creek (see the green route breaking off the trail on map 2). This route is a total of 12 miles, which is 3 miles short of the distance Allred recorded traveling.

Allred’s Camp to the Willow Creek Site via Route Y

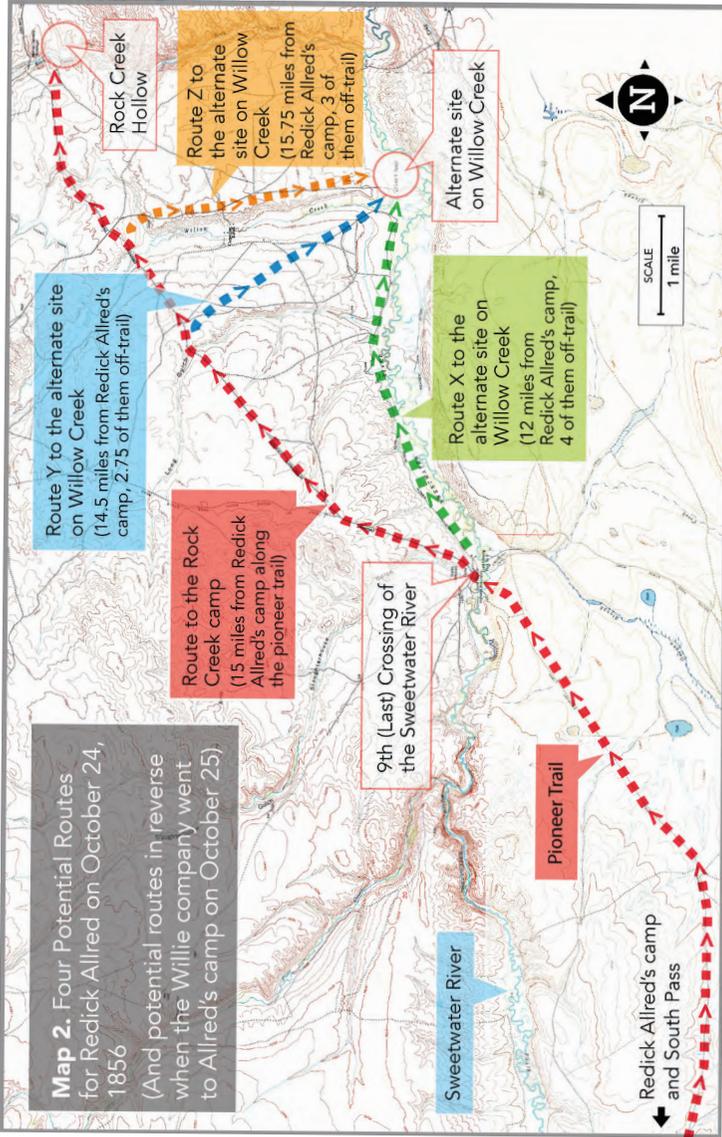
Allred could have taken a longer route, staying on the trail until Long Gulch (11.75 miles from his camp), then leaving the trail and traveling 2.75 trackless miles to the Willow Creek site (see the blue route breaking off the trail on map 2). This route is a total of 14.5 miles, which is close to the 15 miles Allred recorded traveling. However, it has no tactical advantages over Route X, such as easier terrain or visibility of the Willow Creek site, so there is not a plausible reason for Allred to have taken it. On the contrary, Route Y has disadvantages compared to Route X, since it is 2.5 miles longer and lacks geographical features to help navigate the off-trail miles.

Allred’s Camp to the Willow Creek Site via Route Z

A fourth route for Allred would have been to stay on the trail until it reaches Willow Creek (12.75 miles from his camp), then leave the trail and follow

42. Allred, diary, October 24, 1856.

43. The fifteen-mile distance from Allred’s camp to Rock Creek Hollow is corroborated on USGS topographical maps, Google Maps, and the Delorme Topo North America mapping software.



Redick Allred recorded traveling fifteen miles to the Willie company's camp on October 24. This map shows the route and distance to Rock Creek Hollow (in red, following the pioneer trail). It also shows three routes and distances to the alternate site on Willow Creek (the off-trail parts are in green, blue, and orange). Traveling with the Willie company, Allred returned to his camp on October 25, so this map also shows the potential routes for that day going the opposite direction. The fifteen miles of travel, recorded by different diarists on the two days, correspond with the distance between Allred's camp and Rock Creek Hollow. With the exception of the pioneer trail, which is shown in red, none of the other roads on this map existed in 1856. The pioneer trail is the only one shown on Frederick W. Lander's 1858 government survey map of this area (see appendix 2).

the creek for 3 trackless miles to the alternate site—altogether 15.75 miles (see the orange route breaking off the trail on map 2). Although the distance of this route is close to the 15 miles that Allred recorded traveling, there is not a plausible reason for him to have used it. Route Z is nearly 4 miles longer than he would have needed to travel to reach the Willow Creek site and does not have any strategic advantages.

Finding the Camp

When Redick Allred and his men went to help the Willie company, they had only a general idea of where to find them. The express riders couldn't have told Allred the location, since they had no way of knowing how far the company had advanced in the two days since they had left the camp, some forty miles to the east. This section examines the possibilities of how and where Allred's group found the Willie company.

A campsite at Rock Creek Hollow would have been easy for Allred to find, since it was along the trail and was well known. That campsite also corresponds with the fifteen miles Allred said he traveled.

Finding the alternate site near the mouth of Willow Creek would have been much more difficult, since it is several miles off the trail and is not visible until coming within about half a mile of it. Not being able to see the Willow Creek site from the trail, how could Allred have known to go so far off the trail to find it? Could he have seen smoke from the Willie company's fires? That is highly unlikely, given the site's distance from the trail and the weather conditions he described.

Could Allred have seen tracks from the Willie company leaving the trail? Again the possibility is remote. That would have required him to travel all the way to the Willow Creek crossing before he left the trail (Route Z on map 2), and it also would have required the Willie company to have taken the 18.75-mile route on October 23 (Route B on map 1). Even if the Willie company had gone that way, and even if Allred had looked for tracks there, it is highly improbable that they would have been visible by the time he arrived. "The drifting snow," he said, "was being piled in heaps by the gale."⁴⁴

Finally, could William Kimball have told the express riders to have Allred meet the Willie company near the mouth of Willow Creek? That is also highly unlikely. When Kimball sent the express from the Willie camp, he couldn't have known whether the four hundred members of the company

44. Allred, diary, October 24, 1856.

had enough strength to pull their handcarts even ten miles to the base of Rocky Ridge—much less continue almost twenty more miles over the ridge, including several miles off the trail, to reach the mouth of Willow Creek. Nine people had died since the winter storm had begun three days earlier, and many more were barely clinging to life. With no way of knowing how far this large group of people could walk, and without enough wagons to carry very many of them, Kimball could not have told the express, with any degree of certainty, where Allred should meet them—other than somewhere along the trail.⁴⁵

This analysis of Redick Allred’s going to help the Willie company yields the following insights:

- Rock Creek Hollow is the only site that corresponds with the 15 miles Allred recorded traveling.
- No source gives any indication that Allred went off the trail to find the Willie company.
- There is not a feasible way for Allred to have known to look for a camp so many miles off the trail at the Willow Creek site.
- All of the routes from Allred’s camp to the Willow Creek site require off-trail travel of similar difficulty. The most direct route is only 12 miles, not the 15 that Allred recorded traveling (see Route X on Map 2). Routes Y and Z come close to corresponding with Allred’s mileage, but they are circuitous compared to Route X and would have required Allred to travel 2.5 to 3.75 miles longer than necessary. If Allred had gone to the Willow Creek site, there is no reason for him to have used either of these longer routes. They are not better in

45. The Martin handcart company provides a useful comparison for what limitations the Willie company could have experienced in pulling handcarts at this time. About one hundred miles farther east, members of the Martin company were hit by the same storm. As they tried to travel the first two days after the storm began, they could go only a few miles, which Josiah Rogerson said “wilted and downed the best and strongest of our company.” Josiah Rogerson, “Martin’s Handcart Company, 1856 [No. 6],” *Salt Lake Herald-Republican*, November 17, 1907, 14, history.ChurchofJesusChrist.org/overlandtravel/sources/20891. In four days, the Martin company traveled a total of ten miles before coming to a stop. They were then mired in the snow for five days and suffered numerous deaths before the express rescuers arrived on October 28 (see Rogerson, “Martin’s Handcart Company,” 14; James Bleak diary, October 23 and 28, 1856, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/7523; and Jesse Haven diary, October 23, 1856, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/5319).

terms of navigability, terrain, or visibility of the site from a distance. The authors have verified this by walking Routes X and Z to the mouth of Willow Creek, with permission from property owners as necessary, and by viewing much of Route Y between them.

October 25, 1856

“Rolled from camp this morning,” William Woodward wrote in the company journal on October 25. Once again, members of the Willie company were moving toward Salt Lake City, still 250 miles away, but not before two more people died, making a total of fifteen buried at the camp.

In addition to using the miles the Willie company traveled on October 23 to assess the location of their camp, their mileage on October 25—the day they left that camp—can be used to work backward to assess the location. Redick Allred wrote that the company traveled to his camp that day, which was 15 miles to the west.⁴⁶ William Woodward concurs with Allred on the distance and location, writing in the company journal: “Travelled about 15 miles & camped on the Sweetwater. Some brethren were stationed at this post on the river with supplies of flour & onions.”⁴⁷ Alfred Gadd recorded, “We travelled sixteen miles to South Pass and camped.”⁴⁸ Following is (1) a summary of the route and distance from Rock Creek Hollow to Redick Allred’s camp, (2) summaries of the three postulated routes and distances from the Willow Creek site to Allred’s camp, and (3) an analysis of the variances from the mileages given by Allred, Woodward, and Gadd, where variances exist.

Rock Creek Hollow to Allred’s Camp

Using Woodward’s estimate that the Willie company traveled “about 15 miles” on October 25, the mileage for the camp being at Rock Creek Hollow is straightforward: that is the distance from Rock Creek to Allred’s camp (see the red route on map 2). Gadd’s record of traveling 16 miles is a 1-mile overestimate of the distance between the locations.

46. See Allred, diary, October 24 and 25, 1856.

47. Willie company journal, October 25, 1856. Allred’s camp was the only place near the trail to camp on the Sweetwater River after the last crossing of the river. The camp or “post” was about eight miles west of the crossing.

48. Gadd’s entry is an example of generalizing about place names, since the camp was not *at* South Pass, which was not a camping place. South Pass is about two miles west of Allred’s camp.

Willow Creek Site to Allred’s Camp

Using the diarists’ mileage estimates for October 25, the case for the camp being at Willow Creek has considerably less basis. Proponents of that site have proposed three possible off-trail routes the Willie company might have traveled in returning to the trail that day. These routes correspond with those that Redick Allred could have traveled the previous day if he had gone to the Willow Creek site.

The most direct route would have been the reverse of Route X on map 2. It crosses Willow Creek near the mouth, goes 4 off-trail miles along the Sweetwater until it reaches the trail at the last crossing of the river, then follows the trail the last 8 miles to Allred’s camp (map 2 shows the off-trail portion in green).⁴⁹ The author who published this route says its “actual distance was closer to 13 miles,” not the 15 miles that both Allred and Woodward recorded or the 16 miles that Gadd recorded. However, the actual distance is 12 miles, so Allred and Woodward would have had to overestimate by 3 miles and Gadd by 4. This author says the error in these estimates “is both explainable and understandable, given the propensity to over-estimate distances.”⁵⁰ It is inconsistent, though, to consider this 3- to 4-mile overestimate to be “explainable and understandable” while not acknowledging that Woodward and Gadd could have overestimated the distance to Rock Creek Hollow by a lesser amount (2.5 miles) on the Willie company’s most difficult and deadly day—the twenty-hour ordeal on October 23–24 that included Rocky Ridge.

The second and third possible routes that have been postulated from the Willow Creek site to Allred’s camp follow the reverse of Routes Y and Z on map 2 (the map shows the off-trail portions in blue and orange).⁵¹ These routes are, respectively, 14.5 and 15.75 miles—close to the 15 miles that Allred and Woodward recorded traveling. However, both of them would have been much less favorable than Route X, since they are longer and do not provide any strategic advantages. If the Willie company had camped at Willow Creek, there was no probable reason for the leaders to have required

49. This route is mapped in Long, *Journey of the James G. Willie Handcart Company*, 85.

50. Long, *Journey of the James G. Willie Handcart Company*, 86.

51. Route Y is published by Lyndia Carter in *Mapping Mormonism*, 107. In a presentation at the Church History Library on May 23, 2012, Gary Long also mapped Route Y in his PowerPoint presentation, changing from his mapping of Route X in *Journey of the James G. Willie Handcart Company*, 85. No explanation was given for the change.

the debilitated survivors to disregard Route X and pull handcarts the several extra miles that Routes Y and Z would have necessitated.

Conclusions about the Mileage

The mileage information from the daily diarists can be used to make a circumstantial case for the Willie company's campsite on October 23 and 24 being at either Rock Creek Hollow or the alternate site on Willow Creek. There are too many variables—from the accuracy of estimates to the uncertainty of potential off-trail routes to the Willow Creek site—to use the mileage information to prove one place or the other conclusively. Nevertheless, when evaluated cumulatively, the mileage information strongly favors Rock Creek Hollow as the company's camp.

For the Willow Creek site, none of the diarists' mileage estimates are accurate for any of the three days that are relevant to the campsite study, using the most direct routes to and from that site. For Rock Creek Hollow, the diarists' estimates are accurate for two of the three days that are relevant to the campsite study. (See the following chart.)

Date	Diarists and mileage estimates	Destination	Variance from estimates
October 23	William Woodward and Alfred Gadd: 16 miles	Rock Creek Hollow	2.5-mile overestimate
		Willow Creek alternate site	1.5- or 2.75-mile underestimate, depending on the off-trail route
October 24	Redick Allred: 15 miles	Rock Creek Hollow	No variance from correct mileage
		Willow Creek alternate site	3-mile overestimate for the most direct route from Allred's camp
October 25	William Woodward: 15 miles; Alfred Gadd: 16 miles	Allred's camp from Rock Creek Hollow	No variance from correct mileage (Woodward); 1-mile overestimate (Gadd)
		Allred's camp from Willow Creek alternate site	3-mile overestimate for the most direct route to Allred's camp (Woodward); 4-mile overestimate (Gadd)

II. CREEK CROSSING AND STEEP HILL ANALYSIS

Late on the night after crossing Rocky Ridge, the men who were driving the Willie company's last wagons needed help at a creek crossing. None of the historical sources name this creek, but they give two points of reference for helping identify it—and thus for helping evaluate the location of the Willie company's camp.

The first point of reference comes from two sources that say the creek was about four miles from camp (see the accounts from Levi Savage and John Chislett quoted below and on page 28). The second point of reference comes from a letter written by William Woodward in 1907 that says there was "a steep hill to pull up after we got over the creek."⁵² The first half of this section examines the creek crossing, and the second half examines the "steep hill" after the crossing, analyzing what insights can be drawn from that information about the location of the camp.

Creek Crossing Analysis

Two creeks fit the description of being about four miles from a potential campsite on the night of October 23:

1. Strawberry Creek, which is 3.75 on-trail miles from Rock Creek Hollow (see the red route between the white circles on map 3)
2. Rock Creek, which is 4 off-trail miles from the alternate site on Willow Creek via the most direct route (see the yellow route between the white circles on map 3, which is the same as Route A on map 1)

If the wagons needed help at the Strawberry Creek crossing, that would support the camp being at Rock Creek Hollow. If the wagons needed help at the Rock Creek crossing, that would support the camp being at the alternate site on Willow Creek.

In the Willie company diaries, the only reference to this late-night creek crossing comes from Levi Savage, who wrote: "About 10 or 11 o'clock in the night, we came to a creek that, we did not like to attempt to cross without help, the [creek] being full of ice and freezing cold. Leaving Bros Atwood; and Wooderd [Woodward] with the teams, I started to the camp for help. . . . I passed Several on the road, and arrived in camp after about four miles travel."⁵³

52. Woodward to Smith, 1907.

53. Savage, diary, October 23, 1856.

A more detailed account of the problem at the creek crossing is from John Chislett, who, like Levi Savage and William Woodward, was a sub-captain in the Willie company. Chislett provided his account more than fifteen years after the event:

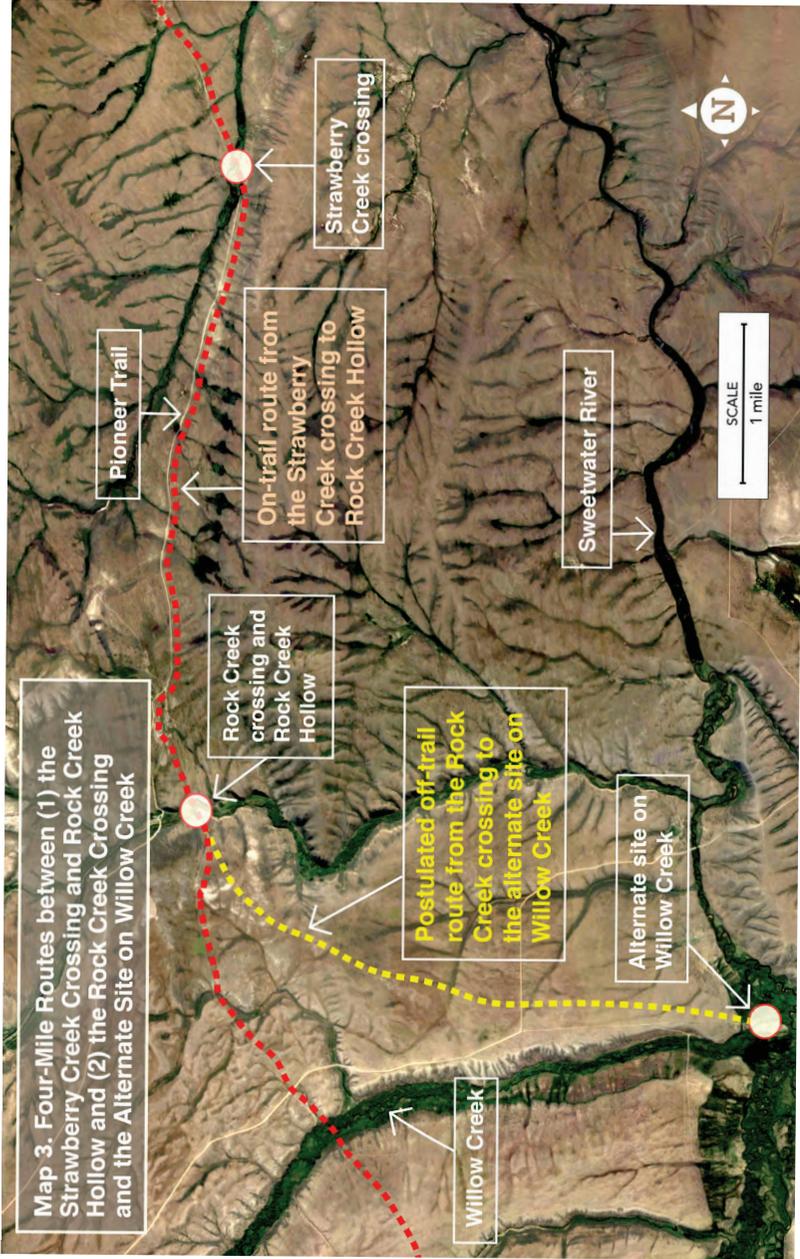
We finally came to a stream of water which was frozen over. We could not see where the company had crossed. If at the point where we struck the creek, then it had frozen over since we passed it. We started one team to cross, but the oxen broke through the ice and would not go over. No amount of shouting and whipping could induce them to stir an inch. We were afraid to try the other teams, for even should they cross we could not leave the one in the creek and go on. There was no wood in the vicinity, so we could make no fire, and were uncertain what to do. We did not know the distance to the camp, but supposed it to be three or four miles. After consulting about it, we resolved that some one should go on foot to the camp to inform the captain of our situation.⁵⁴

Although William Woodward was one of the men driving the late wagons, he didn't mention the creek crossing in the Willie company journal or in any of his other writings about the Willie company until 1907, when he wrote the following account in a letter to President Joseph F. Smith:

In crossing the Rocky Ridge two of our teamsters abandoned their teams. Millen Atwood & myself took the teamsters places - <Bro Savage was with us> we picked up all the stragglers & our wagons were filled[.] We had about 3 steers & 3 Arkansas cows to our wagons & toiled along as best we could. We arrived at a small stream with a steep hill to pull up after we got over the creek. It was dark at night[,] all other teams gone[.] Levi Savage went to camp. Teams were gathered to help us & relieve our loads.⁵⁵

54. In T. B. H. Stenhouse, *The Rocky Mountain Saints: A Full and Complete History of the Mormons* (New York: D. Appleton and Company, 1873), 328. The Chislett account is consistent with Levi Savage's estimate of the distance to camp, but it conflicts with the contemporaneous account of Levi Savage and the later account of William Woodward in saying who went to the camp for help. Savage and Woodward both say that Savage went to the camp (see Woodward's quotation two paragraphs after Chislett's). Neither Savage nor Woodward mentions Chislett. In his account, Chislett says that he went to the camp for help.

55. Woodward to Smith, 1907.



Map 3. Four-Mile Routes between (1) the Strawberry Creek Crossing and Rock Creek Hollow and (2) the Rock Creek Crossing and the Alternate Site on Willow Creek

This map shows (1) the route from the Strawberry Creek crossing to Rock Creek Hollow (in red, on the trail, between the white circles) and (2) a postulated route from the Rock Creek crossing to the alternate site on Willow Creek (in yellow, off the trail, between the white circles). The sources do not name the creek where the wagons stalled, but two of them say it was about four miles from camp, and these are the only crossings and routes that are four miles from a potential camp.

From the information in these sources, cases have been made for both Strawberry Creek and Rock Creek being the place where the last wagons needed help. To date, only one of these points of view has been published. In his book on the Willie handcart company, Gary Long states that this incident could have occurred only at Rock Creek, which would support the camp being at the Willow Creek site. Dismissing the possibility that the wagons could have needed help at Strawberry Creek, he writes: “The stream being described [in these sources] cannot possibly be Strawberry Creek. . . . Strawberry Creek today is . . . a very small stream that by August—and almost certainly late October—is usually dry. . . . It is inconceivable that this [would have been] a really serious obstacle.”⁵⁶

This statement focuses on only one factor: the belief that because Rock Creek was larger than Strawberry Creek, it was the only place where the teamsters could have needed help. However, many other factors merit consideration, including the impact of the weather that night and the previous few days, the broader Willie company history that goes back to early September, and the behavior of draft animals that were inexperienced, broken down, and being driven by unfamiliar teamsters when they faced the crossing of a frozen creek in the dark.

Creek Size

Strawberry Creek is indeed much smaller than Rock Creek. In his 1848 trail guide, William Clayton measured Strawberry Creek to be “five feet wide,” while Rock Creek was “two rods wide” (thirty-three feet).⁵⁷ In his 1852 trail guide, Hosea Horn gave the same measurement for Rock Creek and reported that Strawberry Creek was six feet wide.⁵⁸ Jens Weibye said Strawberry was four feet wide when his company crossed it in September 1862.⁵⁹ Strawberry

56. Long, *Journey of the James G. Willie Handcart Company*, 79–80.

57. Clayton, *Emigrants' Guide*, 16. Clayton referred to Rock Creek as “Branch of Sweet-water.”

58. Hosea B. Horn, *Horn's Overland Guide, from U.S. Indian Sub-Agency, Council Bluffs, on the Missouri River, to the City of Sacramento, in California* [. . .] (New York: J. H. Colton, 1852), 27, 28, available at cpr.org/Museum/Overland_Guide-Horn_1852. Horn referred to Rock Creek as “McAchrans Branch (of Sweet Water).”

59. Jens C. A. Weibye, journal, September 5, 1862 (see translation at Pioneer Database, 1847–1868, The Church of Jesus Christ of Latter-day Saints, accessed October 20, 2019, [CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/5552](http://CHL.history.ChurchofJesusChrist.org/overlandtravel/sources/5552); the database was previously called the Mormon Pioneer Overland Travel Database).

Creek was also sometimes dry by late summer, but that was not the norm.⁶⁰ A Pony Express Station that was established at the Strawberry Creek crossing soon after 1856 attests to the general reliability of the stream.

William Woodward is the only person who addressed the size of the creek where Levi Savage left to get help, saying it was “a small stream.”⁶¹ That description fits Strawberry Creek much better than Rock Creek. Compared to all the other tributaries of the Sweetwater River in the 100 miles and nearly two weeks the Willie company followed it, Rock Creek was the largest and thus the least likely to be described as “a small stream.”

Even so, could a creek that previous travelers had described as being four to six feet wide have been an obstacle for the Willie company’s last wagons? There are many reasons it could have been. There is no record of the width and depth of Strawberry Creek at the crossing that night, nor can that information be surmised from trail guides and pioneer journals of other years, since they do not account for the unique circumstances on October 23. Therefore, the assertion that Strawberry Creek was dry, nearly dry, or too small to be an obstacle that night is based on assumptions for which there is no evidence. Four days of heavy precipitation preceded the night of the stream crossing and likely contributed to a higher-than-normal water level (see figure 5).

Regardless of how much water was flowing in Strawberry Creek that night, Woodward’s statement that “a small stream” prompted the need for help indicates that the size of the waterway wasn’t the primary problem. A creek’s size is only one factor that affects the difficulty of its crossing, and sometimes it isn’t the most important one. For example, William Clayton measured one creek to be only two feet wide but described it as “not good to cross.” He measured a nearby creek to be six feet wide but described it as “good to cross.”⁶² A wider creek isn’t necessarily a bigger challenge for wagons than a smaller one, even in good weather.

60. For reports of Strawberry Creek being dry or nearly dry during the pioneer era, see George Benjamin Wallace emigrating company journal, September 3, 1847, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/6034; Thomas Bullock, journal, August 22, 1848, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/63483898668262610120-eng; and Edward Stevenson, letter to the editor, August 17, 1855, *Deseret News*, September 5, 1855, 208. Stevenson reported that not only was Strawberry Creek dry in 1855 but also that “other streams [were] dried up, and [there was] no water for 25 miles.” The year 1855 was one of severe drought throughout the Intermountain West and did not represent the norm.

61. Woodward to Smith, 1907.

62. Clayton, *Emigrants’ Guide*, 15.



Figure 5. *Strawberry Creek Crossing.* This photo shows the Strawberry Creek crossing in mid-October 2016. A small beaver dam made the crossing at least thirty feet wide and backed up the water into the old trail ruts that lead to the crossing. As shown here, the crossing is in a basin where this slow-moving creek can easily become wider than four to six feet. In the storms of October 1856, the heavy precipitation or an ice blockage could have made the stream wider than usual. This is the same crossing that is shown from a distance in Long, *The Journey of the James G. Willie Handcart Company*, 80.

Problems with the Draft Animals

Apart from the size of the creek, several factors were working against the draft animals that were pulling the Willie company's last wagons that night, prompting the need for help. The Chislett account indicates that the creek where the wagons stalled was frozen over, frightening the first team when it broke through the ice and causing the animals to balk as they started across. The frozen water thus caused problems before the size of the creek would have been a factor. This reaction is common among draft animals when they encounter unsure footing in a frozen creek. They are even more likely to be frightened when it is dark. They can't see the other side of the creek so can't perceive the width, even if it is small, nor can they perceive the depth, even if it is shallow. Unable to establish firm footing and gauge where the next step will take them, they become afraid of slipping and may balk or bolt. Dixon Ford, a lifelong ox trainer and drover and an award-winning author on the subject of oxen on the pioneer trail, explains:

When crossing a creek, oxen are concerned about their footing, especially if there’s ice. What’s most important is the crunch when they first go through. If that’s new to them, they’ll become afraid and will really hesitate, even if it’s a very small stream.

You also have to add in the fact that it was a moonless night. Oxen can see very well in the dark, but when there’s no moon and it’s that dark, they would have had even more apprehension about going into a frozen stream.⁶³

The Willie company’s draft animals were especially susceptible to being frightened by a frozen-over creek in the dark because they were inexperienced in such conditions. The previous month, in the heat of Nebraska, the company had lost thirty oxen, more than two-thirds of the animals that pulled their supply wagons. Each wagon typically required the strength of six oxen, but only about two per wagon remained.⁶⁴ Desperate to keep moving, company leaders had lightened the wagon loads and improvised teams by yoking up “unbroke” and “wilde” milk cows and beef cattle in place of trained oxen.⁶⁵

William Woodward wrote that on the night of October 23, the improvised teams for the last wagons consisted of “about 3 steers & 3 Arkansas cows.”⁶⁶ These untrained animals were more vulnerable than usual to fearing the unknown, such as a frozen-over creek in the dark. The object of their fear was more perceived than real, since the sources do not report any problems when they finally crossed. Nevertheless, when the frightened animals would not move despite shouting and whipping, help was required.

Compounding these animals’ fear was their physical weakness. That night they had already pulled wagons over Rocky Ridge and many miles beyond,

63. Dixon Ford, interview by the authors, April 10, 2017, copy in possession of Jolene S. Allphin. Dixon Ford is coauthor with Lee Kreutzer of “Oxen: Engines of the Overland Emigration,” *Overland Journal* 33, no. 1 (Spring 2015): 4–29. This article won the Oregon-California Trails Association’s Merrill J. Mattes award for best article of the year. Ford has driven his oxen more than two thousand miles over the pioneer trail. Several other experts with cattle have confirmed to the authors what Ford said about why these animals might have balked at a small stream crossing in dark, icy conditions.

64. See James Ferguson, in *Journal History of the Church*, October 4, 1856, CHL (chronology of typed entries and newspaper clippings, 1830–present), microfilm copy in Harold B. Lee Library, Brigham Young University, Provo, UT.

65. Savage, journal, September 7 and 8, 1856.

66. Woodward to Smith, 1907.

battling snow and a hard wind the entire time. The wagons were once again heavy, “crowded with sick [people,] which broke down our teams.”⁶⁷ Even before that day, rescuer Daniel W. Jones said that “most of [the teams] had become too weak to be of much service.”⁶⁸

In addition to the animals’ fear and weakness, a third critical factor was working against them. William Woodward said that the teamsters who were driving these wagons had “abandoned their teams.”⁶⁹ Woodward and Millen Atwood took the teamsters’ places, assisted by Levi Savage. Dixon Ford explains how the absence of the regular teamsters would have affected the animals at the icy stream crossing late at night:

To drive oxen properly, you have to know them, and they have to know you. Mainly, they have to know you. When oxen get to the point that you have to whip them hard, you’ve got the wrong drover there. Oxen have to know their drover before they’ll obey under extreme conditions. Those animals wouldn’t have wanted to go through an icy stream regardless of its size because they weren’t with a drover they trusted. A lot of the reason for the reluctance of the animals in that situation is because their drovers were gone.⁷⁰

Shortage of Men

The balky teams exacerbated another problem for the men at the crossing late that night: they were shorthanded. When they arrived at the stream, they had already been burdened for hours with trying to keep the rear wagons moving despite weak teams, bad trail conditions, storminess, and darkness. At the crossing, they were also confronted with the unpredictability of what frightened animals might do. Because of the darkness, these men couldn’t see what hazards lay beneath the ice—what holes or rocks might exist that would put the wagons at risk of slipping, tipping, getting stuck, breaking a wagon tongue, or getting in some other accident. The wagons were overloaded with sick people, and there weren’t enough men to manage all these predicaments in the dark.

67. Willie company, appendix to journal.

68. Jones, *Forty Years among the Indians*, 65.

69. Woodward to Smith, 1907.

70. Dixon Ford, interview by Jolene S. Allphin, March 16, 2017, copy in possession of Jolene S. Allphin.

After his four-mile trek from the creek crossing, Levi Savage reached the camp at about midnight. An hour or two later, help finally arrived for the last wagons. William Woodward recorded that “teams were gathered to help us & relieve our loads.” These animals were likely experienced mule teams that had been pulling the rescue wagons that were assisting the Willie company. “Teamsters [were] sent to relieve us,” Woodward recorded next, acknowledging the importance of extra manpower. And “best of all,” Woodward wrote, “bread [was] sent to feed our hungry loads of people.”⁷¹

Conclusions about the Creek Crossing

Although smaller than Rock Creek, Strawberry Creek was just as likely to be an obstacle for the Willie company’s last wagons. In the dark, even a small frozen stream could have frightened the animals, especially because they were inexperienced in such conditions and were without their regular teamsters. Furthermore, William Woodward’s statement that the waterway was “a small stream” more accurately describes the usual width of Strawberry Creek.

The Willie company sources do not say the actual crossing of this creek was difficult. Levi Savage recorded only that the men with the last wagons “did not like to attempt to cross [it] without help.”⁷² He mentioned no trouble crossing it on foot, and some four hundred people had crossed it with handcarts and wagons earlier in the day. Rather, the difficulty for the last wagons was largely *anticipatory*—of the problems that frightened, worn-out animals might present; of the risks of taking wagons that were overloaded with sick people across an icy creek in the dark; and of the help that the shorthanded, exhausted men would need to mitigate those risks.

In researching trail guides, the hundreds of trail journals in the Church’s Pioneer Database (formerly the Mormon Pioneer Overland Travel database), and dozens of other journals, the authors have yet to find any references to the crossing of Rock Creek being difficult. They have found only one reference to the crossing of Strawberry Creek being difficult, and that was for a unique circumstance in March 1858.⁷³ Both crossings were so routine that

71. Woodward to Smith, 1907.

72. Savage, diary, October 23, 1856.

73. Owen H. O’Neil, the diarist for Frederick W. Lander’s survey crew in 1858, recorded that the trail from the previous night’s camp “to the crossing of Strawberry . . . was almost clear of snow [and] no further difficulty was met until our arrival at Strawberry at the crossing of which half an hour’s labor was required to remove the drift and make the bank

diarists rarely mentioned them. For these record keepers, the greater size of Rock Creek didn't make it any more noteworthy in terms of difficulty. In fact, describing his company's crossing of Rock Creek in 1862, Jens Weibye wrote that it was "easy to drive over."⁷⁴ These records reinforce the interpretation that the problem at the crossing on October 23 wasn't so much a matter of the size of the creek as it was a unique combination of circumstances—weather, ice, inexperienced animals, darkness, missing teamsters, and inadequate manpower to manage the convergence of these problems.

Steep Hill Analysis

William Woodward is the only person who mentioned that the late wagons had to pull up "a steep hill" after crossing the stream.⁷⁵ Proponents of the Willow Creek site maintain that this recollection from Woodward, written fifty-one years later, could apply only to the hill after the Rock Creek crossing. Again, Gary Long is the only person who has published on this matter to date. In his view, "only one place could fit [Woodward's] description: Rock Creek—'a branch of the Sweetwater' as it was then known. There is no other creek crossing immediately followed by 'a steep hill'."⁷⁶ Woodward's statement is therefore interpreted to support the camp being at the Willow Creek site.

However, proponents of the Rock Creek Hollow campsite point out that the climb after crossing Strawberry Creek, while not as steep, is much more formidable. This interpretation supports the camp being at Rock Creek. This section examines the topography, sources, and interpretations relating to the "steep hill."

less abrupt." "Ft. Kearney, Sth. Pass & Honey Lake Wagon Road," in O. H. O'Neil, journal, March 9, 1858, National Archives and Records Administration, College Park, Maryland, Record Group 48, box 8.

74. Weibye, journal, September 5, 1862. In Long's *Journey of the James G. Willie Handcart Company*, Weibye is quoted as writing that "the crossing [of Rock Creek] was bad" (79). That is an inaccurate quote of the translation of Weibye's journal on the Church's Pioneer Database. Weibye mentioned difficulty with the hills before and after the Rock Creek crossing, but he described the crossing of the creek as "easy." See history.ChurchofJesusChrist.org/overlandtravel/sources/5552. The authors have obtained a copy of Weibye's handwritten journal, which is in Danish, and have verified the accuracy of the translation on the Pioneer Database with a professional Danish translator.

75. Woodward to Smith, 1907.

76. Long, *Journey of the James G. Willie Handcart Company*, 79. Long states that both John Chislett and William Woodward mention this hill, but only Woodward mentions it.

Hill after Crossing Rock Creek

After the trail crosses Rock Creek, it climbs a hill that gains ninety-five feet in elevation in a little more than three-tenths of a mile before it crests (see figure 6).⁷⁷ This climb has a grade of 5.8 percent.⁷⁸



Figure 6. *Rock Creek Crossing and the Hill Afterward.* Looking west, this photo shows the southern crossing of Rock Creek. The trail is in the foreground and ascends the hill after crossing the creek. From the crossing, this route gains ninety-five feet in elevation in a little more than three-tenths of a mile before it crests. This is the crossing that is mapped and photographed in Long’s *Journey of the James G. Willie Handcart Company*, 74; see also the orange dashes on the photo on page 78.

77. There were northern and southern crossings of Rock Creek about two-tenths of a mile apart, and there were correspondingly two routes up the hill. The northern crossing is marked as the emigrant trail on the USGS topographical map, but both routes have trail markers. The routes converge about four-tenths of a mile from the crossings and continue west as a single trail. They gain the same amount of elevation in about the same distance, so neither has a material advantage over the other.

78. Elevations and distances calculated from USGS topographical maps, Radium Springs and Atlantic City quadrangles; google-developers.appspot.com/maps/documentation/javascript/examples/full/elevation-simple, accessed November 19, 2019. Grades calculated by Paul Blackham, civil engineer.

Hills after Crossing Strawberry Creek

Although the trail after crossing Strawberry Creek isn't as steep as it is after Rock Creek, the climb is much longer and gains substantially more elevation. The first hill begins immediately after the crossing and gains seventy-five feet—nearly the same as the hill after Rock Creek—and ascends steadily for about half a mile before it crests (see figures 7 and 8). The grade is 5.4 percent for the first four hundred linear feet and 2.4 percent to the crest.⁷⁹

After the first hill, the trail levels off briefly before it begins climbing again, gaining forty-five feet of elevation in a quarter mile (3.4 percent grade). Then it levels off briefly again before it starts climbing another hill, gaining seventy-five feet in six-tenths of a mile. While the trail after the Rock Creek crossing tops out quickly after three-tenths of a mile, the trail after the Strawberry Creek crossing climbs consistently for more than two miles and gains twice as much altitude before reaching its apex of 7,483 feet. That is the highest point the Willie company reached on October 23—nearly two hundred feet higher than the top of Rocky Ridge and seventy-one feet higher than where the trail later crosses the Continental Divide at South Pass.

Perceptions of the Hills by Other Pioneer Record Keepers

In addition to studying the objective data about these hills (the distances, elevation gains, and grades), the authors have researched hundreds of journals to gather subjective data about them—the perceptions of these hills by people who kept trail journals during the pioneer era. Just as these travelers recorded very little about the crossings of Strawberry Creek and Rock Creek, they rarely mentioned the hills after the crossings. Most people who kept journals apparently considered them to be too short, too gradual, or otherwise too inconsequential to merit including in the record. By comparison, they had just climbed three miles up Rocky Ridge.

From these hundreds of diarists, we have found only four who described the hills after either of these crossings as steep. As table 1 shows, three of

79. There were two primary crossings of Strawberry Creek—a western one and another that is two-tenths of a mile to the east. The routes converge after the western crossing and continue as a single trail. The western crossing is mapped and photographed in Long, *Journey of the James G. Willie Handcart Company*, 74, 80; see also figure 5 herein. Both of these Strawberry Creek crossings are on private property and are fenced; the authors accessed and studied them with permission.



Figure 7. First Hill after the Strawberry Creek Crossing. Looking west, this photo shows part of the steady climb of the first hill after the Strawberry Creek crossing. The trail marker is on the left at the crest.



Figure 8. Near the Crest of the First Hill after the Strawberry Creek Crossing. Looking east, this photo shows the steady climb to the crest of the first hill after the Strawberry Creek crossing. The crossing is down in the willows in the middle part of the photo. The concrete post in the foreground marks the pioneer trail. Today this part of the trail is graded and maintained as the Lewiston Road.

the writers referred to the hill after Rock Creek, and one (James Farmer) referred to the hills after Strawberry Creek.

TABLE 1: Pioneer Diarists' References to the Hills after Crossing Rock Creek and Strawberry Creek

Writer, date	Hill described	Journal excerpt
Thomas Bullock, 1848	After the Rock Creek crossing	Have a good road to the Sweetwater [Rock Creek], where we water our teams; ascend a very steep hill, which we pass over & descend to the Willow Creek. ⁸⁰
James Farmer, 1853	After the Strawberry Creek crossing	Come to Strawberry Creek[.] beautiful water[.] . . . We now ascend a steep hill and come to another creek [Quaking Aspen Creek]. . . . We again pass over a series of hills. . . . We travel for 4 miles by the side of a large range of Bluffs [and] cross the Sweet Water [Rock Creek]. no feed[.] 2 miles further we come to Willow Creek. ⁸¹
Bartlett Tripp, 1861	After the Rock Creek crossing	Dinner on a branch of Sweetwater [Rock Creek]. . . . This a clear swift moving creek on which are growing an abundance of willows[.] The descent on either side is steep. ⁸²
William Miles, 1861	After the Rock Creek crossing	Crossed the Rock Creek. Two steep hills came down, road smooth. ⁸³

80. Bullock, journal, August 23, 1848. In his journal, Bullock was inclined to use the phrase “steep hill,” which appears eleven times. In 1847, Bullock described Rock Creek as being in a “deep ravine,” noting the hills on both sides. Bullock, journal, June 26, 1847, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/17143644455003774922-eng.

81. James Farmer, journal, September 9, 1853, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/5174. Farmer did not record anything about the hill after the Rock Creek crossing. Three years later, he was one of the rescuers of the handcart companies.

82. Bartlett Tripp, journal, July 30, 1861, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/4948.

83. William Hart Miles, diary, August 30, 1861, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/6172. Jens Weibye didn’t describe the hills before and after Rock Creek as steep, but he did report some difficulty with them in 1862: “We drove over a Branch

Just as there was for James Farmer, there is justification for William Woodward to remember the trail after the Strawberry crossing as steep when writing about it fifty-one years later—whether he was recalling the first 75-foot hill or the longer climb that gains 180 feet in elevation from the crossing. The hill after Rock Creek requires only about ten minutes to climb if traveling two miles an hour. The first hill after Strawberry Creek takes nearly twice as long and is followed by additional climbing that requires, altogether, 1.25 hours from the crossing to reach the highest point, assuming a pace of two miles an hour.

As trail journals show, there is an element of subjectivity in what is considered to be steep. This subjectivity can be affected by many factors, such as personal perception, visibility, weather, the labor required, the condition of the people or animals doing the labor, and trail conditions. Any one or more of these factors could have prompted William Woodward to remember the trail after the Strawberry crossing as steep. From a distance of fifty-one years, he was recalling an experience when he had been traveling after midnight, with limited visibility, at the end of an exhausting day. Even with help from camp, the men and animals would have strained to climb the snowy hills after the Strawberry crossing.

Conclusions about the Steep Hill

Proponents of the Willow Creek site dismiss Strawberry Creek as the place where the Willie company’s wagons needed help by asserting that the trail after the crossing doesn’t match William Woodward’s description of being a “steep hill.” Although the hills after Strawberry Creek aren’t as steep as the hill after Rock Creek, the climb is much longer, gains much more elevation, and requires more labor. In the perception of at least one other pioneer diarist, the climb after the Strawberry crossing was “steep” (see the excerpt from James Farmer in table 1).

From the objective and subjective data, it is not possible to know with certitude which hill William Woodward was referring to. What is clear from this data, however, is that the climb after the Strawberry Creek crossing cannot be dismissed as being the “steep hill” he remembered. On the contrary, this research shows that there would have been ample cause for him to recall that climb as steep in the conditions of that night.

of Sweetwater (deep and badly down and driving up the hills). Easy to drive over.” Weibye, journal, September 5, 1862; see also footnote 74 herein.

III. PLACE-NAME ANALYSIS

William Woodward is the only diarist who recorded where the Willie company camped on the nights of October 23 and 24, 1856, writing in the company journal that it was “on the Sweetwater.”⁸⁴ The trail leaves the Sweetwater River when it begins climbing Rocky Ridge and doesn’t meet the river again until crossing it for the last time, twenty miles away—far beyond the distance the Willie company traveled on October 23. What, then, did Woodward mean by saying the company camped “on the Sweetwater” when the trail was not by the river during their travels that day? Proponents of the Rock Creek Hollow site and the alternate site on Willow Creek have set forth the following interpretations.

Rock Creek Hollow Site: The Willie company camped along the trail at the well-established campsite at Rock Creek Hollow. For at least a decade during the pioneer era, before Rock Creek was so named, and both before and after William Woodward said the camp was “on the Sweetwater,” many pioneer diarists referred to Rock Creek as “the Sweetwater” (see table 3 and appendix 3).

Willow Creek Site: The Willie company bypassed the campsite at Rock Creek Hollow and traveled several additional off-trail miles to reach the main channel of the Sweetwater River near the mouth of Willow Creek.

This section analyzes the place-name information in the Willie company sources, puts it in context with the naming conventions of other pioneer diarists, and examines how this information helps assess the location of the company’s campsite and mass grave after they crossed Rocky Ridge.

The Naming of Rock Creek

Rock Creek couldn’t have been mentioned in any of the Willie company diaries because it hadn’t been named as such in 1856. The first designation of Rock Creek by that name appears to be in March 1858, more than sixteen months after the Willie company had been there. Owen H. O’Neil, who kept the company journal for a government survey crew that year, wrote: “March 9th Camp 8. . . . Came to camp on Rock Creek at 1¼ P.M. Day’s march 7 miles.”⁸⁵ Three months later, in June 1858, Rock Creek

84. Willie company journal, October 23, 1856.

85. “Ft. Kearney, Sth. Pass & Honey Lake Wagon Road,” in O. H. O’Neil, journal, March 9, 1858.

was first designated by that name on government maps (see the map in appendix 2).

As table 2 shows, trail guides published before 1856 used a variety of names to refer to Rock Creek, including “Branch of Sweet-water,” “North Fork of Sweetwater,” and “McAchrans Branch (of Sweet Water).” The first trail guide to designate Rock Creek by that name was *Allen’s Guide Book*, published in 1859 by government guide Obridge Allen. In addition to the name “Rock Creek,” Allen included its more commonly known name at the time: “A branch of Sweet Water.” Although these guidebooks had differences in their names for Rock Creek, they all had one constant: they included the name “Sweetwater.”

TABLE 2: Names of Rock Creek from Trail Guidebooks

Source	Year	Name
<i>Latter-day Saints’ Emigrants’ Guide</i> by William Clayton ⁸⁶	1848	Branch of Sweet-water
<i>California in 1850</i> by Franklin Street ⁸⁷	1851	North Fork of Sweetwater
<i>Horn’s Overland Guide</i> by Hosea B. Horn ⁸⁸	1852	McAchrans Branch (of Sweet Water)
<i>The Emigrant’s Guide to California</i> by J. Tarbell ⁸⁹	1853	North Fork of Sweetwater
<i>Allen’s Guide Book and Map to the Gold Fields of Kansas & Nebraska and Great Salt Lake City</i> by Obridge Allen ⁹⁰	1859	Rock Creek— A branch of Sweet Water

86. Clayton, *Emigrants’ Guide*, 16.

87. Franklin Street, *California in 1850* (Cincinnati: R. E. Edwards & Co., 1851), 68.

88. Horn, *Horn’s Overland Guide*, 28.

89. J. Tarbell, *The Emigrant’s Guide to California* (Keokuk, IA: Whig Book and Job Office, 1853), 8.

90. O. [Obridge] Allen, *Allen’s Guide Book and Map to the Gold Fields of Kansas & Nebraska and Great Salt Lake City* (Washington: R.A. Waters, 1859), 65, available at archive.org/details/allensguidebookm11alle. In the preface of his book, Allen states that he “had access to all the official surveys, maps, drawings, and reports presented to the War Department by the Government Topographical Engineers.”

Pioneer Diarists' References to Rock Creek as "the Sweetwater"

Like those who published guidebooks, pioneer diarists referred to Rock Creek in a variety of ways. Table 3 shows a sampling of writers who referred to Rock Creek as "the Sweetwater" both before and after guidebooks named it a "branch" or a "fork" of the Sweetwater. William Woodward's reference to the Willie company's October 23–24 camp being "on the Sweetwater" is consistent with a common way that pioneer diarists referred to Rock Creek.

TABLE 3: *Pioneer Diarists' References to Rock Creek as "the Sweetwater"*

The authors have analyzed each of the entries in this table to verify that the diarists are referring to Rock Creek as "the Sweetwater." For additional examples, see appendix 3.

Writer, company, date	Journal excerpt	Analysis
Thomas Bullock Brigham Young vanguard company June 26, 1847	Camp starts at 7.40[.] pass 3 small Groves on left, one on the right— ascend some gentle hills—on a Sudden <u>came to the Sweetwater</u> <u>[Rock Creek]</u> in a deep ravine—with many Willows & Shrubs on its banks—cross it about 15 yards wide—ascend a hill—see another Camp in our rear, con- tinue over a very good road, & descend a gen- tle inclined Plane—to the main branch of the Sweetwater—cross it. ⁹¹	The company had camped at Strawberry Creek the previous night, so this is a clear exam- ple of Rock Creek being called "the Sweetwater." The "main branch of the Sweetwater" that Bullock references at the end of this entry is the last crossing of the river, seven miles west of Rock Creek. Bullock doesn't mention crossing Willow Creek, which is between the two.

91. Bullock, journal, June 26, 1847.

Writer, company, date	Journal excerpt	Analysis
<p>Millen Atwood Brigham Young vanguard company June 26, 1847</p>	<p>Left there [Strawberry Creek] on Sat 26th[.] traveled about 4 miles[.] <u>forded Sweet waters [Rock Creek]</u> the 3rd time[.] traveled on about 5 miles[.] forded sweet waters [last crossing] the 4th time[.] . . . campd for the night on sweet waters [about 2 miles east of South Pass] making 18 2/3 miles.⁹²</p>	<p>Atwood uses “Sweet waters” to refer to (1) the company’s crossing of Rock Creek, (2) the last crossing of the Sweetwater River, and (3) the camp at the westernmost camping area on the Sweetwater River, about eight miles west of the last crossing. Atwood was later a subcaptain in the Willie company and was with the last wagons on the night of October 23–24, 1856.</p>
<p>James Farmer Jacob Gates company September 9, 1853</p>	<p>We travel for 4 miles [from Strawberry Creek] by the side of a large range of Bluffs [and] <u>cross the Sweetwater [Rock Creek]</u>. no feed[.] 2 miles further we come to Willow Creek.”⁹³</p>	<p>Like many other diarists even after the publication of Clayton’s <i>Guide</i> and other guidebooks, Farmer refers to Rock Creek as the Sweetwater—not a branch or a fork of the river—but the Sweetwater.</p>

92. Millen Atwood, journal, June 26, 1847, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/8363.

93. Farmer, journal, September 9, 1853.

Writer, company, date	Journal excerpt	Analysis
Oscar Stoddard Horace S. Eldredge company July 1 and 2, 1858	<p><u>July 1, 1858:</u> Came on 3 or 4 miles[.] found some water then moved on some 6 or 7 m farther & camped for breakfast on Muddy Creek[.] came on 10 m farther & got dinner then 10 m farther <u>came to sweetwater</u> [Rock Creek].</p> <p><u>July 2, 1858:</u> Came on 14 m & stopped for dinner on the sweet water [the westernmost camping area on the Sweetwater] within 2 m of south pass[.]⁹⁴</p>	Stoddard refers to both Rock Creek and the westernmost camping area on the Sweetwater River as the “sweetwater.” The July 2 entry is included for context, since the distance from Rock Creek to that camping area is fifteen miles—close to the fourteen miles that Stoddard estimates traveling. Two years later, in 1860, Oscar Stoddard led the tenth and last hand-cart company.

As the excerpts in table 3 show, diarists often called Rock Creek “the Sweetwater” for more than a decade during the pioneer era. Proponents of the Willow Creek site advocate a limited interpretation of William Woodward’s statement that the camp was “on the Sweetwater,” asserting that it is applicable only to the main channel of the Sweetwater River. However, the records of pioneer diarists provide historical context that does not support the exclusive nature of this interpretation.

Pioneer Diarists’ Other References to Rock Creek

While many diarists referred to Rock Creek as “the Sweetwater,” others called it by the full names in the guidebooks, including “branch of Sweetwater” and “north fork of the Sweetwater.” Not until 1860, the year after the publication

94. Oscar Stoddard, journal, July 1 and 2, 1858, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/5086.

of *Allen’s Guide Book*, did a Latter-day Saint diarist refer to Rock Creek by that name. See table 4 for a sampling of these references to Rock Creek and appendix 4 for additional references.

TABLE 4: Pioneer Diarists’ Other References to Rock Creek

Writer, company, date	Journal excerpt	Analysis
John D.T. McAllister James W. Cummings company September 10, 1851	We are Camped <u>on the Branch of the Sweet warter [Rock Creek]</u> . plenty of willows and warter but no feed for our Cattle. ⁹⁵	Refers to Rock Creek as “Branch of the Sweet warter.”
Allen Joseph Stout James W. Cummings company [September 10,] 1851	We rolled on <u>up to the north fork of the Sweetwater [Rock Creek]</u> where my wagon broak down and I had to cash [cache] my frate [freight]. ⁹⁶	Stout’s account is a reminiscence in which he calls Rock Creek “the north fork of the Sweetwater,” perhaps drawing that name from Franklin Street’s 1851 guidebook.
Charles R. Savage B. Franklin Brown company August 10, 1860	Nooned at Alkalai Springs 2 miles east of Strawberry Creek— <u>Camped for the night at Rock Creek.</u> ⁹⁷	After Allen’s guidebook used the name “Rock Creek” in 1859, more pioneer diarists referred to it by that name. Charles R. Savage is the first known Latter-day Saint diarist to do so.

95. John D. T. McAllister, Alfred Cordon emigrating company journal (of James W. Cummings company), September 10, 1851, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/1824.

96. Allen Stout, reminiscence, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/5013.

97. Charles R. Savage, diary, August 10, 1860, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/34525969299863919820-eng.

Willie Company Sources That Refer to the Camp Being “on the Sweetwater”

Regarding the location of the Willie company’s October 23–24 camp, William Woodward wrote in the company journal: “Ascended a steep hill [Rocky Ridge], travelled about 16 miles & camped on the Sweetwater.”⁹⁸ The Willie company’s other diarists, Levi Savage and Alfred Gadd, didn’t mention the location, nor did rescuer Redick Allred in his diary.

Chronologically, the next source that names the location is a letter that William Woodward wrote to Wilford Woodruff on February 17, 1857, three months after the Willie company arrived in Salt Lake City. In this letter, Woodward is consistent with his entry in the company journal, describing the camp as “on the Sweetwater.”⁹⁹

A third reference to the camp being “on the Sweetwater” is in a document titled “Synopsis of the Fourth Hand Cart Company’s Trip from England to G.S.L. City in 1856.” This synopsis is generally attributed to James G. Willie because most of it is written in his first-person voice, but that attribution is inaccurate, and its author, handwriting, and provenance are unknown.¹⁰⁰ The author had access to the Willie company journal because the synopsis is clearly a derivative, tracking the journal closely, focusing on the same events, using facts that are unique to it, and echoing and quoting many of its distinctive words and phrases.

98. Willie company journal, October 23, 1856.

99. William Woodward to Wilford Woodruff, February 17, 1857, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/14830511087423921096-eng.

100. The synopsis is not in James Willie’s handwriting, nor is it likely that he dictated it to a scribe or prepared an original that someone copied. In December 1878, John Jaques published a newspaper account of the Willie company’s journey for which he used the synopsis as his primary source, even quoting parts of it. See John Jaques, “Some Reminiscences,” *Salt Lake Herald-Republican*, December 29, 1878, 1, history.ChurchofJesusChrist.org/overlandtravel/sources/7746. Less than two weeks later, James Willie wrote a letter to President John Taylor criticizing the accuracy of the article—and thus implicitly criticizing the synopsis and disclaiming authorship. See James Willie to John Taylor, January 10, 1879, CR 1 180, box 4, folder 8, First Presidency correspondence, 1877–1887, CHL. In this letter, James Willie said he would like to write “a full and correct statement of [the Willie handcart company’s] travels and sufferings that . . . could be inserted in ‘Church History,’ or published.” He explained that he wanted to provide this history because “a true statement of events and scenes, that then transpired, and of which I was an eye Witness, . . . has never been written.” There is no record that James Willie wrote this history before he died in 1895.

The synopsis itself doesn't identify the camp location, but William Woodward reviewed a copy that included a correction, written by a second unknown hand, as a footnote on the last page. Woodward acknowledged the correction by placing his signature next to it. The original sentence reads: "It [October 23] was the most disastrous day on the whole trip—15 dying from fatigue and exposure to the cold." The footnote that Woodward validated corrects this statement to read: "They did not all die on the day that they crossed Rocky Ridge . . . but 15 in all died, and were buried on the Sweetwater."¹⁰¹

The synopsis is the third example of William Woodward using or confirming the words "on the Sweetwater" to describe the location of the camp or mass grave. Naturally, in the Willie company journal, Woodward also used the words "the Sweetwater" when referring to the main channel of the river during the two weeks the company followed it. That, however, would not have precluded him from also referring to "branch of Sweetwater" (Rock Creek) as "the Sweetwater," just as some other pioneer diarists called both the Sweetwater River and Rock Creek "the Sweetwater."

Willie Company Sources That Refer to the Camp Being Near or on Willow Creek

Two recollections mention Willow Creek in connection with the Willie company's campsite and grave of October 23–24. These sources are (1) the appendix to the Willie company journal and (2) the John Chislett narrative. This section examines and evaluates these sources.

The appendix to the Willie company journal says, "We buried 13 souls near Willow Creek on the banks of the Sweetwater." In isolation, this statement might be interpreted to support the Willow Creek site, but it is only

101. "Synopsis of the Fourth Hand Cart Company's Trip from England to G.S.L. City in 1856," attributed to James G. Willie, in Historian's Office history of the Church, 1839–circa 1882, 966–83, CR 100 102, CHL. For the handwritten version with Woodward's approved correction, see "Synopsis of the 4th Handcart Company's Trip from Liverpool, England to Great Salt Lake City, 1856," 8, CR 376 1, box 2, folder 2, Perpetual Emigrating Fund Company general files, 1850–1887, CHL, catalog.ChurchofJesusChrist.org/assets?id=43b4fd81-2ec3-4e46-b181-f63c5ae90629&crate=0&index=0. The synopsis that is on the Church's Pioneer Database is transcribed from the version that was copied into the Historian's Office book; see history.ChurchofJesusChrist.org/overlandtravel/sources/70069. That version does not include the handwritten correction verified by Woodward. A third version of the synopsis is a typescript that has many transcription errors: James G. Willie history, MS 5695, CHL.

one piece of a large, complex historical puzzle. Furthermore, questions about the source cast doubt on its reliability, as outlined below.

William Woodward is the presumed author of the appendix because his name is included at the end of the typescript and because the content, language, and style are based on the company journal and his other writings. However, the appendix begins with a factual error that would be uncharacteristic for Woodward to make. Concerning a crippling setback the Willie company had suffered in Nebraska, the first sentence says, “After the loss of many of our oxen, west of Fort Kearney, we hunted for them some four days.” As the company journal and Woodward’s personal diary make clear, the Willie company searched for their oxen for only *two* costly days before urgently resuming their journey.¹⁰² Most other details in the appendix are consistent with other sources, but an error of this nature raises questions about the reliability of the typescript or the accuracy of the writer’s memory, since the appendix is a recollection.

Another problem with the appendix is that its provenance is unknown, with the earliest available version being a typescript at the end of the Willie company journal typescript. It is unknown how many years later the appendix was written, whether the original still exists, who prepared the typescript from the original, who combined it with the company journal, when that was done, what editing might have occurred during that process, and what transcription errors might have been introduced. Such editing was common practice, and transcription errors were likewise common.

In the company journal and in two handwritten sources, William Woodward indicated that the camp was “on the Sweetwater.”¹⁰³ Only in the typescript of the appendix is the grave (and thus the camp) described as being “near Willow Creek on the banks of the Sweetwater.” In this regard, the appendix is an outlier from the other three Woodward sources. This anomaly, as well as a significant factual error and an unknown provenance, compromise the reliability of the appendix’s description of the site.

102. See Willie company journal, September 4–6, 1856; and William Woodward, diary, September 4–6, 1856, CHL.

103. See Willie company journal, October 23, 1856; Woodward to Woodruff, February 17, 1857; “Synopsis of the Fourth Hand Cart Company’s Trip from England to G.S.L. City in 1856,” 8, available at catalog.ChurchofJesusChrist.org/assets?id=43b4fd81-2ec3-4e46-b181-f63c5ae90629&crate=0&index=0.

The source that mentions the Willie company’s mass grave being on Willow Creek is the John Chislett narrative. That account says: “We buried these thirteen people [and] covered them with willows and then with the earth. . . . Two others died during the day, and we buried them in one grave, making *fifteen in all buried on that camp ground*. It was on Willow Creek, a tributary of the Sweetwater river.”¹⁰⁴ The Chislett narrative describes the location differently than the Woodward sources, saying it was on a tributary of the Sweetwater.

Although many place names, dates, and numbers in the Chislett narrative are accurate, a comparison with more reliable sources shows that many are not. At least ten factual errors can be documented in his account for October 19 through 25. Such errors are typical of recollections. The Chislett narrative was written more than fifteen years after the experience—too long for memories to hold every fact, especially if a writer isn’t referring to a source that was kept contemporaneously. There is no evidence that Chislett had access to such a source. The number of errors in his account, as well as his being a first-time traveler over the trail, weakens the narrative’s reliability for facts such as place names and dates.¹⁰⁵

Place-Name Summary

This section has evaluated the five known sources that provide place-name information about the Willie company’s camp and mass grave, putting the sources in historical context and examining their reliability. For more than a decade, a multitude of pioneer diarists used “the Sweetwater”—the same words that William Woodward repeatedly used to describe the campsite—to refer to Rock Creek, even after guidebooks had named it a “branch” or a “fork” of the Sweetwater River. There is a lack of justification, then, for interpreting Woodward’s references to the camp being “on the Sweetwater” to apply exclusively to the main channel of the river. The naming convention of Woodward’s time shows that this description applies to Rock Creek as well.

The credibility of the two sources that use Willow Creek as a reference point for the grave is compromised. Many questions exist about the provenance of the appendix to the Willie company journal, and both the appendix

104. In Stenhouse, *Rocky Mountain Saints*, 329, italics in original.

105. For example, the Chislett account says the Willie company reached Fort Laramie on September 1 or 2, which is wrong by a month. See Stenhouse, *Rocky Mountain Saints*, 319.

and the Chislett narrative are recollections that have demonstrable errors of significant facts.

IV. ON-THE-GROUND ANALYSIS

The preceding sections have shown that the mileage information in the historical sources favors the Rock Creek site, while the information about the creek crossing and place name doesn't clearly favor one site over the other. This section examines the historical sources within three other contexts that are crucial to assessing the location of the camp and grave:

1. The physical condition of the people and the effects of the weather
2. A comparison of Rock Creek Hollow and the alternate site on Willow Creek
3. The indications about whether the Willie company stayed on the trail to camp at Rock Creek or left it for the Willow Creek site

The Condition of the People and the Effects of the Weather

One of the primary factors affecting the physical condition of the Willie company in late October was their food supply. In addition to meat, flour was the dietary staple of the handcart pioneers. On August 16 and 17, the Willie company had left Florence, Nebraska Territory, with a sixty-day supply of flour. Because that was far less than they needed to reach the Salt Lake Valley, they were to be resupplied along the way. Wagons from Salt Lake City had traveled more than four hundred miles to provide flour to the first two handcart companies at the end of August.¹⁰⁶

On September 30 the Willie company arrived at Fort Laramie, the halfway point between Florence and Salt Lake City. They had traveled the 522 miles from Florence in forty-five days, averaging 11.6 miles a day. That was a good pace, considering the challenges they had faced in Nebraska, but the journey left them with only a fifteen-day supply of flour for the remaining 509 miles to Salt Lake City. Expecting to acquire additional supplies and fresh cattle at Fort Laramie, the people received some grim news instead. They learned

106. See Edmund Ellsworth emigrating company journal, August 30–31, 1856, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/2888; Daniel D. McArthur, reminiscences, in *Journal History of the Church*, September 26, 1856, 3–6, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/2837.

that they couldn't hope for a resupply from Salt Lake City until reaching the vicinity of South Pass—280 miles away—and even that was uncertain.¹⁰⁷ Nor could they purchase many provisions at the fort, which Levi Savage said were "exstreamly costly," so they left having obtained little more than a day's supply of hard bread.¹⁰⁸

The Willie company faced an agonizing dilemma. If they continued to travel at their normal pace and consume their normal rations, they would run out of food eight or nine days before reaching their hoped-for resupply near South Pass. The company journal records that two days after reaching Fort Laramie, "Bros. Willie, Atwood & Savage addressed [the camp] on the necessity of shortening the rations . . . , that our flour might hold out till supplies should meet us."¹⁰⁹ Members of the company unanimously accepted the proposal, and rations were reduced from sixteen ounces to twelve ounces a day.

The distress caused by reduced rations was evident almost immediately. On October 8, Levi Savage recorded, "Our olde people are nearly all failing fast."¹¹⁰ Four days later he wrote, "The people have Sharp apatites."¹¹¹ On October 15, after thirteen days on reduced rations and still four days before the first winter storm, Levi Savage's description was ominous: "The people are geting weak, and failing very fast, a grate many Sick. . . . It requires great exertion to make any progress."¹¹² Even with rationing, the flour was diminishing too fast, so on that day James Willie proposed another reduction—to 10.5 ounces for men, 9 for women, and 6 for children. Again the people unanimously accepted this proposal.¹¹³

Despite these drastic measures, the Willie company ran out of flour on October 19, about sixty miles short of South Pass, where they hoped to meet resupply wagons. Levi Savage recorded that during the sixteen miles the people traveled that day—some of it in a snowstorm—"the childre[n], aged, and infirm fel back to the wagons till they were so full that all in them

107. Levi Savage twice recorded that the company expected to be resupplied at Pacific Springs, three miles west of South Pass. See Savage, diary, October 4 and 6, 1856.

108. Savage, diary, October 1, 1856; see also Willie company, appendix to journal.

109. Willie company journal, October 2, 1856.

110. Savage, diary, October 8, 1856.

111. Savage, diary, October 12, 1856.

112. Savage, diary, October 15, 1856.

113. Willie company journal, October 15, 1856; Savage, diary, October 15, 1856.

were exstreamly uncomfortabl[e].”¹¹⁴ That night the company issued the hard bread that James Willie had obtained at Fort Laramie.¹¹⁵ Except for some scraps and a few bony cattle, there would be no more food for these already starving people until the rescue wagons arrived two days later.

William Woodward wrote that during those two days, “many children were crying for bread and the camp generally were destitute of food.”¹¹⁶ Making matters worse, a cold, hard wind and heavy snow continued on both days.¹¹⁷ “The cattle, and people, are So much reduced with Short food and hard work,” wrote Levi Savage, “that except we get assistance, we Surely, can not move far in this Snow.”¹¹⁸ Ravaged by hunger, members of the Willie company “resorted to the eating of anything that could be chewed,” including bark and the rawhide from their boots. The hardship of the cold and the “scant rations . . . is beyond my power of description to write,” John Oborn said. “God only can understand and realize the torture and privation, the exposure and starvation that we went through.”¹¹⁹

The mortality of the Willie company also reveals much about the effects of short rations combined with exposure. During the eighty days between July 15, when they left Iowa City, and October 2, the last day of full rations, the company traveled about 810 miles and suffered eleven deaths—an average of less than one a week. During the nineteen days between October 3, when rationing began, and October 21, when the rescuers arrived, the company traveled about 220 miles and suffered twenty-one deaths—an average of more than one every day. Ten of those twenty-one deaths occurred between

114. Savage, diary, October 19, 1856. His reference to wagons was to the Willie company’s rear supply wagons, which generally carried heavy items such as tents and flour, as well as the sick who were unable to walk.

115. Willie company journal, October 20, 1856. The Willie company journal and the diary of Levi Savage differ on when the hard bread was issued, with Savage saying it was issued on the morning of October 20.

116. Willie company journal, October 21, 1856.

117. See Willie company journal, October 20, 1856; Savage, diary, October 20, 1856; and Elder, diary, 22; see also Robert T. Burton, diary, October 21, 1856, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/45469/burton-robert-taylor-diaries-1856-1907-record-book-circa-1856-october-november; and William Broomhead, diary, October 20 and 21, 1856, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/12838687573707091629-eng.

118. Savage, diary, October 20, 1856.

119. John Oborn, Reminiscences and diary, circa 1862–1901, [Part 1], 4, [Part 2], 2, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/13647312379501065902-eng.

October 19 and 21, showing how the snow and cold exacerbated the problem of having little or nothing to eat.

On the first day the Willie company was without food, James Willie and Joseph Elder rode ahead to find the rescuers and urge them to hurry forward. After a heroic journey of some fifty miles round-trip, going over Rocky Ridge twice, battling “snow and an awful cold wind,” they returned with George D. Grant and his small rescue team on October 21.¹²⁰ The flour these rescuers brought was lifesaving manna for most of the company, although it couldn’t restore strength that had been waning for weeks.

Grant divided his rescue team the next day, leaving several men and six wagons to help the Willie company while the other men continued east to search for nearly one thousand more people who were farther back on the trail. The rescuers who stayed with the Willie company provided essential help, but it was far from adequate for nearly four hundred people in such dire circumstances and for whom the hardest part of the trail was still ahead. Most members of the Willie company would have to continue pulling their handcarts another 160 miles to Fort Bridger before meeting enough rescue wagons that everyone could ride. The company resumed traveling that day, October 22, trudging about ten miles through the snow to the base of Rocky Ridge.¹²¹

The next morning—only the second that began with full rations restored—the Willie company embarked on the most grueling, anguishing day of their journey: pulling handcarts up Rocky Ridge and more than ten miles beyond. From where the trail leaves the Sweetwater River at the base of Rocky Ridge, it climbs six hundred feet in about three miles. Pulling loaded handcarts up that grade was punishing labor. Compounding the difficulty, the people traveled into a biting wind and in some places through deep snow. They traversed barren, exposed terrain at high elevations, where there were no trees or topographical features for protection.

Regarding the weather on October 23, William Woodward wrote, “Crossing the rocky ridge we had a tremendous snow storm.”¹²² Levi Savage said, “The

120. Elder, diary, 22. Elder said the distance between the Willie camp and the rescuers’ camp was twenty-seven miles. William Broomhead said that Willie and Elder reported the distance to be twenty-three miles. See Broomhead, diary, October 20, 1856. Harvey Cluff noted the distance to be twenty-five miles. See Cluff, *Autobiography and journals*, 3:19.

121. See Willie company journal; Savage, diary; and Gadd, diary, October 22, 1856.

122. Woodward to Woodruff, February 17, 1857; see also William Woodward to Albert Jones, September 12, 1906, in which Woodward said the company faced “a bitter snow storm” that day.

wind blew awful hard, and colde. . . . Some places [were] Steep and covered with deep Snow. . . . Some became chilled, and commenced to frieze.”¹²³

Hypothermia menaced the Willie company. Every rest carried the risk of freezing to death, and some people collapsed in a frozen stupor. The wagons that brought up the rear were so overloaded with people who could no longer walk that Levi Savage “was fearful, Some would Smuther.”¹²⁴

In this condition, members of the company began arriving at camp that evening and continued to straggle in until almost dawn the next day. The survivors were desperate for rest, for the warmth of a fire, and for the protection of a tent. Rock Creek Hollow offered the first good place for respite and shelter in more than thirteen miles and, for some people, at least twenty hours. Going to the Willow Creek site would have required them—in their time of greatest extremity—to disregard these benefits, leave the trail, and grind out at least four more miles into the black, blustery cold of night.

The Campsite Comparison

Given the Willie company’s condition after crossing Rocky Ridge, the most important characteristics of a campsite would have been (1) accessibility, (2) availability of water and wood, and (3) protection from the elements.

In terms of accessibility, Rock Creek Hollow had an enormous advantage over the Willow Creek site, since it was along the trail and didn’t require traveling several additional off-trail miles to reach.

Both sites had water, and according to guidebooks from 1848 and 1852, both the Rock Creek and Willow Creek trail crossings had “plenty” of willows.¹²⁵ Trail journals from 1854, 1860, and 1861 also describe Rock Creek as having “an abundance of willows” and “plenty of willows for wood.”¹²⁶ Because there were willows where the trail crossed Willow Creek, it is

123. Savage, diary, October 23, 1856.

124. Savage, diary, October 23, 1856.

125. Clayton, *Emigrants’ Guide*, 16; Horn, *Horn’s Overland Guide*, 28.

126. Tripp, journal, July 30, 1861; James L. Lowry, journal, June 15, 1860, Merrill J. Mattes Collection, Oregon-California Trails Association, <https://www.octa-journals.org/merrill-mattes-collection/1683>; see also Robert Campbell company, report, October 6, 1854, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/4931; Sixtus E. Johnson company journal, September 10, 1861, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/3550.

reasonable to surmise that the alternate site three miles downstream also had willows, as it does today (see figure 11).

When comparing which site offered better protection from the elements, there are two factors to evaluate: willows and topography. The protection afforded by the willows was important enough that on the second day in camp, the Willie company “move[d] the tents, and people behinde the willows to She[l]ter them from the Scre[am]ing wind, which blew enough to pearce us through.”¹²⁷ This protection was available at Rock Creek Hollow and was likely available at the Willow Creek site, as it is today. By contrast, only Rock Creek Hollow provided a measure of topographical protection from the weather. The hollow is a low-relief valley, with hills and cliffs on three sides that create some degree of windbreak (see figures 9 and 10). Thomas Bullock described this valley as a “deep ravine.”¹²⁸ The Willow Creek site is topographically wide open (see figure 11).

The authors have researched hundreds of trail journals from 1847 through 1868 and have not yet found a single reference to an emigrating company, including wagon companies that were in good condition, going so far off the trail to camp at the Willow Creek site. It defies reason that at the end of this deadly day, the Willie handcart company would have bypassed a superior campsite at Rock Creek Hollow and exerted the extra labor required to travel several additional off-trail miles to the Willow Creek site when they, of all emigrating companies, were in the worst condition to do so.

Staying on the Trail or Leaving It

None of the historical sources give any indication that the Willie company traveled off-trail to reach their campsite of October 23 and 24. If the people had done something as laborious as blaze a new route of many miles in the snow, over rough and disorienting terrain, while weak and numb with cold, that information was uncharacteristically omitted from the record. None of the sources—some of which provide a substantial amount of information about those days—even hint at such an ordeal.

Levi Savage’s diary strongly suggests that the people stayed on the trail. As outlined in the “Creek Crossing and Steep Hill” section, when the last wagons needed help between 10:00 and 11:00 p.m., Levi Savage went ahead to

127. Savage, diary, October 24, 1856.

128. Bullock, journal, June 26, 1847.

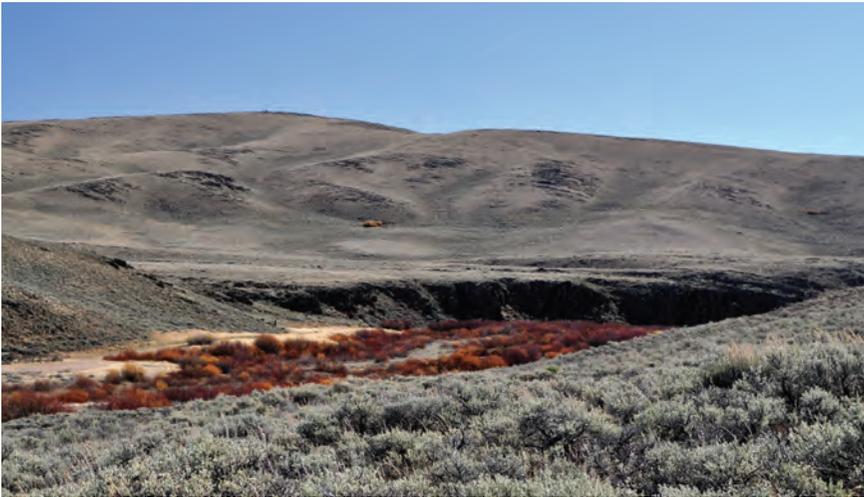


Figure 9. *Topography at Rock Creek Hollow. This photo looks southeast at Rock Creek Hollow, showing how it is in a low-relief valley. The hollow is bounded by ninety-five-foot hills on the west, sixty-foot hills on the east, and forty-foot cliffs (center of photo) that curve from northeast to southwest.*

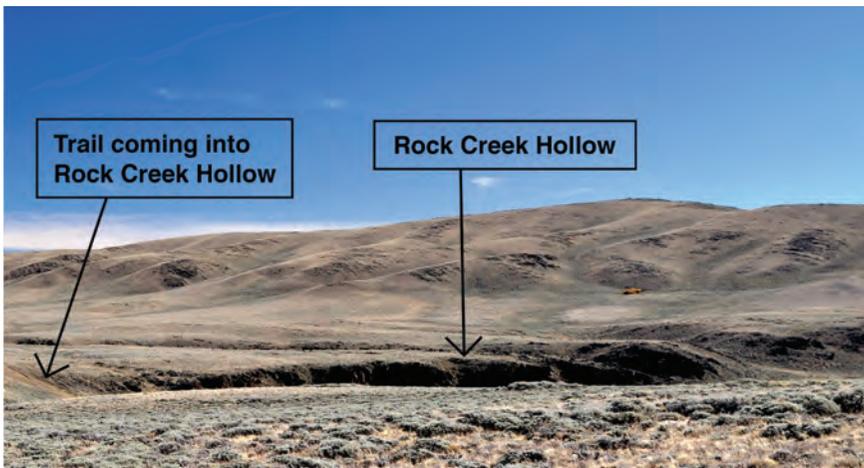


Figure 10. *Topography around Rock Creek Hollow. This photo looks southeast toward Rock Creek Hollow from the hill immediately to the west. The valley is deep enough that the camping area in the bottom is not visible, an indication that the topography provides some degree of protection from the wind. Historical sources describe strong winds from the north and northwest on October 23 and strong winds from the west on the 24th. West and northwest winds would have come from this vantage point toward Rock Creek Hollow.*



Figure 11. Topography at the Alternate Site on Willow Creek. This photo looks south at the alternate site on Willow Creek. The creek flows beside the willows on the right side of the picture and empties into the Sweetwater River at the confluence near the center. The Sweetwater runs from west to east (right to left) along the base of the hill. This site provides no topographical protection from a north, west, or northwest wind. It is on private property and was accessed by permission.

the camp to request assistance. He wrote that on his way, he “passed Several [people] *on the road*, and arived . . . after about four miles travel.”¹²⁹ Pioneer diarists often referred to the trail as “the road,” as Levi Savage did twenty-three times. Instead of a road, however, any route to the Willow Creek site would have been, at best, a tenuous path of several off-trail miles through blowing snow, created by people who were dispersed over many hours.

Other information from Levi Savage’s record of that night suggests that the Willie company stayed on the trail. Somewhere along his way to get help, he “met Bro Willey coming to look for us.” When Levi Savage related the predicament of the last wagons at the creek crossing, James Willie “turned [back] for the camp as he could do no good a loan.”¹³⁰ For Levi Savage to meet James Willie, both of whom were traveling solo, in the dark, in the

129. Recall from an earlier section that four miles was the approximate on-trail distance from the Strawberry Creek crossing to Rock Creek, as well as the distance from the Rock Creek crossing to the Willow Creek site via the off-trail cross-country route.

130. Savage, diary, October 23, 1856, italics added.

snow, coming from opposite directions, would have been highly unlikely in that vast expanse unless they had both been on the trail.

When Levi Savage left to get help, he was not only traversing unfamiliar territory on snowy ground in the dark; he was also looking for a camp he didn't know the location of and wouldn't recognize until he saw campfires or a creek. The other two men he mentions being with the last wagons that night, William Woodward and Millen Atwood, both had some familiarity with the trail in that area. Because Levi Savage is the one who went forward, it is reasonable to conclude that Woodward and Atwood were confident that Savage could find the camp with minimal risk of getting lost or experiencing any costly trial-and-error delays. Both of these risks would have been much greater if the camp had been several miles off the trail.

In addition to examining Levi Savage's diary, it is useful to research the practical considerations of leaving the trail to go several extra miles to the Willow Creek site. These considerations begin with the weather and the extended exposure of the Willie company to arctic conditions while they were debilitated, malnourished, and underclothed. The day they crossed Rocky Ridge, the weather was so bad that George Grant's well-outfitted rescue team, which by then was about thirty miles to the east, did not travel despite their urgent mission to find the Martin handcart company. "Stayed in the same Camp[;] snows deep[;] could not travel," wrote rescuer Robert T. Burton.¹³¹

Another practical consideration that favors the Rock Creek Hollow campsite is that the routes to the Willow Creek site would have been incredibly difficult to navigate (see map 4, page 64). One major impediment would have been the snowstorm. The limited visibility in a high-plains snowstorm can make it difficult to stay oriented for even a short distance. This challenge increases substantially when hundreds of people, nearly all of whom are unfamiliar with the area, become scattered over many hours.¹³²

131. Burton, diary, October 23, 1856; see also Broomhead, diary, October 23, 1856: "stayed there all day." On October 23, Grant's rescue team was still about seventy miles west of Martin company.

132. One example of the difficulty of staying oriented in a high-plains snowstorm comes from Albert "Pete" Carpenter. From about 1920 to 1953, he owned and operated a ranch that included the alternate site on Willow Creek. His daughter, Ann Carpenter Facinelli, said that during a snowstorm, when her father had to go from the cabin to the barn, he would "tie a rope between the house and the barn and follow the rope out and back." The distance between the cabin and the barn was only about 125 feet, and yet without the help

Along with the snowstorm, darkness added significantly to the difficulty of navigation. Sunset on October 23 was just before 5:30 p.m., and the moon didn't rise until between 2:00 and 2:30 a.m., which meant that some members of the Willie company had to travel in total darkness for at least eight hours. Even when the moon did rise, it gave only the faint promise of light for those who were still on the trail, since it was only a crescent, 16 percent illuminated, and what little light it offered in the middle of the night was likely obscured by storm clouds.¹³³ It is probable that some people had to travel in the dark for about thirteen hours—the time between sunset and when the last of the company reached camp, just before daylight.

The navigational difficulties caused by the snowstorm and darkness would have been severely compounded by leaving the trail for any of the routes to the Willow Creek site. In the conditions on October 23, the trail was the closest thing the Willie company had to a lifeline to keep from getting lost. Had the people left the trail, the first problem would have been knowing where to turn off, which would have been especially hard to discern for those arriving there intermittently after dark. A much greater problem would have been staying oriented during several off-trail miles to the Willow Creek site while struggling through wind-driven snow, exposed terrain, and darkness. The position that the Willie company camped at the Willow Creek site requires assuming that nearly four hundred widely dispersed people could have successfully navigated a lengthy off-trail route despite the many obstacles. This assumption cannot be made with any confidence.

Because none of the sources mention or allude to the Willie company leaving the trail for the Willow Creek site, proponents of that site have postulated two off-trail routes to it. With permission from property owners as necessary, the authors have walked and studied these routes from where they leave the trail all the way to the confluence of Willow Creek and the Sweetwater River. An on-the-ground analysis of each of them follows. These are the same routes that were measured for distance in the “Mileage Analysis” section.

of the rope, Pete Carpenter could get lost on his own property in that distance. Interview by Jolene S. Allphin, September 18, 2015, copy in possession of Jolene S. Allphin.

133. See “Riverton, Wyoming, USA—Sunrise, Sunset, and Daylength, October 1856,” TimeandDate.com, accessed October 20, 2019, timeanddate.com/sun/usa/riverton?month=10&year=1856; https://aa.usno.navy.mil/cgi-bin/aa_rstablew.pl?ID=AA&year=1856&task=1&state=WY&place=lander. The authors are indebted to Paul D. Lyman for pointing out the lack of moonlight on the night of October 23–24.

Route A crosses Rock Creek, leaves the trail, and continues another four miles over a vast, trackless plain to the Willow Creek site (see the green route breaking off the trail on map 4, page 64). Today some dirt roads crisscross this area, but Frederick W. Lander's survey map from 1858 doesn't show any trails there at that time (see appendix 2). Nor have the authors been able to find a pioneer journal that records any emigrating company using this off-trail route.

Route A climbs hills, descends gullies, and crosses plateaus, with sagebrush covering the ground most of the way. Traveling this route would have been arduous with handcarts even for fresh, hardy people in good weather. Worn down, emaciated, and pummeled by icy winds, members of the Willie company had no such advantages.

This route is also disorienting and can be difficult to navigate directly to the Willow Creek site even when visibility is good. On a clear day, Willow Creek is not visible until traveling about 3 miles, and the alternate camping area is not visible until traveling about 3.5 miles. On a day when visibility was severely limited and part of the travel was in the dark, trying to use this route to navigate the scattered members of the Willie company to the Willow Creek site would have greatly increased the probability of people getting lost.

Route B crosses Rock Creek, continues along the trail for another 2.25 miles to the Willow Creek crossing, then leaves the trail and follows the creek for 3 trackless miles to the alternate site—altogether an additional 5.25 miles from Rock Creek Hollow. Those who favor this longer route do so because they acknowledge the difficulty of staying oriented on Route A. In theory, Route B provides a geographical feature—Willow Creek—to help the people navigate the off-trail miles.

The off-trail portion of Route B has two variants to consider. The first, shown as Route B1 on map 4, goes directly beside Willow Creek at the base of a hill that ranges from eighty to one hundred feet high for most of the way (see the blue route breaking off the trail). Although much of this route would have been navigable for handcarts and wagons, the junction between the hill and the creek also presents many obstacles, such as places where the angle of the slope is too high for a handcart or wagon to travel. Due to these impassable places, this route would not have been feasible. Today, not even a primitive road exists for much of it. (See figure 12.)

The second variant, shown as Route B2 on map 4, would have been the only possible route on the east side of Willow Creek, going along the top of the hill above the creek (see the orange route breaking off the trail). Using

today’s roads as points of reference, it generally follows the Riverview Cutoff Road for the first 1.5 miles, then connects with a private ranch road that leads to the Willow Creek site. Lander’s survey map from 1858 doesn’t show any trails in this area at that time (see appendix 2). Nor have the authors been able to find a pioneer journal that shows any emigrating company using this off-trail route.

Although Route B2 could have been navigable for the Willie company, it would have been highly problematic. Traveling on top of the hill would have required them to leave the trail a quarter mile before it crosses Willow Creek—and thus before the creek could have signaled a turnoff point. Soon after leaving the trail, the people would have had to go down and up a one-hundred-foot hill. Additionally, in a snowstorm or in the dark, this route would have presented the same navigational difficulties as Route A. Most of

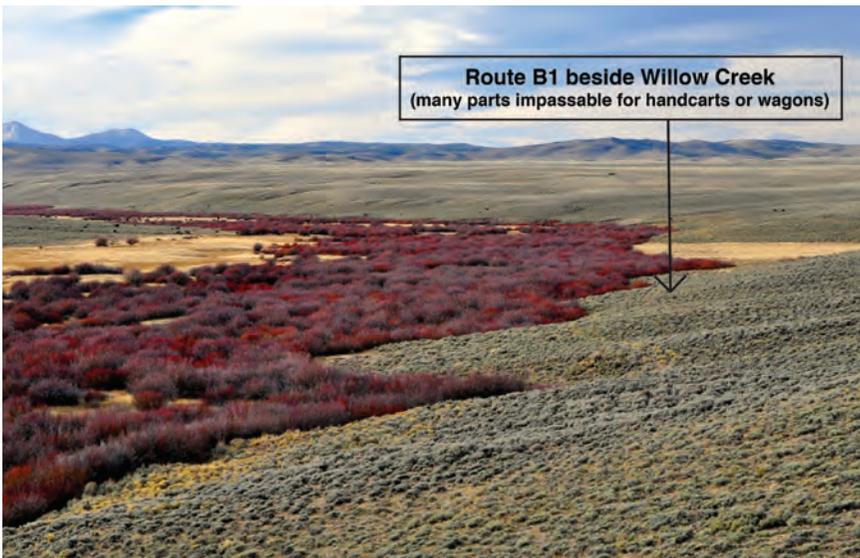
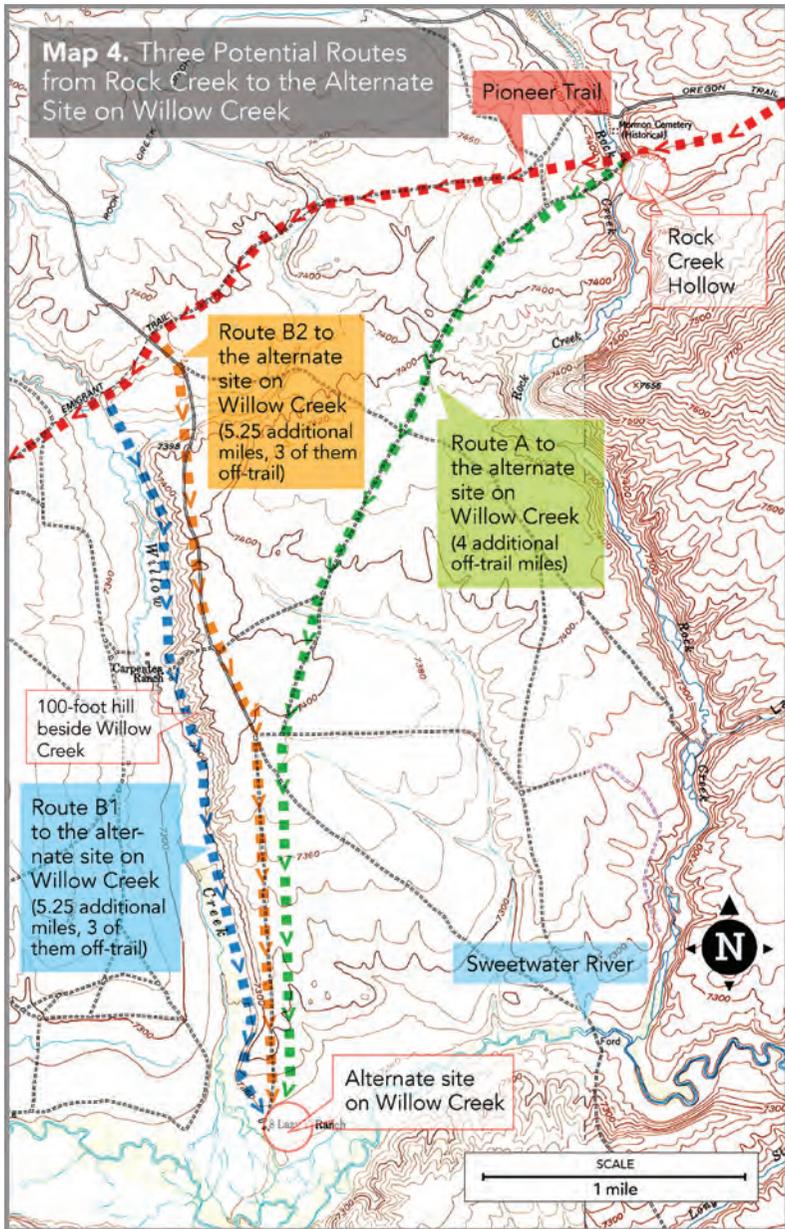


Figure 12. An Early Part of Route B1 to the Alternate Site on Willow Creek. This photo looks northwest (upstream) at Willow Creek, from about a mile south of where the trail crosses the creek. Some proponents of the alternate site on Willow Creek have suggested that the Willie company could have followed the east bank of the creek (the right side of the willows in this photo) to reach the site. However, there was no established route beside Willow Creek, and some areas would have been impassable for handcarts or wagons. This photo shows one of these areas. Route B2, which is on top of the hill that is outside the right boundary of this photo, is too far from the creek for it to have provided the Willie company navigational help in the storm and darkness.



This map shows (1) the locations of Rock Creek Hollow and the alternate site on Willow Creek and (2) three potential routes from the Rock Creek crossing to the Willow Creek site. With the exception of the pioneer trail, which is shown in red, none of the other roads on this map existed in 1856. The pioneer trail is the only one shown on Frederick W. Lander’s 1858 government survey map of this area (see appendix 2).

the three off-trail miles are eighty to one hundred vertical feet above the creek and a quarter mile east of it.¹³⁴ From that distance, the creek is rarely visible even on a clear day. It therefore would have provided little if any navigational help if the Willie company had tried to go that way.

Besides the additional miles and the navigational problems inherent in any off-trail route to the Willow Creek site, all of the routes would have the added impediments of more rocks, more holes, more hills, more uneven terrain, and clumps of sagebrush to wrest handcarts over with every turn of the wheels. All of this would have required extraordinary labor for members of the Willie company, especially at the end of a long, deadly day.

A final practical consideration that weighs against leaving the trail for the Willow Creek site is that doing so would have put the Willie company far out of view of additional rescuers. Because the Willow Creek site is not visible until traveling a few miles off the trail, it is unlikely that Redick Allred and his six rescue wagons from South Pass would have found the Willie company if they had camped there (see the analysis on pages 19–24). Additionally, any rescuers who left Salt Lake City after George Grant’s small rescue team—rescuers who everyone expected were coming and whose help was desperately needed—almost surely would have passed by the Willie company if the camp had been several miles off the trail.¹³⁵

On-the-Ground Analysis—Questions and Summary

When the Willie handcart company arrived at Rock Creek Hollow, they had already pulled their handcarts more than thirteen miles, which included the ordeal of Rocky Ridge. Given the brutal weather and the condition of the people, it is essential to consider the following questions:

- With so many dead and dying, why would William Kimball, James Willie, and other leaders have directed the company to go any farther than Rock Creek Hollow, the first good campsite they reached

134. Traveling closer to the edge of the hill—and thus closer to the creek—would not have been possible because the edge sloughs away numerous times into gullies and slopes that are not navigable.

135. Brigham Young and other Church leaders continued to issue calls for more rescuers after George D. Grant’s initial rescue team left Salt Lake City. Daniel W. Jones, who was with Grant, explained, “When we left Salt Lake it was understood that other teams would follow until all the help needed would be on the road.” Jones, *Forty Years among the Indians*, 65.

that was large enough for a group of nearly four hundred people in such circumstances?

- More especially, why would these leaders have directed the people to go an additional 4 to 5.25 miles—all or most of them arduous, disorienting off-trail miles—when they were already in such a precarious physical condition?
- Even more especially, why would these leaders have directed the people to go that much farther to a site on Willow Creek that offered no advantages over Rock Creek Hollow and was inferior in access and topography?
- Finally, why would these leaders have directed the people to bypass a visible, well-known campsite at Rock Creek Hollow and go so far off the trail that it would jeopardize the ability of Redick Allred and other rescuers to find them?

The historical sources do not provide any direct or indirect information that would help answer these questions in favor of the Willow Creek site.

The primary objective of the rescuers and leaders of the Willie handcart company was to keep as many people alive as possible as they moved toward Salt Lake City. For the reasons outlined in this section, bypassing Rock Creek Hollow and going to the Willow Creek site would have compromised that objective in many ways without any potential benefit. It would have added several unnecessary, excruciating off-trail miles to the Willie company's most horrific day, after the people had already pulled their handcarts more than thirteen miles. It would have been reckless to place lives at so much additional risk when people were already at the point of collapse. Going to the Willow Creek site also would have taken the company far out of sight of additional rescue help, and it would have required traveling several more off-trail miles to return to the trail on October 25.

V. SUMMARY AND CONCLUSION

The first section of this article showed that the mileage information in the historical sources favors Rock Creek Hollow as the site of the Willie company's camp and mass grave. The two Willie company diarists who recorded total mileage for October 23—the day they crossed Rocky Ridge—estimated that they traveled “about 16 miles.” Measuring from the last camping place near the base of Rocky Ridge, that estimate doesn't correspond with the actual distance to either Rock Creek Hollow (13.5 miles) or the alternate

site on Willow Creek (17.5 or 18.75 miles, depending on the off-trail route). However, given the difficulty of pulling handcarts that day, overestimating how far the people traveled is much more likely than underestimating it.

The Willie company stayed in camp on October 24, but rescuer Redick Allred recorded traveling fifteen miles from his camp near South Pass to the Willie camp that day. That distance is a match for the camp being at Rock Creek Hollow and a three-mile overestimate for the most direct route from Allred's camp to the Willow Creek site.

William Woodward recorded that the Willie company traveled about fifteen miles to Allred's camp on October 25. That is the distance from Rock Creek Hollow to Allred's camp, but it is a three-mile overestimate for the most direct route from the Willow Creek site.

In summary, the mileage case for the Willow Creek site requires errors in the diarists' estimates for October 23, 24, and 25. The mileage case for Rock Creek Hollow requires only one error in estimation—for October 23—and that is by a smaller amount than the most direct route to and from the Willow Creek site requires for both October 24 and 25.

The second section focused on the Willie company's last wagons being stalled at a creek crossing late on the night of October 23, about four miles from camp. If the wagons stalled at Strawberry Creek, that would support the camp being at Rock Creek Hollow. If the wagons stalled at Rock Creek, that would support the camp being at the Willow Creek site. Proponents of the Willow Creek site assert that Strawberry Creek was too small to have been a problem for the wagons. However, this section detailed many reasons why the wagons could have stalled at Strawberry Creek that night. Strawberry Creek also corresponds more accurately with William Woodward's description of the crossing being "a small stream" and with Levi Savage's record that he was "on the road" after leaving the creek to get help from the camp.

The second section also addressed William Woodward's recollection that a steep hill followed this late-night creek crossing. Proponents of the Willow Creek site maintain that such a hill exists only after the Rock Creek crossing. However, the ascent after the Strawberry Creek crossing, while not as steep, is more formidable—climbing much higher, continuing much longer, and requiring more labor. Beyond the metrics, at least one other pioneer diarist, James Farmer, described the hill after the Strawberry Creek crossing as steep. The two factors addressed in the second section—the creek crossing and the climb afterward—apply just as well to Strawberry Creek as to Rock Creek.

The third section analyzed and contextualized the sources that mention place names in relation to the Willie company's October 23–24 camp. It explained that none of the contemporaneous sources could have specified Rock Creek Hollow as the campsite because Rock Creek wasn't named as such until 1858. Section 3 also examined what William Woodward could have meant by writing multiple times that the camp was "on the Sweetwater," since the trail leaves the river when it begins climbing Rocky Ridge and doesn't meet it again until the last crossing, twenty miles to the west. Proponents of the Willow Creek site assert that Woodward's reference applies only to the main channel of the Sweetwater River, which would have required the Willie company to travel several off-trail miles to reach. However, historical context shows this interpretation to be unduly exclusive. For more than a decade, many pioneer diarists referred to Rock Creek as "the Sweetwater" even after trail guides had named it a "branch" or "fork" of the Sweetwater. William Woodward would have been no different in using this naming convention of his time to refer to Rock Creek as "the Sweetwater." Section 3 also evaluated two recollections that refer to the camp being near or on Willow Creek. The discussion detailed how the credibility of both of those sources is compromised.

The fourth section examined the historical sources within three other contexts: (1) the physical condition of the people and the effects of the weather, (2) a comparison of Rock Creek Hollow and the alternate site on Willow Creek, and (3) the indications about whether the company stayed on the trail to camp at Rock Creek or left it for the Willow Creek site.

As explained in section four, none of the sources indicate that at the end of the Willie company's most deadly day, the people left the trail at either Rock Creek or Willow Creek and traveled out of their way several extra miles, pulling handcarts over rocks and sagebrush, through snow and wind, for part or all of the way in the dark, so they could reach the Willow Creek site. Nor does any source allude to any possible incentive for the Willie company to go so far off the trail to that site. Nor does any source—either contemporaneous or a recollection—suggest that the company traveled several off-trail miles when leaving camp on October 25 to rejoin the trail. These issues create an imposing burden of proof for the position that the Willie company camped at the Willow Creek site.

It is also telling that the historical record does not include any comments or criticisms that the men leading the Willie company required the people to keep traveling past the first good campsite they had reached in more than

thirteen miles—and forced them to do a perilous march of several more grueling miles to the Willow Creek site in their condition. Even those who later wrote accounts that included sharp criticisms do not mention the leaders making such a demand, which would have been a prime target for reproach.¹³⁶

Section four also combined this source analysis with the findings from hiking the routes that proponents of the Willow Creek site have postulated the Willie company could have used to reach it. All of these routes would have been arduous, risky, and unnecessary, and one of them would not have been possible for handcarts and wagons.

Finally, this article has shown that the historical sources do not, on their own, provide adequate information to support a definitive conclusion about the location of the Willie handcart company’s camp and mass grave after they crossed Rocky Ridge. Some individual sources may seem to favor one site or the other, and on some matters the source material is not complete or consistent enough to give an advantage to either site. As with most historical subjects, reasonable minds can parse, interpret, and synthesize the sources and reach different conclusions. After thoroughly examining the Willie company sources, putting them in context with other sources from the time, and evaluating them within the framework of an on-the-ground analysis, the authors conclude that the weight of evidence strongly supports Rock Creek Hollow as the site of the Willie company’s camp and mass grave.

* * * * *

William James died on the day the Willie company crossed Rocky Ridge, and he is one of the thirteen people who were buried together on October 24. He had been in poor health before leaving England, but he pulled a handcart more than a thousand miles until reaching Rocky Ridge. That day, weak from malnourishment and cold, he collapsed in the snow. Even with help from his wife, Jane, he couldn’t get up, so he asked her to go ahead with the children and said he would come along after resting. Thirteen-year-old Reuben stayed with his father, and eventually William was able to continue. He could go only short distances between rests, however, and he and Reuben fell behind.

136. See, for example, John Chislett, in Stenhouse, *Rocky Mountain Saints*; and John Ahmanson, *Secret History: A Translation of Vor Tids Muhamed*, trans. Gleason L. Archer (Chicago: Moody Press, 1984). These sources include severe criticisms, yet neither comments on leaders pushing the Willie company beyond the first good place to camp that night.

When Jane James and her other children reached camp that night, they began asking about William and Reuben, but no one had news of them. “We watched and listened for their coming, hoping and praying for the best,” wrote Mary Ann, a daughter.¹³⁷ Finally, just before dawn, when the last wagons arrived, the family learned that their hope for a good outcome was not to be. The oldest daughter, nineteen-year-old Sarah, explained: “All night we waited for word. Toward morning some of the captains who had gone out to gather up the stragglers came into camp bearing the dead body of my father and the badly frozen body of my brother Reuben.”¹³⁸

Having already lost a baby on the ocean voyage, and now her husband, and with her oldest son barely alive, Jane James ached with grief. Sarah recalled: “I can see my mother’s face as she sat looking at the partly conscious Reuben. Her eyes looked so dead that I was afraid. . . . [But] when it was time to move out, mother had her family ready to go. She put her invalid son in the cart with her baby, and we joined the train. Our mother was a strong woman, and she would see us through anything.”¹³⁹



Figure 13. Jane James.
Courtesy Shauna Stout

Jane James and her seven children who made the handcart journey, including Reuben, arrived safely in Utah. Jane lived another fifty-five years, nearly all of them as a widow, before she died in 1911 at age ninety-six. Regarding her far-reaching influence for good, Sarah wrote in tribute, “She left a great posterity to revere her memory and give thanks that she had the determination to come to Zion.”¹⁴⁰ Another daughter, Emma, wrote that “in spite of all [her] trials, hardships,

137. In *Our Pioneer Heritage*, comp. Daughters of Utah Pioneers, 20 vols. (Salt Lake City: Daughters of Utah Pioneers 1958–77), 14:294.

138. Sarah James, recollection, in *Journey to Zion: Voices from the Mormon Trail*, comp. Carol Cornwall Madsen (Salt Lake City: Deseret Book, 1997), 630; see also “Dixon, Loleta Wiscombe [Wille Handcart Company and William James],” Pioneer Database, 1847–1868, accessed October 20, 2019, history.ChurchofJesusChrist.org/overlandtravel/sources/7434.

139. James, recollection, in *Journey to Zion*, 630. The “baby” was four-year-old John Parley James.

140. James, recollection, in *Journey to Zion*, 631.

and sacrifices, her faith and testimony of the truthfulness of the restored gospel of Jesus Christ remained strong, and she said that the gospel of Jesus Christ meant more to her than life itself.”¹⁴¹

Such was the faith and strength of most members of the Willie handcart company. Visits to Rock Creek Hollow provide opportunities to be on sacred ground while remembering these valiant pioneers.

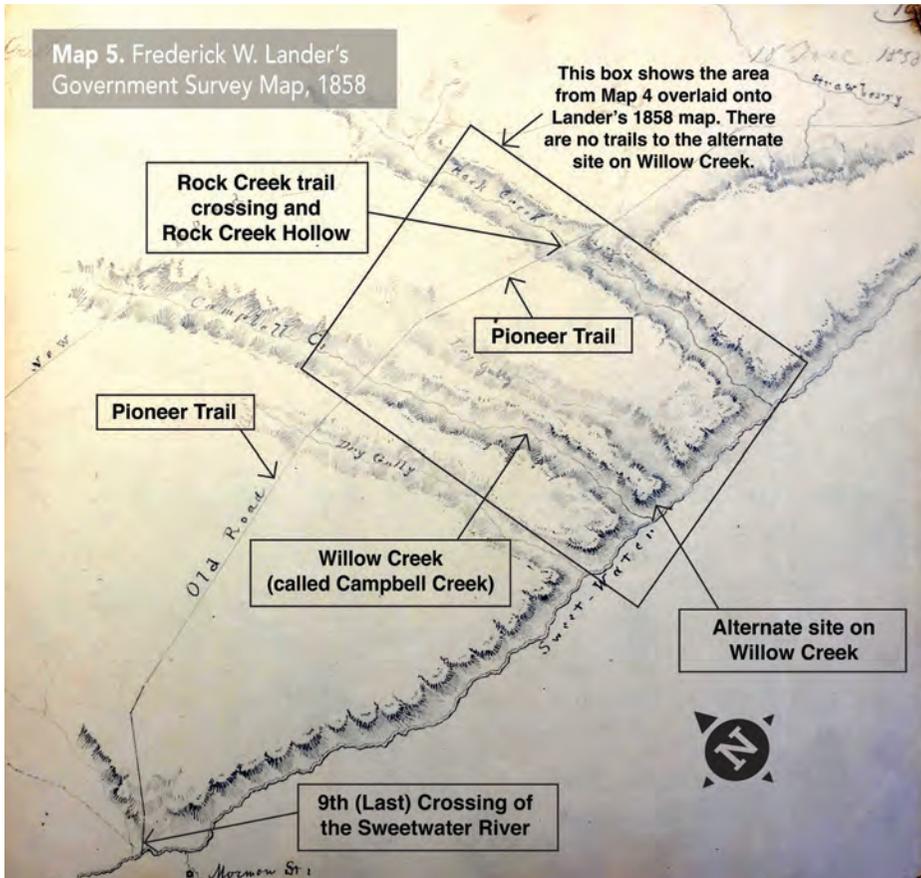
APPENDIX 1: Names and Ages of Those Who Were Buried at the Willie Company’s Camp after Crossing Rocky Ridge

<i>Those Who Were Buried on October 24</i>	<i>Those Who Were Buried on October 25</i>
Neils Anderson (41)	Thomas Girdlestone (63)
Elizabeth Bailey (51)	William Groves (22)
Samuel Gadd (10)	
James Gibb (63)	
Chesterton John Gillman (76)	
William James (48)	
James Kirkwood (11)	
Ole Madsen (41)	
Bodil Malene Mortensen (10)	
Hella Neilsen (22)	
Niels Nielson (5)	
Ane Olsen (46)	
Lars Gudmundsson Vendin (59)	

141. Emma James Johnson, “Biography of Jane Haynes James,” 2–3, Daughters of Utah Pioneers History Department, Salt Lake City.

APPENDIX 2: Map from Frederick W. Lander's Government Survey, 1858

The survey map on page 73 is from the Fort Kearney, South Pass, Honey Lake Wagon Road Expedition. The first chief engineer of this expedition was Frederick W. Lander, and in 1858 he was the superintendent. This map labels the pioneer trail as the "Old Road." After the surveyors made a thorough reconnaissance of the area, neither the map nor its accompanying notes plotted any trails leaving the pioneer trail between Rock Creek and the last crossing of the Sweetwater River (shown near the 1857 Mormon mail station). As shown in the rectangular box, there was not a trail from the Rock Creek crossing to the alternate site on Willow Creek, nor was there a trail going beside Willow Creek (called Campbell Creek) to that site. The "New Road" shown on the map appears to be an attempt to find a more direct route to the newly established Fort Aspen Hut on the Lander Cutoff. It did not materialize. Map is from "Field Book of the Ft. Kearney, South-Pass and Honey Lake Wagon Road Expdt.," William H. Wagner, topographical engineer, June 18, 1858, National Archives and Records Administration, College Park Maryland, Record Group 48, box 8. In the Field Book, the map and accompanying survey data are titled "Mr. Lander's Road from Strawberry Creek to Campbell's Creek and Aspen Hut."



APPENDIX 3: Pioneer Diarists' References to Rock Creek as "the Sweetwater" (supplement to Table 3)

This appendix provides a sampling of diarists' references to Rock Creek as "the Sweetwater" (see also table 3). The authors have analyzed each of these entries to verify that the writers are referring to Rock Creek.

Writer, company, date	Journal excerpt	Analysis
Thomas Bullock Brigham Young company August 23, 27, 30, 1848	<p><u>August 23, 1848 (traveling west):</u> Pass Aspen Grove Creek & <u>have a good road to the Sweetwater [Rock Creek]</u>, where we water our teams; ascend a very steep hill, which we pass over & descend to the Willow Creek.</p> <p><u>August 27, 1848 (traveling east):</u> "Cross the Creek [Willow Creek] & ascend the hill, continuing on to the <u>next crossing of the Sweetwater [Rock Creek]</u> where we stop to water team."</p> <p><u>August 30, 1848 (returning west):</u> "Passed a <u>Camp at the Sweetwater [Rock Creek]</u>, another at Willow Creek, & arrived at home [last crossing of the Sweetwater River]."¹⁴²</p>	During his return journey to Salt Lake City in 1848, Bullock called Rock Creek "the Sweetwater" three times as he traveled back and forth to check on the companies behind. William Clayton was also with this group. Although the company had a copy of Clayton's newly published <i>Emigrants' Guide</i> , which called Rock Creek "branch of Sweet-water," Bullock still called it "the Sweetwater." He was the official clerk for this company, which had split into eight companies on July 16, 1848.

142. Bullock, journal, August 23, 27, 30, 1848.

Writer, company, date	Journal excerpt	Analysis
<p>William Appleby George A. Smith/ Dan Jones company October 2, 1849</p>	<p>Just before night it commenced snowing and blowing severely, and continued for about thirty hours. . . . <u>Our Camp was on a Branch of the Sweet Water [Rock Creek]</u>. I lost one ox and a Cow in the Storm. and another Young Steer, nearly exhausted, [h]as perished. Indeed it was a trying and sorrowful time so cold that chickens and pigs &c froze to death in the Camp, and <u>froze the Sweet Water River [Rock Creek]</u> near so hard that I crossed over on the ice.¹⁴³</p>	<p>Appleby calls Rock Creek a “Branch of the Sweet Water” and “the Sweet Water River” in the same entry on the same day. After the quoted excerpt, Appleby notes that many of the cattle wandered off during the storm about five miles to the “Sweet Water River,” again not differentiating between the main channel of the river and the “branch” of it (Rock Creek). Appleby states in his diary that he is using Clayton’s <i>Guide</i> (see his July 21 entry), which makes it even more remarkable that he refers to Rock Creek as both “a Branch of the Sweet Water” and “the Sweet Water River.”</p>

143. William I. Appleby, journal, October 2, 1849, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/5985.

Writer, company, date	Journal excerpt	Analysis
George Sims Christopher Arthur and Jacob Gates company journal September 9, 1853	Started 9 o clock[.] rough Hilly Road[.] rested 1 oclock for half an hour[.] Made 15½ Miles[.] crossed Strawberry Creek & aspen- poplar Creek—Camped at Willow Creek (<u>crossed the Sweetwater River once</u>). ¹⁴⁴	Rock Creek is the only “Sweetwater” crossing between the company’s camp at the base of Rocky Ridge and the next camp at Willow Creek.

144. George Sims, Christopher Arthur and Jacob Gates company journal, September 9, 1853, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/2454.

**APPENDIX 4: Pioneer Diarists' Other References to Rock Creek
(supplement to Table 4)**

Writer, company, date	Journal excerpt	Analysis
Samuel Woolley Philemon Merrill company August 1, 1856	Down on across Strawberry creek. [a] branch of sweet water [Rock Creek] to Willow creek some 12 miles & camped. ¹⁴⁵	Woolley refers to Rock Creek, which is between Strawberry Creek and Willow Creek, as "branch of sweet water." In the heading for this August 1 entry, he refers to the camp on Willow Creek as "Camp of Israel on Sweet Water River." Such nam- ing variations are com- mon in pioneer journals.
George Teasdale Sixtus Johnson company September 9, 1861	In the afternoon we travelled over a similar road for 7 miles when we came to rock creek and here we stayed for the night. ¹⁴⁶	This 1861 reference to Rock Creek appears to be drawn from Allen's 1859 guidebook.
Elijah Larkin Daniel McArthur company September 18, 1863	Nooned a(t) Straburry Creek. . . . This after- noon we crossed Rock Creek, & Willow Creek & arived at the upper croessing of the Sweetwater. ¹⁴⁷	This 1863 reference to Rock Creek appears to be drawn from Allen's 1859 guidebook.

145. Samuel Woolley, diary, August 1, 1856, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/5644.

146. Sixtus E. Johnson company journal, September 9, 1861.

147. Elijah Larkin, diary, September 18, 1863, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/5577.

Writer, company, date	Journal excerpt	Analysis
Orley Bliss William Warren company September 18, 1864	Traveled 15 miles and camped on the north fork of sweet water [Rock Creek]. ¹⁴⁸	Even after Allen's guidebook used the name "Rock Creek" in 1859, some writers continued to call the creek by earlier names, as this example shows.



Figure 14. *Just in Time*, by Julie Rogers. Eight-year-old Mary Hurren of the Willie company said the rescuers “came just in time to save our lives.” Courtesy Julie Rogers.

148. Orley Bliss, diary, September 18, 1864, CHL, history.ChurchofJesusChrist.org/overlandtravel/sources/6258.