## Long Canyon Bus Tour


"Through the lens of history, preserving the past, focusing on the future."

## Oregon-California Trails Association $38^{\text {th }}$ Annual Convention

Elko, Nevada - September 13-16, 2021



Points of Interest

1. Gravelly Ford
2. Emigrant Pass
3. Greenhorn Cutoff
4. Carlin Canyon
5. South Fork Canyon
6. Overland Pass
7. Fort Ruby Site
8. Ruby Lake National Wildlife Refuge
9. Harrison Pass
10. Ruby Mountains
11. Fort Halleck Site
12. Secret Pass
13. East Humboldt Mountains
14. Metropolis Ghost Town
15. Bishop Creek cutoff
16. Humboldt Wells
17. Clover Valley
18. Spruce Mountain
19. Independence Valley
20. Pequop Mountains
21. Winecup/Gamble Ranch
22. Thousand Springs Vallley
23. Goose Creek
24. Long Canyon Mine
25. "Chiles' Cache" / Settler's Cabin
26. Goshute Valley
27. Toano Mountains
28. Pilot Peak
29. Donner Springs
30. Salt Flats

Welcome to the Long Canyon Mine Bus Tour during the 2021 OCTA Convention in Elko, NV. The trip is offered on both Tuesday, September 7 and Thursday, September 9. As we leave Elko and travel east on Interstate 80 we will be traveling along the route of the main California Trail until we reach Wells. At this point I-80 continues east and the Trail enters from the valley to the north of Wells. Further along $1-80$ we'll intersect Goshute valley in which the Hastings Cutoff approached from the east and crossed the highway from north to south. This is the valley where the Long Canyon Mine is located. After visiting the mine site we'll make a number of stops to take a look at various points of interest related to the Hastings Cutoff, main California Trail, and other interesting sites.

Your tour guide, Steven Owens, is a retired high school teacher originally from Denver, CO. After teaching Geology and AP Physics (among other things) for 30 years, Steve worked an additional five years as a customer education manager for an oil and gas exploration and analytic software company. He has been working for the past few years (since September, 2019) as a visitor guide at the California Trail Interpretive Center. Officially, he is now a Florida resident and has a home in a small town located halfway between Orlando and Tampa.

As we head east I want to focus a bit on another traveler who went east through this region as well - Peter Skene Ogden ${ }^{1}$. He was a Canadian trapper employed by the North West Company. Ogden gained a bit of notoreity as a bully when he was implicated in the death of an Indian trapper and was essentially exiled by his company to the more remote Columbia River valley. Although Ogden was plagued by his rough reputation, he was nevertheless hired to lead the Northwest ventures of the newly enlarged Hudson's Bay Company. From 1824 to 1830 he and his associates explored the Snake River region, becoming the first known Euro-American to see the Great Salt Lake and the first to trace the length of the Humboldt River through the Great Basin. It is a portion of this $\mathbf{1 8 2 8}$ eastward journey that we will examine today. Ogden and a team of 30 other trappers reached the Humboldt River near present-day Winnemucca, NV in early November. Ogden's mission during these trapping explorations was to virtually eradicate the beaver from the western territories for the political goal of discouraging westward expansion by American trappers. During the 1828 trip he had set a goal of trapping 2,000 beavers. I've included his diary entries from near Gravelly Ford until he reached the presentday Nevada-Utah border.

Peter Skene Ogden ${ }^{2}$ (1828) - November 25 - [for context] - ... the arrival of one of the trappers [Joseph Paul] late last night dangerously ill has prevented us from raising camp as I had intended. This poor man stands but a poor chance of living long in this country. A sick man is not an enviable situation in any part of the world, still less in this... December 6 There being appearance of a fine day, and our sick man consenting to raise camp, at 11 a.m. we started, advanced six miles and encamped [approximately 1 mile east of Gravelly Ford]. I took the precaution to appoint two men to assist the sick man and with three others I proceeded on to the encampment, had a fire made and place cleared for his arrival. He did not appear to suffer more than usual. Our Snake Indian who had been with us for the last ten days informed us that in two good encampments we should reach buffalo. I wish it may be so. One beaver. December 7 - Cloudy cold weather. our sick man requested to remain, apprehending it was too cold. To this I consented, not wishing to expose him too much in his present situation. Trappers and hunters out in all directions. Seven beaver. December 8 - At 9 a.m. we started. I gave the sick man two men to assist him and lead his horse, taking every precaution to have him well covered with robes and blankets as from the cold and our having a long point of land to cross over, as from the rocks along the waters of the river it was impossible to follow it. We had a most hilly road with snow nearly two feet deep and did not reach the River until 3 p.m. Shortly after one of the men I had left in charge of the sick man arrived and informed me that his horse had become so fatigued they could no longer advance. I immediately sent off two horses to his assistance and about 7 in the evening they arrived with him [about 1 mile west of Carlin]. He does not complain of having suffered from the cold. Course south-east. Distance ten miles. Two beaver. December 9 - From the sufferings of our sick man
during the night, it was impossible for us to attempt raising camp. The cold also most severe. The river is now entirely fast bound with ice, and provisions very low, not a trace of an animal to be seen in any direction; this with our sick man makes our situation the revers of being pleasant. Three beavers. December $\mathbf{1 0}$ - Cold most severe during the night. Two men came forward this morning and volunteered to remain with the sick man, and as the latter most earnestly requested I would consent to go on without him in quest of provisions, and not apprehending any serious danger from the natives, I gave my consent. In fact there was no other alternative left for me to adopt, for it is impossible for the whole party to remain here and feed on horse flesh for four months. One hundred would scarcely suffice, and what would become of us afterwards would not be a difficult point to decide - return to the Columbia with nothing. Before parting with the sick man and his two attendants, I secured an Indian of this river to accompany us as a guide, at the same informing them of our intention to return and not molest those I leave behind, otherwise I would not only retaliate on them, but also on the one who accompanies us. Before starting I gave the three men one bag of pease and a three year old colt and gave them also strict orders to take every precaution for their safety. At 10 a.m. we started, advanced along the banks of the river, crossed over twice on the ice and encamped at sun set. Course east, distance ten miles. December 11 - Cold severe. At 8 a.m. we started, following along the banks over a level country with few or no stones. At 4 p.m. we reachd a hot spring [near the Hot Hole] and encamped. Course east south east. Distance fifteen miles. Wood very scarce, only a few willows on the banks of the river. December $\mathbf{1 2}$ - Cold severe. At 8 a.m. we started and had not advanced more than four miles when our guide informed me we must encamp as he intended leaving the river here. Of course I consented. The trappers informed me beyond this they have not been far in advance with their traps, and as the river here is nearly as large as when we first discovered it, for we have only as yet seen three small forks which we passed on the $10^{\text {th }}$ and $11^{\text {th }}$ last [Maggie Creek, Suzie Creek, and South Fork], gives me hopes that it is yet far to its sources and will give us some employment in the spring. December 13 - At 8 a.m. we started, crossed over the river, travelled over a hilly country for eight miles, when we descended into a large plain, covered with worm wood without any appearance of a brook or river and at 4 p.m. we encamped. No want of snow as a substitute for water both for man and horse. Our course this day sought. Distance fourteen miles [the group had left the Humboldt and entered the valley where present-day Lamoille is]. December 14 - The cold was most severe during the night, and at 9 a.m. having found all our horses we started taking a south course. At 12 p.m. we reached a small river with signs of beaver. There however cannot be many as it does not appear on any part to be more than ten inches deep. We crossed over this [Lamoille Creek], advanced three miles and when we reached another small stream [John Day Creek], far deeper than the other with signs of beaver, and from the course these two streams take I presume are sources of the river we left on the $13^{\text {th }}$, we are now near the foot of a mountain, which appears very high and this we are to cross tomorrow. We encamped on this stream. Distance ten miles. Course south [east]. December 15 - Having a long day's journey to perform we were early in motion, but it was 8 a.m. ere we started crossed over the river. Advanced two miles, when we commenced ascending. As our guide appears to know the road I allowed him to lead and at 4 p.m. we encamped. We had not more than two feet of snow, still our horses were considerably fatigued, and one did not reach us until late at night. Distance this day nine miles [heading through Secret Pass]. Course south. December 16 - At 9 a.m. we started and had not advanced more than two miles when we reached the height of land, and was soon down on a level plain and found but little snow. We also followed a stream deep enough for beaver but not a vestige to be seen, this stream we crossed over. Our course from our starting had been south, now we took an easterly course crossed over some hills and as we were descending into the plain, we discovered three tents of Indians. They had taken flight but our guide discovered them, and they returned and pointed out to us within a short distance of their camp a small lake [Snow Water Lake]. To this we proceeded and encamped. We could only procure one dog to add to our provisions; these poor creatures were men, women and children with the exception of small hare skin blankets entirely naked. Here wood is in abundance (cedar trees) but their stock of provisions appears to be the reverse of plentiful, and consists of grass which our horses can ill spare them and a few pheasants and hares which are scattered sparingly on the hills we crossed over. Distance this day twelve miles, general course east south east. December 17 - It was 10 a.m. ere we were in readiness
to start, our horses having strayed far in quest of food, and as the days are now so short our progress is not quick, add to this our horses are in a very low state. As we were on the eve of starting two of the Indians seen yesterday paid us a visit. From them we could obtain no satisfactory information where we are, or any prospects of our soon obtaining animals, but in the course we are now going I trust we shall soon find buffalo or probably elk. On starting we took a due east course, crossed over a plain, ascended a small hill and again ascended and encamped. We found water in a marsh [Mound Spring?] sufficient for our wants. One horse killed, worm wood abundant, and on the hills cedar trees. This is certainly a most mountainous country, we are surrounded on all sides by lofty ones. Distance eight miles. Course east. December 18 - [Joseph Paul apparently died on this day with the group that was left behind] At 9 a.m. we started. We travelled over a level country until 2 p.m. when we crossed over a long range of high hills and descended a very high hill, when we reached a fine level plain with scarcely any snow. Here again we found a small lake [Flowery Lake] and encamped at dusk. Course east, distance twelve miles. Our guide now informed me we were near the Utas country and not far distant from Salt Lake, consequently we need not advance any further in an eastern course, as in that direction I am fully aware we shall find nothing but salt water, not very palatable more particularly in our starving state. December 19 - At 10 a.m. we started taking a north-east course, travelling over a barren plain covered with wormwood at a good pace until night, when finding snow on a hill and wood in abundance I encamped [near Shafter, NV]. Distance this day twelve miles. Two horses again killed for food. December 20 - At 9 a.m. we were again in readiness, and proceeded over level plain for five miles, when we crossed over a number of hills and although not late, there being a long barren plain and no appearance of snow, I encamped [in the plain southwest of Pilot Peak]. This is certainly a gloomy barren country, with the exception of a few tracks of wolves, no other has been seen the last few days. Course NE, distance nine miles. December 21 - Our guide informed me that by starting at an early hour we would find water to encamp, which our horses stand greatly in need of, and although every exertion was made to find the horses it was late (half past eight) ere we started, and although we travelled as fast as our worn out horses coult it was night ere we crossed the plain and reached a small brook, and on piercing the ice found the water too salt to drink but by melting the ice it was tolerable. Our guide expressed his surprise by this mode of procuring fresh water from salt, and the greater part of my men were equally surprised. This day the hunters killed an antelope, a large herd was seen but were very wild. Course this day north. Distance fifteen miles [camped in Montello valley west of Pilot Peak].

As we drive I-80 to the Long Canyon Mine, you might watch for a few landmarks.

- Mile Marker 312 - Osino Canyon with the California Trial route ascending and descending the hill south of I-80
- Mile Marker 318 - North Fork of the Humboldt River
- Mile Marker 321 - Halleck exit and Secret Pass (Highway 229) Secret Pass marks the break between the Ruby Mountains (south side) and the East Humboldt Mountains (north side). The canyon carved by Soldier Creek was too narrow and rocky for wagon use. The Ruby Mountains formed the central core for the large loop that the Hastings Cutoff followed. Had emigrants known, they could have turned north for 30 miles along the East Humboldt Mountains and struck the California Trail at Humboldt Wells, but instead following the Ruby Mountains south added an extra 70 miles to the trip. The Ruby Mountains acquired their name from red garnets found by early prospectors.


Figure 1 Secret Pass from the Halleck exit

Fort Halleck was located about fifteen miles southeast of here. There used to be a NV historical marker just off the freeway here but it has been missing for awhile. It said, "Established as Camp Halleck by Captain S.P. Smith July 26, 1867, to protect the California Emigrant Trail and construction work on the Central Pacific Railroad. The Camp was named for Major General Henry Wager Halleck, at that time Commander, Military Division of the Pacific. In May 1868, it became headquarters for the Nevada Military District when Fort Churchill was abandoned. On April 5, 1879, it became Fort Halleck. The nine square mile reservation was set aside October 11, 1881. The fort was a two-company post, with about twenty buildings of wood, adobe and stone construction, arranged around the side of a rectangular parade ground. Troops from the fort took no
 part in local Indian troubles. However, they saw action in February, 1873, against the Modoc Indians of northern California; against the Nez Perce uprising in Idaho in 1877; in 1878, against the Bannocks in Oregon; and against the Apaches in Arizona, 1883. The fort was closed December 1, 1886."

The actual site is located on private property, but there is an older historical marker there. With permission, you can visit the cemetary that was adjacent to the fort and has a few late nineteenth century headstones and a small section is still used for modern burials.


Figure 3 Older Fort Halleck Historical Marker
Figure 4 Grave Site in Fort Halleck Cemetery


Figure 5 Fort Halleck Cemetery Gate

- Mile Marker 335 - I-80 crosses Mary's River (coming from the North) and the Humboldt River (from the Northeast)
- Mile Marker 343 - I-80 passes around the north end of the East Humboldt Mountains. Emigrants coming down the valley to the northeast (Thousand Springs Valley) would often comment on the snow-clad mountains ahead of them.
- Mile Marker 351 - The community of Wells was named for its proximity to the Humboldt Wells, natural springs the become the headwaters of the Humboldt River. The River is entirely contained within the Great Basin, beginning here and flowing approximately 300 miles west until it sinks back into the ground at the Humboldt Sink west of Lovelock, NV. Note that alternating mountians and valleys


Figure 6 Horst and Graben System

## Horsts and Grabens (German:Heap, Trench)

- As the crust stretches, blocks slide down faults.
- Mountains are formed by uplifted blocks
- Valleys formed by downthrown blocks.
- Half-grabens (and horsts) tend to be asymmetrical (lots of these in Nevada) as we continue east. The entire state of Nevada is comprised of a series of north/south trending mountain ranges and valleys known in Geologic Terms as a Horst and Graben system. The valley south of us is Clover valley and leads to the Ruby Valley to the southwest where the Hastings Cutoff traveled around the Ruby Mountains. It is the modern-day location of the Ruby Lake National Wildlife Refuge. Closer at hand is Angel Lake in the heart of the East Humboldt Mountains,
occupying a glacial cirque carved by glaciers about 20,000 years ago. Lamoille Canyon, closer to Elko, was glaciated about 100,000 years. Both areas show extensive glacial evidences.
- Mile Marker 361 - We pass along the north edge of the Wood Hills
- Mile Marker 363 - We cross Independence Valley
- Mile Marker 370 - We head across the Pequop Range. Note the extensive limestone cliffs in this pass. As we leave these mountains we'll exit I-80 and proceed to the Long Canyon mine site.


## Stop A - Long Canyon Mine

(-114.4981932364689,41.01003585006341) - I-80 Mile Marker 379 ( 77 trip miles)
${ }^{3}$ On July 1, 2019, Barrick Gold Corporation and Newmont Corporation successfully concluded the transaction establishing Nevada Gold Mines LLC. The assets of Nevada Gold Mines comprise 10 underground and 12 open pit mines, two autoclave facilities, two roasting facilities, four oxide mills, a flotation plant and five heap leach facilities. The Long Canyon mine is an open pit mine that


Figure 7 Long Canyon Mine as seen from I-80 began operations in 2016. The Long Canyon operation produced 22,000 ounces of gold in November and December of 2016, and at December 31, 2016, reported 1.2 million ounces of attributable gold reserves. ${ }^{4}$ The mine is a part of the northern Pequop Mountains, an uplifted block of regionally east-dipping carbonate and siliclastic rocks. Most of the mineral is contained within the carbonate rocks of Cambrian-Ordovician age, especially the limestone of the Ordovician Pogonip group and the limestone and dolomite of the upper Cambrian Notch Peak Formation. Gold mineralisation occurs mainly within the limestone along dolomite margins. Haematitic matrix of collapse breccias contains most of the high-grade mineralisation, in addition to the adjacent zones of strata-bound mineralisation characterised by strong decalcification. All of the mineralised zones discovered to date are oxidised. As of 31 December 2014, the Long Canyon gold mine is estimated to contain probable ore reserves of 18.4 million tonnes grading 2.29 grams per tonne ( $\mathrm{g} / \mathrm{t}$ ). Contained gold is estimated to be 1.23 million ounces (Moz).
${ }^{5}$ In Spring, 2020 Nevada Gold Mines submitted change of use applications with the State of Nevada Division of Water Resources that would enable them to expand into Phase Two mining operations some 1,000 feet below the water table. However, a coalition of conservation groups responded with formal protests that expanding to underground mining operations and its subsequent groundwater pumping would dessicate the Johnson Springs Wetland Complex [JSWC], located near the Long Canyon mine. The JSWC is comprised of 88 individual springs and is home to rare fish species such as the relict dace. "The Johnson Springs Wetland Complex serves a critical role in that area in terms of wildlife migrations," Hadder said. "There are sensitive species that exist in that wetland complex, particularly the relict dace, which the Center for Biological Diversity has filed for an [endangered species] listing." Hadder also noted the cultural significance the wetland complex has to the Goshute people. Consequently, an expanded mining operation below the
water table could have substantial impacts to those living in the area in multiple ways. "Phase Two of the operation which would be to go much deeper below the water table and that would require what we call 'dewatering,'" John Hadder, executive director at the Great Basin Resource Watch, said. "This means that you pump large quantities of water from around the mine site to lower the water table artificially so the workings stay dry." If the expansion to underground mining and groundwater pumping were to have gone through as proposed, over 43,000 gallons of water per minute would be pumped from the Goshute Valley aquifer on the eastern side of the North Pequop Mountains. The proposed dewatering would pump an average of 45,000 acre-feet per year.

## Stop B - Settler's Cabin / Marker HN-5 <br> (-114.5150702302513,40.96611946802834) - I-80 Mile Marker 379 (3 miles / 80 trip miles)

${ }^{6}$ In the American West, ranching and mining have had parallel histories, though they share a common landscape. Cowboys, with their ranching culture, are the chosen representatives of Nevada. Their images are printed on license plates and tourist souvenirs. But the biggest profits are in mining. Towns are built or abandoned based on the price of gold. If Nevada were a country, it would be the fourth-largest gold producer in the world. Raw nuggets have been gone from the state for generations, but the metal fetches such high prices that it is now profitable to mine for one-tenth of an ounce of gold dust in a 2,000 -pound rock. Companies are digging increasingly bigger holes to find


Figure 8 Trails West Photo of Marker HN-5 and an old cabin smaller and smaller deposits, and leaving pits where once there were mountains. When I met the Randy Stowell family in 2012, it was their last year leasing the Big Springs Ranch. Newmont Mining Corporation, one of the world's largest gold-mining companies, had recently purchased the 350,000-acre property. Soon after, the company announced the discovery of a multimillion-ounce high-grade gold deposit there, the only significant discovery made in Nevada in the past decade. They renamed the land Long Canyon.
${ }^{7}$ While mining is the core business of Newmont's North American Region, our presence in Nevada extends beyond exploring and producing gold, silver and copper. Our substantial land position provides not only access for mineral resources but for other natural resources including water, livestock forage, and wildlife habitat and watershed / open space. Most significantly, the ranches provide land management and mitigation to support our mining operations. Elko Land and Livestock Company (ELLCo), a subsidiary of Newmont USA Limited, owns and operates several ranches. These ranches, the TS, Horseshoe, Big Springs, and IL, are integral parts of our Nevada operations.

Among the records which have preserved for future generations the story of the pioneering of the Hastings Cutoff, none exceeds and few match in interest the extraordinary Map of the Emigrant Road from Independence, Mo., to St. Francisco, California, which was published in New York in 1849 by T. H. Jefferson as the fruits of an 1846 journey to California by way of the Hastings Cutoff. So rare is this map, only three copies are known to exist, and the images shown
here are screenshots from a digital copy available for download from the Library of Congress. In December, 1945, the California Historical Society reprinted 300 copies of the map and its brief Accompaniment ${ }^{8}$, along with an introduction by George R. Stewart, thus for the first time making it generally available to scholars. Not unnaturally, this edition itself promptly went out of print, and print copies have become difficult to find. Of course we live in a world blessed with many digital access opportunities!


Figure 9 T. H. Jefferson's 1849 map of the Hastings Cutoff


Figure 10 Closeup of Plate III of Jefferson's Map

- Near this spot is where Jefferson's map marked "Chiles Cache", known to be the location where the Bidwell/Bartleson party, of which Joseph B. Chiles was a member, had abandoned their wagons to pack the rest of the journey to California. On August 25, 1846 Heinrich Lienhard ${ }^{9}$ wrote, "We arrived at our new camping place about 11 o'clock in the morning, finding another company already encamped there. At this place, two years earlier [actually 5 years earlier, in 1841], an immigrant company had camped; apparently they had suffered the loss of the greater part of their stock along the way, for they had abandoned their wagons here, burying in the
ground what they could not carry with them. After they left, the Indians had burned the wagons; the travelers in advance who had recently arrived here had found what was left of the wagons."


## Stop C - Pilot Peak Overlook <br> (-114.2084539697494,40.84520115192741) - I-80 Mile Marker 399 ( 25 miles / 105 trip miles)

Nevada Historical Marker 46 says, "The high, symmetrically shaped mountain seen rising to the north is Pilot Peak, named by John C. Fremont on his expedition in 1845. These emigrants had traveled one day and night across the Great Salt Lake Desert to find their first water here. In the period 1845-1850, the peak was a famous landmark and symbol of hope and relief to the Reed-Donner party and all other wagon train pioneers who traveled the 70 -odd miles of deadly, thirst-and-heat-ridden steps across the Great Salt Lake Desert. This desert represented the worst section of the infamous Hastings Cutoff of the California Emigrant Trail."

On the east side of the Pilot Peak range can be found a series of natural springs which flow underground from the upper elevations and emerge between the range and the plain to the east.


Figure 13 Donner Spring east of Pilot Peak

Figure 14 Google Earth screenshot of springs east of Pilot Peak
Several of the emigrant diaries from travelers along the Hastings Cutoff indicate that after completing the 90+ mile trek across the salt desert to the springs, groups would join together to take water supplies back out 25 or so miles to relieve others still making the journey. These relief efforts were sometimes just altruistic, but sometimes were done by profitseekers.

## Stop D - TW Marker HN-2 <br> (-114.215137502184,40.89654490405023) - I-80 Mile Marker 399 (4 miles / 109 trip miles)

Emigrants would travel south along the Pilot Peak range and cross into the next valley through what is now called Bidwell pass. Nearly all of the Trails West, Inc. T-Markers along this section of the cutoff are illustrated in the image below from Google Earth. Unfortunately, we are only able to stop at a few of these. You can see the descriptions and locations of each one in the California Trail Center app available for free from the Google and Apple app stores. The app was created by and maintained by Steve Owens in conjunction with the California Trail Interpretive Center. The app content is also available online at https://ctic.oncell.com.


Figure 15 Locations of Trails West T-Markers in the region


Figure 16 Marker HN-2

Trails West Marker HN-2 has a quote from John Wood. Here is his entire August 10, 1850 entry: "This morning we traveled over one of the most uninhabitable parts of God's creation; not a thing but the bare earth to be seen, but I suppose if it was not for these there would be no pretty places. We traveled on until 10 o'clock, when we reached some water, nothing but a deep hole dug in the side of the road; our cattle must now have grass or they are gone, and here we can find but little, so our stay must be short here, and yet it is eighteen miles farther to water and grass, and we must reach there this night, so at 4 o'clock this evening we started again, across another desert of eighteen miles, and at 10 o'clock at night we
of water and tolerably good grass. Ogle \& Robinson's train also reached this water last night, and we once more camped together. The road since we left the big desert has been pretty good and the weather fair."

- Pronghorn traps (Marker 372-376)

As we travel back along I-80 to our next stop I'll mention a bit about the historic pronghorn traps ${ }^{10}$ in this area. A visit to some of these sites is one of the other tour options during the OCTA convention. The referenced paper states, "Great Basin archaeologists have studied wood, brush, and stone structures associated with pronghorn hunting since at least the early 1950s. Over 100 Late Prehistoric corral and fence features have now been documented within this region, and the clustered occurrences of broken dart points near extant traps probably represent kill areas within decomposed Archaic pronghorn corrals. Given this data set, communal pronghorn hunting probably was a common practice within the Intermountain West between about 3000 BC and AD 1850 and may date back to early Holocene times.... Some Great Basin pronghorn hunting facilities were relatively simple affairs consisting of parallel rock walls and wood/brush fences that formed a gauntlet through which animals were herded and shot at as they ran past archers concealed along a drive line fence. However, the most common and best documented pronghorn hunting structures are large circular or ovate corrals with one or two fences that funneled animals into the pounds."

In 1846, Edwin Bryant ${ }^{11}$ noted some of these traps. On


Figure 17 Locations of pronghorn traps and the Spruce Mountain Trap Complex (SMTC) in northeastern Nevada. Numbered sites are as follows: 1) White Horse Pass Complex (3 traps); 2) Currie Hills; 3) Thorpe; 4) Maverick and Luv Traps; 5) Ruby Wash; 6) Butte Valley; 7) South Dry Lake; 8) North Dry Lake; 9) Clover Valley; 10) Bubba; 11) Tobar; 12) Wendover; 13) Silverzone; 14) Cobre; 15) Five Mile Draw Complex (3 traps); 16) Dixie; and 17) Toano Draw. August 6 he observed, "We passed around the side of the mountain on which we had encamped, and rose gradually to the summit of the range. Here we were delayed for some time in finding a way to descend. There are several gorges or
ravines leading down, but they appeared to be choked up with rocks and brush so as to render them nearly impassable. In searching to find a passage presenting the fewest difficulties, I discovered, at the entrance of one of these gorges, a remarkable picketing or fence, constructed of the dwarf cedars of the mountain, interlocked and bound together in some places by willow withes. It was about half a mile in length, extending along the ridge, and I supposed it at the time to have been constructed for defensive purposes, by some of the Indian tribes of this region, against the invasion of their enemies. At the foot of the mountain there was another picketing of much greater extent, being some four or five miles in length, made of the wild sage; and I have since learned from trappers that these are erected by the Indians for the purpose of intercepting the hares, and other small game of these regions, and assisting in their capture." It is possible that Bryant's observations were in the vicinity of the Silverzone trap site (\#13 in Figure 17).

Just a few weeks later in that same year (1846) Heinrich Lienhard also provided a description from the same vicinity. On August 25 he wrote, "We at last reached the end of the gorge, and from it emerged out upon the table land. Although this valley had no salt flats, the quality of the soil was in other respects the same, pebbly and sandy. On our right we came upon a great circle of interwoven cedar branches with a wide opening. The ground there was the same sort of dry soil as elsewhere, and what the purpose of this circle could be was to us at first an enigma. Later on, I learned from old hunters that in this circle the Indians caught the swift-footed antelope, and this was the way they went about it: Perceiving an antelope near this circle, a group of Indians would seek, by gradually drawing closer, to drive the animal into the entrance to the circle. The closer the animal approached the opening in the circle, the greater care the Indians took that it should escape neither to the side nor behind them. Finding itself approached ever nearer to the side and behind by the advancing Indians, the antelope would elect to flee into the wide opening before it rather than to accelerate its flight alongside the enemy. As soon as the antelope was actually inside the circle, the Indians looked on the hunt as a success. The best bowmen placed themselves on both sides of the opening in the cedar branches, while others formed a ring, part in and part outside the circle, and then began the true hunting. Seeing the enemy approaching from all directions, the antelope would be afraid of the cedar-circle, but would see the wide opening by which it entered and hope to escape the same way. Scarcely would it emerge, however, than it would be shot from both sides, the arrows entering the body with such great force that when it was not immediately killed, it could not flee much farther and soon would be brought down by the pursuing Indians. The great, gray wolf catches the antelope in a very similar way, and perhaps the Indians have learned their cunning stratagem directly from the wolf. At all events, if I may be allowed a few more words, I shall demonstrate its intelligence and powers of calculation. To catch a healthy antelope, at least four wolves must associate themselves, not that a single wolf is afraid, but because they know that the antelope is much swifter than they are. When this respectable company of four or more large wolves has assembled, they creep up in such a manner that they form a large circle, the antelope of course being in the middle between them. Naturally, they seek to take the antelope upon an open plain. Now they gradually approach it, so that when the antelope perceives one and seeks to turn in another direction, it sees one there also, ahead and behind; suddenly, to its alarm, it perceives that wherever it turns, the frightful enemy comes ever nearer. In its agitation the antelope loses its presence of mind and seeks to break out of the wolf circle anywhere possible, but the wolves come on warily, and rapidly closer. The antelope becomes blind with fear and suddenly it is seized by one of the wolves; soon afterward, the one which but a short time before was so swift-footed will perhaps have been wholly devoured."

## Stop E - CPRR Railroad Overview ${ }^{12}$

(-114.8025028503581,41.11404450224758) - I-80 Mile Marker 360 ( 43 miles / 152 trip miles)
In the early 1860s, travel on the California Trail was light. However, later in the decade, use of the trail increased greatly with the construction of the Transcontinental Railroad. Instead of California bound wagons occupying the trail, eastward bound supply wagons from California covered the route, carrying construction materials for the railroad. The original

Central Pacific Railroad grade from 1869 was built on top of and next to California Trail for many miles heading west from here. In the winter of 1868-69, thousands of laborers, mostly Chinese, built the railroad bed and laid rails. Legend has it that the winter was so cold that workers had to use black powder to blast the frozen ground and loosen it up for digging and moving. When the Central Pacific met the Union Pacific at Promontory Summit, Utah, on May 10, 1869, America's first transcontinental railroad was complete. This event greatly shaped the history of the United States. Travel along the entire 2,000-mile long California Trail took an average four-to-six months in a wagon. With trains this distance could be covered in a week. The trip was also much cheaper. Train passengers didn't need to purchase six months of food, ox teams, and wagons for their journey across the West.

The Thousand Springs Valley and Goose Creek Valley, both accessed from Highway 93 north of Wells, lie on the Wenecup Gamble Ranch ${ }^{13}$. According to their website, "Since 1868, the Winecup Gamble Ranch has been one of the defining ranches of the Great Basin area. Cattle were first brought here by John Sparks, who would become governor of Nevada. After Sparks' death, the Utah Construction Company purchased the ranch. For the next 37 years, the company ran the ranch under the UC brand employing as many as 239 people in 1910 to keep the vast operation in working order. In addition to its purpose as a livestock operation, Utah Construction Company also used the ranch as collateral for notable projects such as the Hoover Dam and Alaska Highway. Today, the Winecup Gamble Ranch represents approximately one-third (nearly 952,000 acres) of this once vast three-million-acre empire.


The Winecup Gamble Ranch would enter a new era in 1945 with its sale to Russell Wilkins and Martin Wunderlich. The two men went on to divide the ranch, splitting it down the middle into two parts with Wilkins taking the Winecup (west) side and Wunderlich the Gamble (east) side. After Wilkins' death in 1953, the Winecup changed hands with its sale to actor Jimmy Stewart. Stewart would only own the ranch for a brief period, but nonetheless was still well known in the Great Basin Area.


In 1957, the Winecup and Gamble ranches were reunited by Bud Stewart who was deeply involved in cattle operations. During his ownership, Crittenden Reservoir - now considered a premier trout fishery - was built to provide a reliable source of irrigation water to the ranch. Come 1962, the Winecup Gamble Ranch would again be divided when Stewart sold the ranch. Over the years which followed, the two ranches would have several more owners, yet remained active and continued successful cattle operations during this period.


Today, the Winecup Gamble Ranch continues its legacy as a producer of quality cattle and a responsible land steward. Under the care of a diversified and collaborative management team, the ranch has enjoyed a renaissance and return to its place as one of the last great ranches of the American West with highly respected cattle operations, vast natural resources, big game hunting opportunities, and efforts in habitat conservation."


An article written for Chadron State College in Nebraska ${ }^{14}$ states, "The manager of one of the West's largest and most historic ranches discussed his efforts to make it more productive and environmentally sound during a talk to Dr. Ron Bolze's rangeland management students at Chadron State College Friday night [in 2015]. His audience included at least 30 area ranchers who were also invited to the session. James Rogers has managed the Winecup Gamble Ranch located in extreme northeast Nevada the past five years. The ranch encompasses a million acres of high desert country spanning from 4,000 to 8,500 feet in elevation. The smallest of the 23 pastures has 18,000 acres; the largest 96,000 acres, he said. The cowherd numbers about 7,000.

While the ranch has 247,000 deeded acres, Rogers said it is in "partnership with the federal government" because the remaining 750,000 acres are under the jurisdiction of the Bureau of Land Management. Although it is still among the nation's largest ranches, it was three times that size until the 1940s, according to the ranch's website. Once owned by actor Jimmy Stewart, who died in 1997, it is now owned by Paul Fireman, former CEO of Reebok, athletic shoe and apparel giant. Fireman now heads an investment company and lives in Boston.

Rogers grew up on a ranch near Pinedale, Wyoming, and was in the real estate business for 10 years before becoming the Winecup Gamble manager. He was called an "out of the box thinker" by Bolze, who teaches rangeland management at CSC and has visited the ranch three times. Rogers said his top priority now is to utilize the best land and cattle management principles possible. But making the people who worked on the ranch more invested and productive five years ago was the top priority when he took over as the manager. Rogers said both the ranch and its people "were broken." He said the buildings, including the houses, were run down and employee morale was suffering. Using the analogy, "Classy gals don't look for trashy guys," he said considerable money was spent repairing both the homes and
the other buildings, trying to improve both the working and living conditions. "We gave them more responsibilities and they have achieved more," he said. "The cream always rises to the top."

The ranch has 21 full-time employees and also hires seasonal help and contracts the haying. He invited CSC students to apply for internships to work on the ranch. He also stated that as the general manager, "I try to know a little about a lot on the ranch and let those who know a lot about a little take care of their areas of expertise." Because of the size of the ranch, he said he personally switched from riding horses to motorcycles to keep in touch with what's happening. The two headquarters are 50 miles apart on a gravel road. Because of some of its rugged terrain, horses still play a major role on the ranch, he added.

Rogers said the ranch welcomes visitors and never shies away from showing them the problem areas in hopes they can suggest solutions. "We try to mimic nature," he said. "They used to trap beavers and sell the hides. We don't do that now. During the drought in 2012-13, the beaver dams were about the only places where our cattle could water. Everything else had gone dry." He added that developing watering places has been a priority in an effort to better utilize the grazing land. He said that in the heat of the summer cows will not venture more than a mile and a half from the source of water. Rogers said a few years ago, the cowherd was divided into three herds, making it easier to manage. During his video presentation, he showed maps of where the herds are run at various times of the year to help prevent overgrazing. He noted this has been a good year for the ranch. It has received from eight to 10 inches of precipitation and is the first since he's been there that the ranch hasn't had fire. "We keep a lot of records on how we've utilized the land and try to make sure we don't damage it," the speaker said. "In our country, it can take a long time for it to recover." He said the ranch begins calving about April 10, all of it in the open. He said it retains about 1,200 heifers annually and the 100 or so that have not raised a calf are sold. "We don't give them a second chance," he observed. But a couple of hundred 10- to 12-year old cows that continue to raise calves are given special treatment and retained for raising bulls used on the ranch to utilize those genetics, he said. Because of its growing popularity, grass fat beef is Winecup Gamble's specialty. Rogers said it takes from 22 to 26 months for those steers to be ready for marketing."

## Stop F - Wells City Park (Lunch)

(-114.9704173358751,41.10586147874513) - I-80 Mile Marker 351 ( 52 miles / 204 trip miles)
David Toll wrote a brief history of Wells published on nevadaweb.com ${ }^{15}$. He wrote, "The California Trail joins the headwaters of the Humboldt River near the present site of Wells, and this region saw the westward passage of the covered wagons until the coming of the railroad. It was in September, 1869, that Humboldt Wells was established as a station on the Union Pacific Railroad: a Wells Fargo office, a log shanty saloon, and the station office in a boxcar. By 1872 stores and hotels had been added to the single business street paralleling the west side of the tracks, and stagecoaches ran south into White Pine County three times a week. Devastating fires in 1877, 1881 and 1900 interrupted development, and lacking any business beyond that provided by the railroad and the ranches, growth was very slow.

Since the turn of the century, Wells, like many of the old railroad towns, has slowly shifted its center away from the railroad tracks. In the 1940s businesses migrated a block south to US 40, and in the 1980s the little town began an agonizing stretch toward I-80. The last business on Commercial Row - Quilici's, a 60-year institution — closed in 1991. Thirteen saloons once provided entertainment to railroad travelers. Now even the Bullhead Bar, the last and most famous of them, with its big dance floor upstairs, is closed and padlocked, although plans are afoot to restore it.

Wells' prosperity is solidly based in the crossroads created by I-80 and U.S. $93.1-80$ is a main east-west transcontinental artery. U.S. 93 extends from Alaska to Panama, and one day you'll be able to gas up at Wells and drive south to Tierra del Fuego. It is a road favored by the Canadian "Snowbirds" - not the aviators, but the folks who like to winter in the
south, with the sun. They come down with the geese in the fall, and they head back with them again in the spring, on their way home to British Columbia, Alberta and Saskatchewan. The geese settle down in the Ruby Marshes, but the Canadians prefer Wells.

The 4-Way Casino, at the highway intersection, recently spent a half million dollars to grow bigger. Near the ramp on the west end of town, Chinatown spent more than that but did not survive. The Chamber of Commerce is located on Sixth Street and now houses the Trail of the 49ers Interpretive Center with artifacts and exhibits focused on the wagon trains that rumbled along the Humboldt Trail from the 1840s to the 1860s.

The countryside is considerably wilder than it looks from Sixth Street, Wells' principal boulevard, which is so peaceful that it seems to tame everything within view. But Wells is not far from the bobcat's lair and the eagle's nest; during a recent visit a mating pair of great horned owls was entertaining onlookers on Sixth Street. Antelope season, which starts in August, provides an outstanding hunt, and an opportunity for a world record animal. The Rubies to the south are favored for black powder and bow and arrow hunting. There's an upland game season for cottontails, and predator hunting for coyotes. There's good duck hunting along the Humboldt River and out at Tobar Flat, on the fringe of Snow Water Lake. Up at Angel Lake, $8^{\prime \prime}$ catchable trout are stocked every year, and the fishing is very good in winter, although you'll have to drill through as much as three feet of ice to wet your hook. The fishing is also excellent at Salmon Falls Creek and its tributaries in the primitive country. Go to Jiggs Creek if you're out for trophy-sized trout, or to Crittenden Reservoir. There you'll catch beautiful big rainbows - as big as 19" in length, and 11-1/4" in girth - with flies and artificial lures. The limit is three fish, and nothing smaller than 15 " can be taken. A couple of men who spent 2-1/2 days fishing Crittenden caught and released over 200 fish, only keeping the ones longer than 20 ".

Go south to the Ruby Marshes and trophy trout go unnoticed because the bass fishing is so good. Try Starr Creek for trophy sized German Browns. And at Dakes' Reservoir north of Montello there are state trophy-sized Northern Pike available. You'll find as much camping, hiking and mountain climbing as you care to indulge in, there's cross-country skiing and snowmobiling in winter, even downhill skiing in which you climb to the summits in a snow cat to ski down trackless mountainsides. The vast lawned City Park across from the high school provides you with picnic tables and barbecue grills and a comfortable romp with the kids. There is also a swimming pool, a children's playground and a "pleasantly undemanding" 9-hole disc golf course.

The brick City of Wells office on Clover Street was once the dormitory for ranch kids who boarded over the winter in town so they could go to school. These kids ride the bus to school now, but some of them have to ride 50 miles just to meet the bus for its 50 mile run to town. High school attendance still drops during deer season, and whenever livestock is being moved. Take the paved 12 mile drive to Angel Lake, a small blue jewel tucked up under the summits of the East Humboldt Range. Fish, swim, or set up in one of the Forest Service campsites. There are more campsites at nearby Angel Creek and from either spot hiking trails lead up to the unusual Hole-In-The-Mountain Peak. Or go northwest the 13 miles to the ruins of Metropolis, the ambitious city abandoned in the sagebrush. You can travel on the California Trail northeast of Wells by taking Highway 93 north 26 miles to the well-marked Winecup Ranch turnoff to the east, and continuing 15 miles to the sign-marked Mammoth Ruts. This is a section of the California Trail, worn down as much as six feet below the floor of Thousand Springs Valley, one of the few places where the passage of the pioneers can still be seen today. You can continue on about 60 miles to Jackpot, or return to US 93."

## Stop G - Trail of the 49ers Museum

(-114.9644587071791,41.1109634708701) - I-80 Mile Marker 351 (1 mile / 205 trip miles)


Stop H - Wells Wayside Exhibit (-114.9709917736515,41.11778111602025) - I-80 Mile Marker 351 (1 mile / 206 trip miles)

There is a whole series of these wayside exhibits erected across Nevada describing various points along the California Trail. The map below appears on all of them (on this one the "You are here" arrow points to Ragtown) and shows the locations of all the waysides. You can see the full text and locations of each one in the California Trail Center app available for free from the Google and Apple app stores. The app was created by and maintained by Steve Owens in conjunction with the California Trail Interpretive Center. The app content is also available online at https://ctic.oncell.com.



Stop I - Bishop Creek Overlook
(-114.9829999386302,41.23697868083137) - I-80 Mile Marker 351 ( 10 miles / 216 trip miles)
As emigrants traveled the California Trail from Goose Creek through Thousand Springs Valley, they reached a fork in the road about 12 miles north of present-day Wells in which they could continue down the valley to the Humboldt Wells, or take a side "cut-off" through Bishop Creek Canyon.


James Pressley Yager, in 1863, traveled the Trail and provided a description of the descent into the Wells area and early progress down the Humboldt. He wrote, "August 8 - From the head of Thousand Spring Valley we made a rapid ascent, partly steep \& sideling, up the kanyon and a serpentine track of about three miles found us on the sumit \& a more graduel decent of a mile or more brought us to the mouth of a kanyon and the head of a valley \& full view of a high snow spoted \& striped mountain before us. Obliquely to the right I could see a grassy valley runing nearly at right angles with this one, joining this on the end forming a T making a wide valley at that point. The valley on the right became a deep kanyon, known as Humbolt Kanyon [Bishop Creek Canyon] before it reached Humbolt River. Two miles from the sumit we found our selves in the valley proper and at the forks of the road. The right hand road went through the right hand valley \& Humbolt Kanyon. The left hand road we took [to Humbolt Wells]. From our late camp to the forks of the road the sides of the mountains was covered with fine bunch grass. Choak cherries \& sarvice berries grew on the road side. The choak cherries left my mouth in about the same condition that a half ripe persimon would. One mile more then crossing the dry
rocky bed of a creek, five more \& crossing to the right hand side of the valley, following down, \& finally decending to the bottom of the valley \& to noon camp. Fine grass here \& four fine springs or well of cool water Here Mike and I took our boxes carpet bags \&c out of the wagon \& went through a general dusting. August 9 - Leaving our noon camp yesterday, we followed down the grassy banks of the little creek for about a mile then ascended to a bench of the right hand mountains and followed down over a rolling road the latter part of it particularly, finally decending to the bottom again, turned to the right \& camped Ten miles since noon. On the mountain sides \& on the bench on which the road run, was fine bunch grass, all the way. A very fine strip of grass run along the foot of the main stem of the mountains on our right, \& the bottom below \& to our left was covered with fine headed grass South of us in the snow spoted \& striped mountain, apparently near us. The bottom here is narrow, a small mountain closeing in on its south side, between it and the snow mountain. Fine grass here and fine water. Besides plenty of water for stock we have the benifit of a deep natural well of cool water. It is full of fish The little creek we started down after noon yesterday has disapeared; \& the water that runs from these wells disapears after runing a short distance Our camp is situated amediatly at the foot of a high bluff bank, on the north of us. About three miles back on our road a road turns off obliquely to the left to water \& grass. Louis'es train which was in our rear turned off that road. Our roads yesterday were smooth \& mostly easy grade. The three first miles was dificult. Sage brush \& greesewood still follows us in more or less quantities; always on the highlands \& a great deal in the bottoms. It does not infringe on good grass in the bottoms often but always some little among good grass on the high lands Take the country al over the sagebrush predominates over the greesewood. In the bottoms the greesewood some times predominates, particularly along our rout for the last one hundred miles. If the ground is much moist sagebrush will not grow, dry land for sage brush. There are two kinds of greesewood one that is thorney \& has a short narrow leaf resembling a kind of ever green, the other has no thomes, a narrower \& longer leaf with yellow bloom on its top. Cattle will eat \& fatten on the last named kind in the winter season. We left our late camp early following down the bottom. The bottom soon widened. Going a south west course two \& a half miles we raised to a sagebrush \& greese wood bench on the left. A camp road turned off to the right, here, going to a fine body of grass and water. Crossing over this bench or point, \& a hollow comeing down from the snow mountain on the left, we decended again (two miles) and one \& a half miles along the left border of the bottom we rose to the same bench again; following along on the bench next to the bottom a short distance, crossing another small bottom or hollow comeing down from the same mountain, we ascended to the bench again (three quarters of a mile) Here we saw the remains of an indian camp. willows bent in the shape of wagon bows, both ends sticking in the ground, forming a kind of frame to spread their blankets or skins over, forming a kind of tent. Nearby was a circle of dry sagebrush six feet in diameter formed as if for burning a victem. there was an opening in one side of the circle. We have seen many indian signs from time to time, that we can only guess at their meaning. About two miles this side of our noon camp on the fifth of the month, on the high lands east of Thousand Spring Valley, we saw three or four paralel rows of sage brush, about equally distant from each other, lade across the road. The rows were as long as the road was wide, about forty feet. What this indicated I could not tell; some said it indicated hostilities a blockade, a protest against travel. As we traveled along we could see the smoke from their signal fires, bursting up from different points on the mountains. While we were camped on Bear River, a smoke bursted up on the east mountains \& was kept up from day to day untill we left yet no indian showed his face While we were on the mountains decending to Goose Creek we could see their fires on the opposite side of the creek, above \& below, bursting up fresh and along the road in many places we could see the same. We know they were indian fires and signals from point to point, and as the indians did not show them selves we took it as a lack of friendship towords us. Yesterday \& to day, we could see their smokes burst up, on the snow clad mountain \& in the valleys, even while we were looking on. We have frequently seen the remains of their encampments. At the uper end of Goose Creek Kanyon, near the crossing of the creek the willow frames, straw \& ashes of their fires were to be seen. Two \& a quarter miles farther over the bench \& we decended to a mountain creek comeing down from the same snow spoted mountian. At this point just as we got to the creek we had a little excitement. Some of our men going ahead of the train on foot sudenly came in sight of a party of indians in a kanyon to the left, on the creek suppriseing them. They instantly on seeing
our men sprang in to the bushes hideing them selves. This movement looked rather suspicious \& our captin of the military called out all the odd men all excepting those necessary to every team, armed \& equiped \& drew them up in line of battle, to fight or draw the indians from their cover and make them show their "hand" whether they intended fight or not As soon as the men were formed some of the indians reluctantly came from the bushes \& cautiously \& hesitatingly advanced towards our men and with all the broken english they could command Their chief as he represented him self as soon as he came up wanted to smoke the pipe of peace As soon as satisfaction was had our train moved on down the creek about a mile \& camped, the indians following us. After the first indians suckceeded in making friends with us others by squads made their appearance comeing in to our camp. They told us they were Shu-shon-ees. They were nearly naked; some had on old shirts, but the most of them had on nothing but mockisons \& britch-cloths. They were armed mostly with bows and arrows. Two of them had guns. Some of our train traded them old clothes for antelope skins. Good grass \& fine water here Our road thus far to day was good but dusty About a half mile below our camp this creek joins the left fork of Humbolt River. We gave the indians some coald biscuit A parcel of indian boys came in to camp shooting their arrows at first one thing and another. We put up a biscuit on a stake offering it to the first boy that hit it. After several shoots one of them hit it, then another was put up, finally our men got to shooting at the biscuit with revolvers."

Stop J - Metropolis Ghost Town ${ }^{16}$
(-115.0605895608649,41.22803397259915) - I-80 Mile Marker 351 (5 miles / 221 trip miles)
TravelNevada.com provides the following history of Metropolis: "The New York based Pacific Reclamation Company's scheme of building a city and surrounding it with farms looked like a good idea late in 1909. When the plan was on the drawing board the next year it looked even better. In the midst of over 40,000 acres of farms was to be a modern city of 7,500. An office opened in Salt Lake City in the summer and the great reclamation project soon to rise on the Nevada desert was heavily publicized.

Streets, lots and two parks were staked out in 1911. The semi-monthly Chronicle began publication in September,
 boosting the sale of dry farm land at $\$ 10$ to $\$ 15$ an acre, irrigated land at $\$ 75$, and town lots for from $\$ 100$ to $\$ 300$. Metropolis eventually had graded streets, broad cement sidewalks, hydrants and streetlights in the four block commercial district. Later that year the Southern Pacific built an eighteen mile spur from its main line in Tulasco and erected an elaborate depot and a small park with trees.

A hundred foot high dam was built early in 1912, along with the large canals and an expensive water distribution system for the town. A reservoir began to form behind the dam and land sales boomed; by year's end about 700 eager colonists, over two-thirds Mormon, had settled in the vicinity. The town then had a post office and several businesses including a wagon factory, five saloons and a modern brick hotel costing about \$75,000.

The same year farmers in Lovelock Valley initiated a suit enjoining the Pacific Reclamation Co. from using certain creeks in the headwaters of the Humboldt. A court decision allowed only enough water to irrigate about 4,000 acres in the Metropolis vicinity. The irrigation ditches were proving unsatisfactory too, in that they delivered too little water to many farmers and too much to others. Plagued by these and other difficulties, the company went into receivership in the spring of 1913; the promotional paper ceased publication that December.

Though a fine $\$ 25,000$ brick school was opened in 1914, it was clear that the reclamation scheme was not successful. Farmers were moving away because of the water problems, which were compounded by several drought years, high interest rates charged by buyers, litigation over water and land rights and general discontent. The farms that remained had more water available after the exodus and for the rest of the decade were successful in raising turkey-red wheat and potatoes as well as dairying. In the early 1920's they shipped cream to Reno by railroad. Social life centered in the recreation hall with dances and parties, and at the hot springs where picnics and baseball were enjoyed.

Beginning about 1925 the town and farming activity steadily decreased. The Southern Pacific abandoned its branch that year. Buildings were moved away and land was abandoned. The famed hotel succumbed to fire in 1936; the post office closed in 1942 and the school was shut down five years later.


No one lives in the town today, but about seven ranches are left."

## Stop K (Optional) - Elko RV Park in Ryndon - Osino Canyon overlook (-115.5998540493766,40.94879748805364) - I-80 Mile Marker 315 ( 40 miles / 261 trip miles)

Just east of this RV park is Trails West Marker C-35 with an 1849 quote from James Pritchard that says, "We have to cross hills along here to avoid bends in the river \& also canyons." James Pressley Yager wrote quite a bit about this area as well and Marker C-36 lies next to the trail ascending the hill across the plain before you. He wrote, "August 11 - It is now morning. We got to this point last night after eleven miles travel since yesterday noon Plenty of willow along the Humbolt; we pick out the dead ones for fuel. Still a range of snow spoted mountains on the oposite side of the river Indian camp fires all the way down on the oposite side. Plenty of good grass most any where on this river. Roads as a general thing good but quite dusty. Some places the dust is deep \& the road in places is rough from "chuck holes" wore down in the road by the wagon wheels The road, from where we came to Goose Creek to this point is mostly new, the old one being washed. There has been but few trains on this rout this year on account of the hostilities of the indians. We, after five miles, travel, the road bending with the river to the right, came to a creek comeing down from the right. Here we halted \& watered our stock \& crossed on a gravely bottom. Here we was forced to leave the river on the account of bluffs comeing up to the river on both sides, a high mountain on the south side \& a low one on this. One half of a mile over the low mountain found us in the river bottom again and three quarters of a mile in the river bottom brought us to another hill; one half mile over the hill found us in the river bottom again At this last hill the river ran through another narrow pass. One mile down the river bottom \& we came to another narrow river pass \& hill \& had to leave the river. The ascent of this hill was worse than the others on account of sand. Over this hill about a half mile \& we were in the river bottom once more The river has taken a left turn \& is now runing about its usual course. About a mile \& a half more down the river \& we camped for noon. We had some gravel beds to pass over, the wheels sinking untill the fellows were hid."

## Return to Elko - I-80 Mile Marker 303

(13 miles / 274 trip miles)

Thank you for participating in this trip. If you have any questions feel free to email me at sowens130@gmail.com.

[^0]
[^0]:    ${ }^{1}$ https://www.oregonencyclopedia.org/articles/ogden_peter_skene/\#.YQASI45KiM8
    ${ }^{2}$ Peter Skene Ogden, Peter Skene Ogden's Snake Country journals, 1827-28 and 1828-29 (London: Hudson's Bay Record Society, 1971).
    ${ }^{3}$ https://www.newmont.com/operations-and-projects/global-presence/north-america/nevada-us/default.aspx
    ${ }^{4}$ https://www.mining-technology.com/projects/long-canyon-gold-mine-nevada/
    ${ }^{5}$ https://www.sierranevadaally.org/2020/08/13/nevada-gold-mines-phase-two-expansion-of-long-canyon-put-on-hold/
    ${ }^{6}$ https://story.californiasunday.com/big-springs-ranch/
    ${ }^{7}$ https://nvoutdoorsmen.org/wp-content/uploads/2015/01/Newmont-Ranching-Fact-Sheets.pdf
    ${ }^{8}$ https://babel.hathitrust.org/cgi/pt?id=uc1.32106000651759\&view=1up\&seq=26\&skin=2021
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    ${ }^{10}$ https://www.researchgate.net/publication/320306897_Communal_Pronghorn_Hunting_in_the_Great_Basin_
    What_Have_We_Learned_Over_the_Last_Twenty-Five_Years
    ${ }^{11}$ https://archive.org/details/whatisawincalifoin00brya
    ${ }^{12}$ http://cprr.org/Museum/index.html
    ${ }^{13}$ https://winecupgambleranch.com/history/
    ${ }^{14}$ https://www.csc.edu/news/story.csc?article=11131
    ${ }^{15}$ https://www.nevadaweb.com/cnt/cc/wells.html
    ${ }^{16}$ https://travelnevada.com/ghost-town/metropolis-ghost-town/

