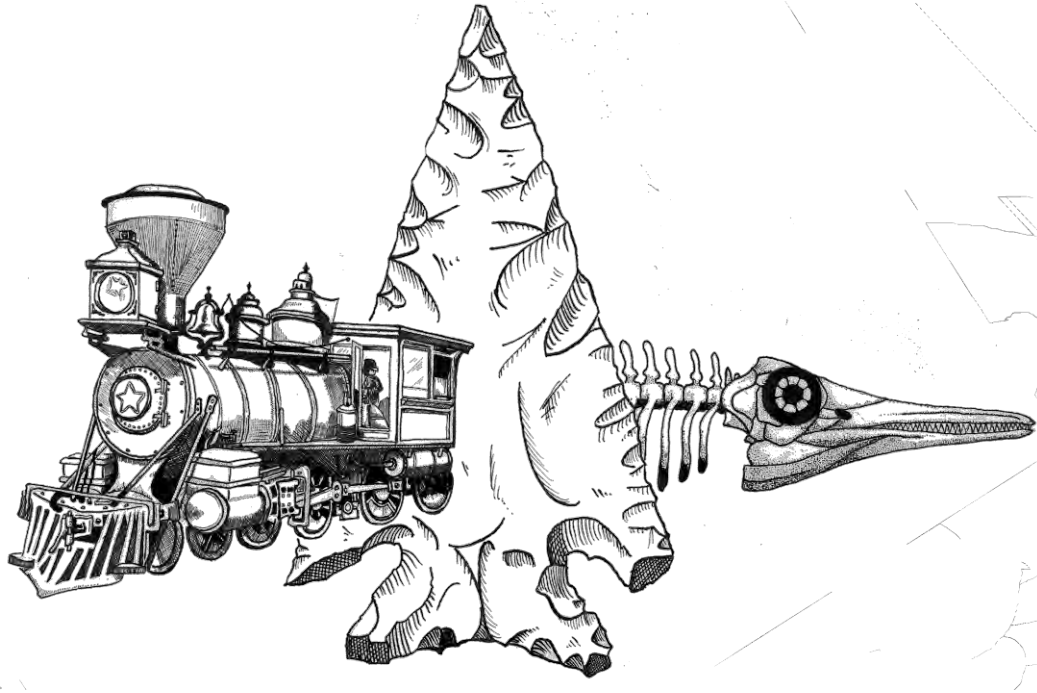


U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
NEVADA



Foot Path to Four-Lane
A Historical Guidebook to Transportation on Lake Tahoe's
Southeast Shore
Erich Obermayr

Cultural Resource Series No. 22
2014

**Foot Path to Four-Lane
A Historical Guidebook to Transportation on Lake Tahoe's
Southeast Shore**

by
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R. VALENTINE
PHOTO
ANGELES, CALIF.

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Cover Illustration

1908 Putnam and Valentine photograph of the Lake Tahoe Wagon Road in the Logan Shoals area. This road later became the Lincoln Highway. Putnam and Valentine were commercial photographers specializing in scenic views of the West. The firm was in business from the 1870s through the 1930s. Photograph courtesy California State Library.

FOOT PATH TO FOUR-LANE

A HISTORICAL GUIDEBOOK TO TRANSPORTATION
ON LAKE TAHOE'S SOUTHEAST SHORE

by ERICH OBERMAYR

2005

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The writing and production of this booklet was a group effort, and I would like to express my special appreciation to my colleagues and friends in the MACTEC cultural resource management team. Vickie Clay, Bill Reich, Ron Reno, Laurie Walsh, and Charles Zeier tirelessly read and reread the manuscript. Their perceptive criticisms and suggestions are in no small part responsible for the quality and success of *Footpath to Four-Lane*.

Erich Obermayr



I. Introduction

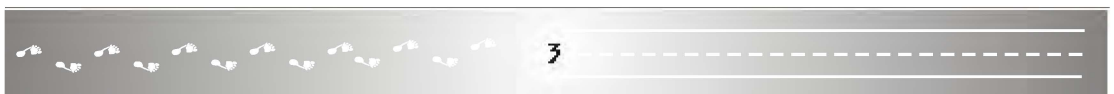
The best way to appreciate history is to stand where it happened. This guidebook will give you a chance to do that. We will show you a pathway which is a thousand years old, or more, and still in use today. We will point out places where you can pause in your own travels, and imagine what it was like to make the same trip during prehistoric times, the days of the Comstock bonanza, or the Lincoln Highway era. History includes the when and why of people's travels, so we'll arm you with enough information to follow the evolution of the pathway from the first Native American trails, to pack trails, wagon roads, paved highways, and finally a modern, four-lane strip of asphalt. We will show you how it connected the Tahoe Basin with distant places, and with events as diverse as the discovery of silver on the Comstock, the invention of the automobile, and even the appearance of a rustic style of architecture.

Highway 50 between Spooner Summit and Stateline, Nevada, is a very busy road. The speed limit ranges from thirty-five to fifty-five miles per hour, but traffic moves faster. Like many highways in the modern American West, it changes back and forth in the space of a few miles from a high speed divided highway to a crowded, suburban street. There are spectacular views of Lake Tahoe along the way, and of the rugged mountains on the lake's far shore. Travelers come to enjoy weekends at the Stateline casino hotels, the ski slopes in the nearby mountains, the beaches in summer, or the hiking, ski, and snowmobile trails going all directions into the Sierra Nevada. A lot of traffic is a down to earth mix of families in mini-vans, and the work trucks of mechanics, tradesmen, and loggers. But limousines are not at all uncommon, and the good life associated with world-class entertainment and recreation also attracts its share of sports cars and top of the line sport utility vehicles.

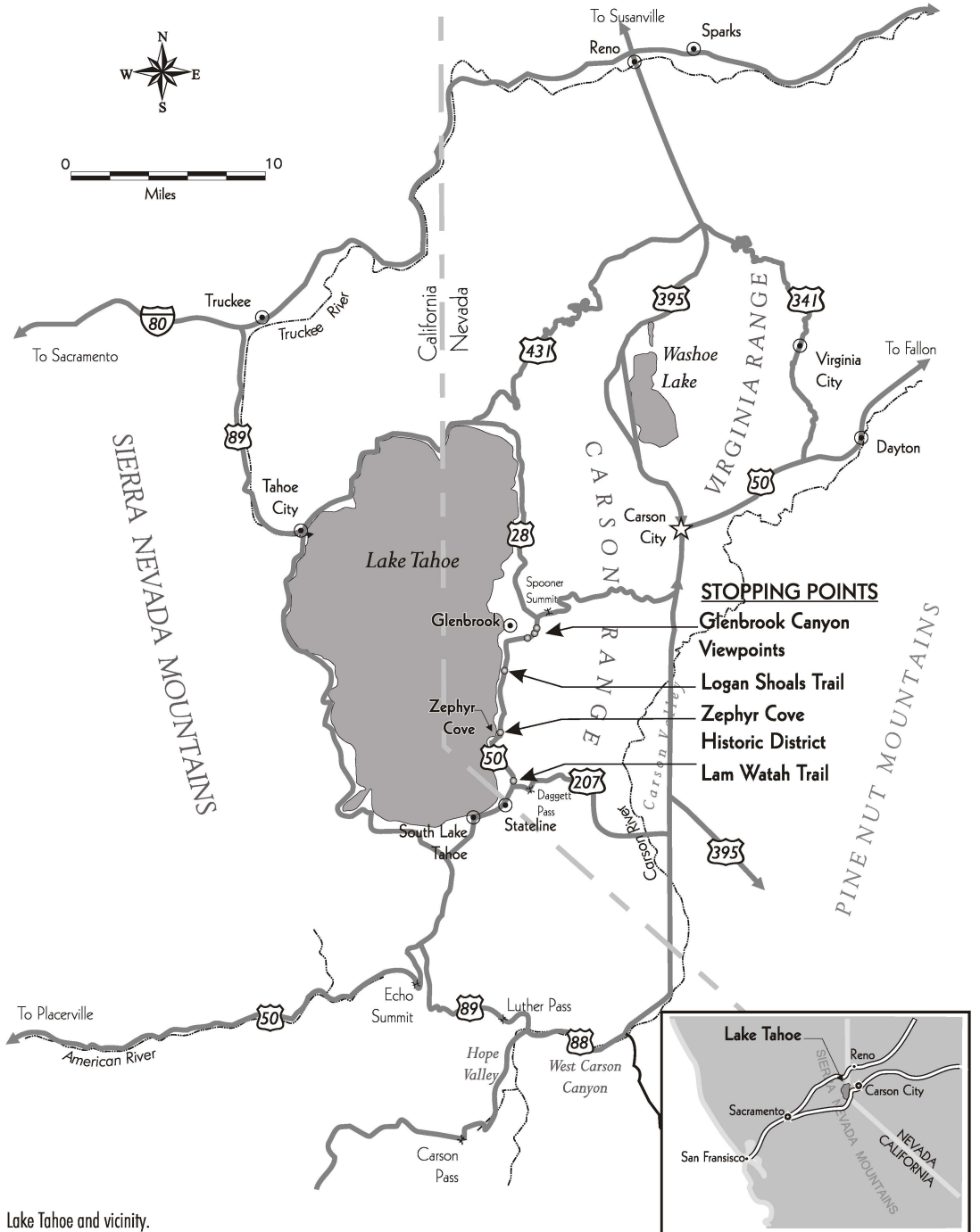
It is odd at first how everyone hurries along Highway 50 past one of the most scenic lakes in the world, as if they had a more important place to be. It is easy to blame this impression on the fast pace of modern life, but this is not entirely true. Travelers passed this way long before the era of fast cars, email, and cell phones. They came on foot, rode horseback or in wagons and stages, drove cars, and many of them were in a hurry. They were on the way to someplace else, someplace more important. But it is also true that Lake Tahoe has been a destination throughout its history. Its plants and animals sustained the area's first human inhabitants, and it was and continues to be a place of great spiritual importance to Native Americans. For Euroamericans, the Tahoe Basin has been a source of raw materials, and a place where the natural environment offers recreation, enjoyment, and relaxation.

The nine chapters of this guidebook form a chronological framework for the story of transportation in the Tahoe Basin. We begin with the geological setting, and move through Native American occupation of the area, the Euroamerican emigrants, the Comstock boom, and the rise of tourism. We also include sidebars which delve in more detail into some of the more interesting events and places along the lake's southeast shore, plus some background for the guidebook itself.

Four stopping points are also interspersed among the chapters. These are meant to be visited while traveling from north to south, that is from Glenbrook Canyon to Stateline. They are in this order both for safety and convenience, since they are all located on the right hand side of Highway 50 as you drive west and then south. They offer first hand looks at how travel developed from prehistoric time through the nineteenth and twentieth centuries. You can see the early wagon roads and later highways, and perhaps note a few things about how they were built. You can imagine what it was like to travel them, and you can even tour a historic neighborhood which owes its existence to the automobile and 1920s and 30s highway construction. Remember, these places are where history happened. We can put you there—the rest is up to your own curiosity and imagination. (One important reminder: these stopping points include important historic and archaeological sites, and it is against federal law to remove or disturb any objects or features which you might find there.)



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Archaeology, History, and the Public

The general public does not realize how interested it is in what is called Cultural Resource Management (CRM). The popularity of archaeology and history is obvious, and growing every day. One only has to peruse TV Guide or try a Google search for "archaeology," and then scroll through the 8,330,000 responses to understand this. Cultural Resource Management is historical and archaeological work mandated by law and designed to protect historic and archaeological sites (See "Why Focus on Highway 50?"). Through the years, archaeologists and historians have dutifully conducted their CRM projects and filed the results away with the proper regulatory agencies. They left the public unaware of their work, despite the average person's fascination with what they do. This has been changing however. Archaeologists and various agencies concerned with cultural resources, such as the Environmental Division at the Nevada Department of Transportation (NDOT) and the Nevada State Historic Preservation Office (SHPO), have seen the value in sharing what is found and learned during CRM projects with a much wider audience than agency reviewers. In fact, one of the major goals of the Nevada SHPO is to increase public education and involvement in historic preservation.

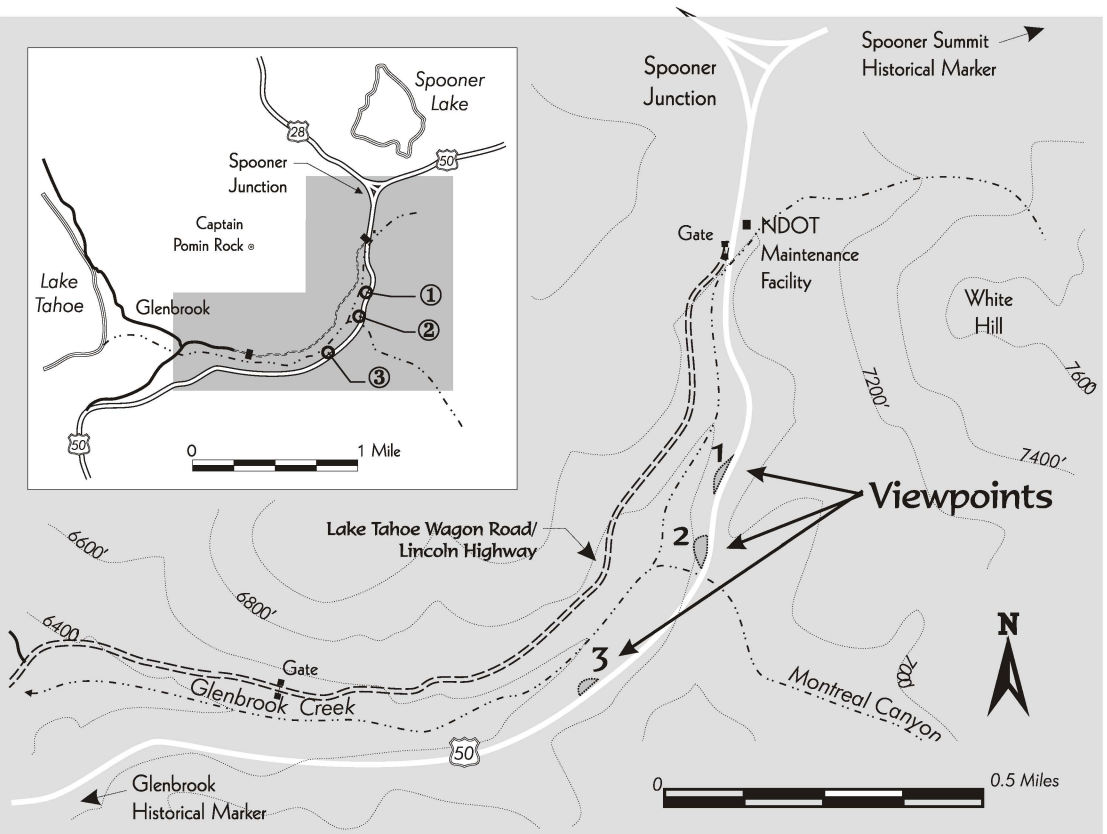
This guidebook is presented to fulfill the requirement that NDOT's Highway 50 erosion control and storm water management project compensate for the effects it will have on historic archaeological sites and historic architecture. But more important, it is a means of

sharing with the public the results of a CRM project which, like so many others, has produced some very interesting results. This guidebook looks at the history of Highway 50 along Lake Tahoe from a traveler's point of view, and also includes locations where the traces of this history can be experienced first hand. These are not spectacular archaeological sites, but they have much to offer. They give you the opportunity to discover and explore the evidence of history just as an archaeologist or architectural historian would do in the course of their work.



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GLENBROOK CANYON



Glenbrook Canyon viewpoints.

Glenbrook Canyon

Location: West side of Highway 50, between 0.6 and 1.1 miles south of Spooner Junction (Highway 50 and State Route 28).

Access: From southbound lanes of Highway 50 only.

This location includes three scenic turnouts (Viewpoints 1, 2, and 3) along a one-half mile section of Highway 50 on the southeast side of Glenbrook Canyon. At all three turnouts, you can stand at the edge of a modern highway with speeding traffic at your back and look to the opposite side of Glenbrook Canyon at the Lake Tahoe Wagon Road and Lincoln Highway. It can be seen through the trees, but shows up best as a roadcut in the side of the canyon. The old road is today's U.S. Forest Service Road 1451. It is blocked to vehicular traffic, but

you can reach it by foot or bicycle from the turnout on the west side of Highway 50 at the head of the canyon opposite the highway department maintenance yard.

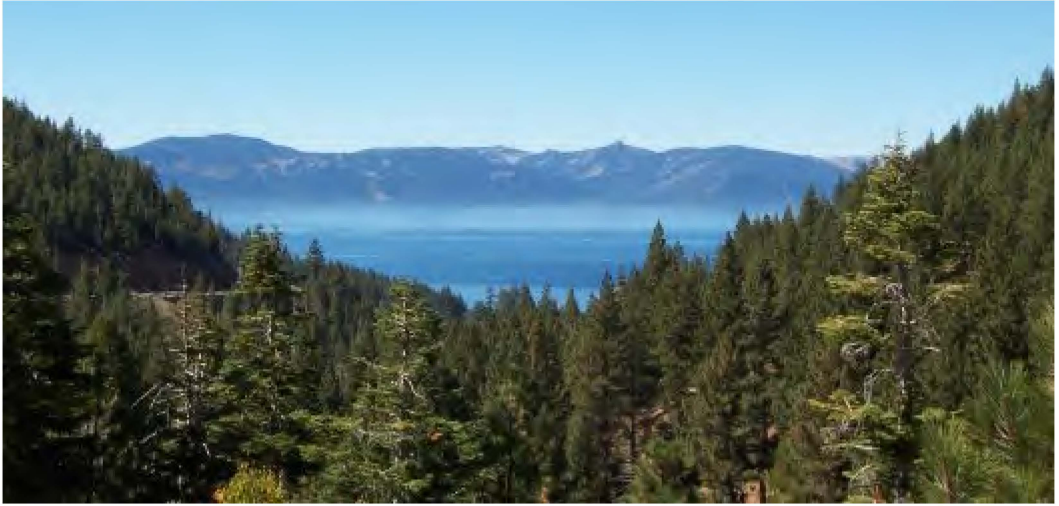
Viewpoint 1 offers the best view of the Lake Tahoe Wagon Road and Lincoln Highway. It gives you a good sense of the steepness of the grade from Glenbrook up this portion of the canyon. During the heyday of the Comstock, the road would have been crowded with wagons and stages, the oxen and horses toiling up the grade. The return trip would have been less strenuous. The stagecoaches would have moved downhill at a trot. The freightwagons either returned empty from the Comstock, or hauled loads of ore west to California mills and smelters. The climb would not have been easy on the radiators of early twentieth century automobiles, either. You likely would have seen one or two pulled over, the driver and passengers waiting while the boiler subsided. This portion of road is described by Effie Gladding (see "Automobile Tourism") who made her trip up Glenbrook Canyon in 1914. Note that the barren slope she describes on the north side of the canyon has since regrown.



Looking across Glenbrook Canyon to the Lake Tahoe Wagon Road/Lincoln Highway.

Mactec

The second and third viewpoints offer post card views of Lake Tahoe, framed between the north side of the Glenbrook Canyon and Shakespeare Point. It is a modern view, since earlier travelers on the opposite side of the canyon would not have seen the lake until they were closer to Glenbrook (See 1915 Lincoln Highway photo). There are some remnants of Old Highway 50 slightly downslope from the turnouts, and in some of the ravines on the opposite side of the highway. The old road was built in 1927, and replaced in the 1950s. It looped in and out of every side canyon and ravine, and its numerous curves were buried under the much straighter modern highway. The traces left behind consist of small, terraced arcs of crumbling pavement peeking out from under the base of the modern road grade.



View of Lake Tahoe from Highway 50 in Glenbrook Canyon.

Mactec

The Spooner Summit and Glenbrook Historic Markers

The State Historical Markers at Spooner Summit and Glenbrook are two additional stopping points along this section of Highway 50. The Spooner Summit marker presents an account of the changing role the summit played in transportation into and out of the Tahoe Basin, from the earliest wagon roads to the modern highway. The Glenbrook marker recounts the history of this lakeside town which, at its peak during the 1870s, was the most important lumber town in Nevada.

The Lincoln Highway

In 1935, the Lincoln Highway Association published the official history of the Lincoln Highway. It was subtitled "The Story of a Crusade That Made Transportation History." The fact that building the nation's first transcontinental highway required a "crusade" says something about the persuasion it took to make the highway a reality. Today, we take long distance highway travel for granted. In 1913, when the Lincoln Highway Association first presented its plan, it was not only a new concept, but coart to coast automobile travel was not even looked upon as something the country necessarily needed. The motivations behind the crusade were complex. The country was poised on the verge of a transportation revolution, though few knew it, and fewer still appreciated how completely the automobile would change personal and commercial transportation. Nevertheless, individuals in the automobile and highway industries were prepared to advance their interests in the coming revolution, and they took it upon themselves to begin financing the Lincoln Highway. Major contributions came from industrialists such as John N. Willys of Willys-Overland Company, as well as a consortium of cement manufacturers. General Motors, Goodyear Tire and Rubber Company, and the United States Rubber Company also made significant contributions to trust funds established to benefit the project.

Carl Fisher, of Indianapolis, Indiana, is credited with the idea of the Lincoln Highway. He was a co-founder of the Prest-O-Lite Company, which manufactured a device for compressing the acetylene gas first used in automobile lights. He also organized and built the Indianapolis Speedway. He envisioned a coast to coast, all weather, hard surface "rock" highway. It would include various other amenities, such as accurate mileage and warning signs, which no modern road would be without.

Fisher and his partner James Allison solicited financial assistance from the automotive industry and donations of



Route 66 trail looking south. The present day Highway 50 travels south to the right of this view.

material from road builders and construction materials companies. It was not their intention to finance the Lincoln Highway themselves, even with the industry contributions. Nor was the highway to be a continuous, newly constructed road. The designated route from New York to San Francisco would instead be comprised of existing roads, complemented by some segments of new or improved highway. State and local governments would be tapped for money in addition to the industry contributions. The main role of the Lincoln Highway Association was to coordinate funding for the project, and select the actual route. Towns and states understood the economic benefits the highway

Footpath to Four-Lane

would bring, and in short order began lobbying to be included. The Association formally presented the proposed route from Times Square in New York City to Lincoln Park in San Francisco at the annual Conference of Governors in Colorado Springs, Colorado, in August of 1913.

The crusade was on. The Lincoln Highway Association was a grass roots organization, comprised of sustaining members supervised by several hundred regional "councils." These local citizens lobbied legislatures, solicited funds, and argued for bond issues to finance the highway. Local support was also generated by "seedling miles." These were strategically placed mile-long sections of concrete highway built to demonstrate the value of hard surface

roads, and the suitability of concrete as construction material.

The proponents of the Lincoln Highway aimed to persuade the general public, as opposed to government officials, to share their enthusiasm for the project. Their publicity addressed the people directly, and at one time 1500 newspapers were on the Association mailing list. Henry B. Joy, President of the Lincoln Highway Association, and Director of the Packard Motor Car Company, said, "What we really had in mind was not to build a road but to procure the building of many roads, by educating people." The crusade also dovetailed with highway legislation being proposed in both Congress and state legislatures. In the Association's own words, without the Lincoln Highway



Photo Courtesy, Lincoln Highway Foundation

Lincoln Highway overlooking Glenbrook, from the north side of Glenbrook Canyon. This photograph was taken in 1915, by a documentary film crew recording the Lincoln Highway route.

"federal aid would have been only a vision, instead of a reality, at the end of 1916. The whole system of federal aid, including the state highway departments ... and even the present Bureau of Public Roads itself, are all natural sequences of Lincoln Highway influences."

The Association ceased activity in 1927, although in the following year Gael Hoag, Field Secretary, organized the placement by boy scout troops of concrete route markers along the entire route from New York to San Francisco. The crusade had succeeded. There were now strong advocates for highway improvement throughout the country. Good roads were seen as essential and, as the Association put it, "there seemed no need for further stimulation of public opinion in this regard."

The Nevada State Legislature appropriated \$25,000 in 1913 for road improvements between the Utah and California state lines, hoping to be included in the Lincoln Highway. The Association selected a route from Ely to Fallon which is basically today's Highway 50. From Fallon, the original route went to Reno, where one branch continued west over Donner Summit and the other south to Carson City, Lake Tahoe, and eventually on to Sacramento. In 1919, a southern route was also designated, following the old California Trail from Ragtown, just west of Fallon, to Carson City. This southern branch was a "scenic alternate" called the Pioneer Route, and it followed the Lake Tahoe Wagon Road up Kings Canyon, along the southeast shore of the lake, to eventually rejoin the main Lincoln Highway in Sacramento.

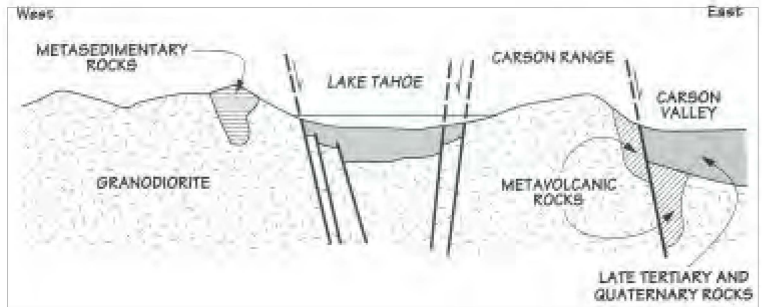
The Lincoln Highway east of Ely became a bone of contention, much like the emigrant trails and wagon roads which earlier merchants, guides, and promoters haggled over. The Association's original plan had the Lincoln Highway proceeding south from Salt Lake City to Ely, and then westward across Nevada. At Ely, a traveler stood approximately equidistant from San Francisco and Los Angeles, so either destination would be well served. But

Utahans wanted the highway to continue farther south in their state, eventually heading west through the Mojave Desert to Los Angeles. The Lincoln Highway Association rejected this idea, and it was next proposed that the route go west from Salt Lake City to Wendover, and then follow the California Trail along the Humboldt River to California. The Association eventually accepted the Wendover alternative, but when the highway south from Wendover to Ely was built in 1930, it was promptly designated and marked as the Lincoln Highway.

II. The Destination

Imagine a lake held in a crystal goblet, raised high by snow capped mountain peaks. This is one nineteenth century description of Lake Tahoe. It is six thousand two hundred feet high and surrounded by mountains reaching to eight and nine thousand feet. The Tahoe Basin is forty miles long and twenty miles wide, oriented north to south. The Truckee River drains the basin at its northern end, flowing north and then east out of the Sierra Nevada. It ends fifty miles away in Pyramid Lake. Geological studies have found that this portion of the Sierra Nevada was uplifted 5,000 to 6,000 feet in the past ten million years, while at the same time the Tahoe Basin has slipped downward between faults on its east and west sides. The north end of the basin has been further enclosed by flows of volcanic rock during the past two million years. Mountain glaciers, which intermittently covered all but the highest peaks, created the moraines and scoured the steep-sided valleys making up the modern Tahoe Basin landscape.

The lake's deepest point is 1,645 feet, and average depth is one thousand feet. The bottom of the lake is at about the same level as the floor of Carson Valley, across the Carson Range to the east. The body of the lake formed as the block between the two north-south faults dropped, and the resulting depression filled



Lake Tahoe geology. The Lake Tahoe Basin is slipping downward along the faultlines, while the surrounding mountains are uplifted (From Purkey and Garside, 1995).

with rain and snow, runoff, and glacial meltwater. Glaciers originating at the southern end of the basin also scoured the lakebed as they advanced northward, and at times glacial dams blocked the lake's outlet at the Truckee River. These ice dams came and went as the climate fluctuated, creating a much different lake than the one we now see. During the Ice Age, the level of the impounded lake was sometimes as much as 600 feet higher than today. Each dam inevitably weakened and collapsed as the climate warmed, sending massive floods roaring down the Truckee River, and depositing gravel and boulders as far as forty miles down the river valley.

Modern Lake Tahoe covers 191 square miles, and is 22 miles long and 12 miles wide. It is a few feet deeper and wider than the lake Euroamerican explorers first laid eyes on in the mid nineteenth century. An artificial dam, built at the outlet in 1870 and then replaced with a concrete structure in 1909, raised the water six feet above the natural level. Several factors account for the lake's remarkable and celebrated clarity. First, the lake itself occupies about 40 percent of the total area of the basin. Consequently, 40 percent of the rain and snowfall in the basin, which is as clear as water can be, falls directly into the lake. Precipitation in the rest of the basin reaches the lake as runoff. In the undeveloped areas, it is filtered through relatively clean, sterile soils derived from the weathered

Footpath to Four-Lane

granite of the surrounding Sierra.

Lake Tahoe is a beautiful place, and the first Euroamericans to describe it used some extravagant images to communicate what they saw. Thomas Starr King, a famous San Francisco Unitarian minister, described the lake's colors in a sermon entitled "Living Water from Lake Tahoe."

There is a ring of the Lake, extending more than a mile from shore, which is brilliantly green. Within this ring the vast center of the expanse is of a deep, yet soft and singularly tinted blue. . . . It is precisely as if we were looking upon an immense floor of lapis lazuli set within a ring of flaming emerald.

This early description was not at all unique, and the gemstone theme used by Rev. King was even continued in some of the place names on the lake, such as Agate, Crystal, and Emerald Bays.

The Euroamericans brought profound changes to the Tahoe Basin. But the first visitors discovered a spacious, park-like forest of ancient Jeffrey pine, sugar pine, ponderosa pine, fir and cedar. The trees were commonly eight feet or more in diameter, and towered 100 to 150 feet in the air. They had matured during a period known as the "Little Ice Age," between 350 and 175 years ago. This was a time of cool, wet climatic conditions. The trees flourished, free from drought, devastating fires, or insect infestations. In contrast to the modern forest, which is ten times as dense and packed with smaller trees, the old forest was open enough that, as an early newspaper account described, riders could pass among the trees "at full gallop without losing their hats."



Why Focus on Highway 50?

The answer begins with Lake Tahoe and its world renowned clarity. In an experiment conducted in 1873, a white dinner plate lowered into the lake on a line remained plainly visible to a depth of 108 feet. But the lake has been losing clarity ever since. Visibility was only 71 feet in a similar test in 2003. One cause has been the development of the Tahoe Basin during the last 30 to 40 years. Residential and commercial construction, new roads, and parking lots have reduced the amount of undeveloped or forested land, and increased the amount of runoff. Rainfall and snowmelt which had been absorbed by plants and soil now flow to the nearest curb or gutter, and from there into the lake. This runoff adds sediment to the lakewater, and carries pollutants which nourish water-clouding algae.

Runoff from paved roads, such as Highway 50, has been identified as a major contributor to the problem. In response, NDOT developed a master plan for erosion control and storm water management to help reduce the amount of sediment washing into Lake Tahoe from highway rights of way. The plan for Highway 50 includes building retaining walls and culverts to control the runoff, and settling basins and filters to reduce the amount of sediment it carries. Roadcuts are also being regraded to reduce their steepness, and capped with rip-rap and vegetation.

As federal law requires, a cultural resource survey was done in order to find any prehistoric or historic archaeological sites which might be disturbed or otherwise affected by these improvements. Archaeological sites are mostly thought of as places

with buried artifacts, or the remains of old structures or other cultural features, but they can also be trails and roads, or even highways, provided they are old enough.

A team of archaeologists spent several weeks carefully searching the area along Highway 50 where the improvements were planned. Old maps, property records, and archives were also examined, as these often show the locations of historic features such as cabins, roads, and trails. The survey discovered twenty-two historic-period sites, dating as far back as the 1860s. They included tin can scatters, an irrigation ditch, a mining prospect pit, and a log pile, as well as segments of well known historic roadways. Among these were several relatively undisturbed sections of the old Lake Tahoe Wagon Road and Lincoln Highway, (which shared the same route along much of the lake), and segments of Old Highway 50, as it existed before the 1950s. These roads were part of well known transportation routes which had already been identified during cultural resource surveys in other parts of the Tahoe Basin. All three had been recommended as eligible for inclusion on the National Register of Historic Places (NRHP). The NRHP is the nation's official list of historically important sites. Sites which qualify for the National Register are legally entitled to protection and preservation, but they must be historically significant or have a clear potential for archaeological research.

In analyzing the results of their survey, the archaeologists determined that the smaller sites, like the can scatters, did not qualify for the NRHP. The three roads were a different matter. The Lake Tahoe Wagon Road was a vital link in the Bonanza Road,



which was the transportation system connecting the Comstock mines, in Nevada, with their California supply points. The Lincoln Highway represented a landmark transportation event for Nevada and the nation. It was the country's first transcontinental highway, and demonstrated the feasibility and benefits of coast to coast automobile travel. Highway 50 also went coast to coast, and was among the first highways which crossed the Sierra Nevada.

These important roads and highways were all eligible for the National Register. But the archaeologists had only discovered relatively short, isolated sections. The roads had not only deteriorated with the passage of time, but in many places new construction had completely obliterated them. The Lincoln Highway from New York to San Francisco is eligible for the NRHP, but it certainly does not still exist as it did when it was organized from wagon roads and early highways in 1913. So the question for the archaeologists was whether the individual segments they discovered could still contribute to the overall importance of the historic roads. Some portions of the old roads had been paved and absorbed into modern side streets along Lake Tahoe, and were unrecognizable. Others, however, have remained undisturbed ever since they were abandoned.

The archaeologists evaluated each portion of road that they discovered individually. They had to decide whether the segments contributed to the eligibility of the complete roadway. For example, did they include engineering features, like a roadbed, bridges, retaining walls, or pavement which could tell us how the road was designed and built? Or had natural or man-caused disturbances damaged them to the point where it was no longer possible to learn anything about their

planning, materials, or construction techniques? Were the surviving segments long enough to fill any gaps in our knowledge of the roadway's exact route? Finally, the archaeological team had to decide if the area around the road segments still had the feel or atmosphere of the historic period, or if modern development had completely changed the surroundings. Ten of the twenty-two sites were determined to be eligible for the NRHP. Eight were segments of the Lake Tahoe Wagon Road and Lincoln Highway, and two were portions of Old Highway 50.

Architecture can be just as valuable in the study of history as archaeological sites, and projects such as the erosion control improvements along Highway 50 must also take into account any effects they might have on important historic buildings or structures. The corridor along Highway 50 was examined by an architectural historian, whose job it was to identify and evaluate any historic structures which might be affected. There were no buildings in the actual path of construction, but the various retaining walls and other improvements were the kind of thing which could change the historic setting or look of a neighborhood.

The architectural fieldwork was much the same as the archaeological survey, except it focused on standing buildings and structures. These were documented in the field with notes and photographs, and the information was recorded on standard architectural survey forms. Additional research was also done at the local courthouse to establish when buildings were constructed, and who the various owners had been. They were then evaluated for eligibility to the NRHP, just as the archaeological sites were. An eligible building or structure must be of sufficient age and



associated with important historic events or individuals, or it must be a good example of an important architectural style. The building and its surroundings must also be intact and undisturbed enough to maintain a sense of the historic time period. In other words, a building from the 1920s or 30s might not be eligible if there was now a shopping mall on either side, and a four lane highway out the front door.

The architectural survey identified two eligible historic neighborhoods, or districts, both in the vicinity of Zephyr Cove. One consists of only a handful of buildings and structures, including residences, a water tower, and a pier. The other, designated the Zephyr Cove Properties Historic District, consists of 83 structures, 56 of which are historically important. Most of the structures were summer homes or cabins built in the 1920s and 1930s. The Zephyr Cove district is significant because it is one of the first and most successful subdivisions on the lake. Almost all the buildings follow a rustic architectural style, which further unifies the district. The neighborhood has also not been fundamentally altered by the subsequent development of the surrounding area.

Federal environmental law requires that projects using federal funds compensate for any damage they cause to National Register eligible sites. A buried village site in the path of a new road, for example, would be archaeologically excavated before the road was built. The artifacts would be analyzed and studied, and the importance of the site would be preserved in the form of scientific data. Other kinds of sites, including old roads, can be excavated too. A hand dug trench through a roadbed can expose the different layers of pavement or other surfacing which were added as the

road was improved, as well as showing what methods were used to construct the roadbed itself. But in the case of the historic roads discovered along Highway 50, the archaeologists realized they would learn very little new information about the Lake Tahoe Wagon Road, the Lincoln Highway, or Highway 50 from an archaeological excavation. It was also obvious that the rustic architecture in the Zephyr Cove area would not be explored archaeologically.

Background research and the archaeological and architectural surveys along Highway 50 produced a great deal of information about the area's history. Even without an excavation, this information could have been the foundation for a technical report, which would preserve the value of the NRHP eligible sites. But several technical reports had already been written dealing with the Lake Tahoe Wagon Road, the Lincoln Highway, and Old Highway 50 in other parts of the Tahoe Basin. A different approach was called for. A report was needed which presented the technical information the archaeologists and historians had gathered in a way the public could use and appreciate. The production and publication of this guidebook serves just that purpose.





John Taylor

An example of the rustic architecture popular during the 1920s and 1930s. This house, located in Zephyr Cove, was built in 1927.

Rustic Architecture

Rustic architecture was a popular building style in the first half of the twentieth century. It was widely used in rural and resort areas in particular. Some of the best known examples of the rustic style are the lodges and administration buildings found in national parks throughout the West, many built in the Depression era by the National Park Service. The rustic style was an obvious choice for the Lake Tahoe area. It is based on the idea that a building should be in harmony with its natural surroundings. In other words, a structure which exists to shelter you during your visit to a destination whose main attraction is landscape, scenery, or peace and quiet, should not disrupt any of those.

The rustic style called for using native building materials, such as logs, wood, and stone. These could be imitated, as with the use of log cabin siding (siding milled to resemble logs), but for the most part meant

log or stone walls, stone foundations, and shingled roofs and gable ends. The appropriate use of these materials would also copy their natural occurrence as much as possible. For example, stone walls, chimneys, and foundations were built to reflect the randomness of nature. Rocks were not selected or arranged by size, or neatly aligned in courses. Other features included steep rooflines, to shed snow, but also to echo the jagged, mountain skylines. Open eaves and exposed rafter tails and purlin ends were some additional touches creating an air of rough-hewn informality. Large fireplaces, and the massive stone chimneys they required, were featured prominently. These not only provided heat in the cold, mountain environment, but symbolized the warmth and comfort even the most dedicated naturalist craves at times.



III. The First Travelers

The Euroamericans who imagined themselves discovering Lake Tahoe likely had little or no knowledge of the Washoe, the Native American group in whose territory the lake is located. Whether the Washoe and the Euroamericans perceived the beauty of the lake in the same way is difficult to say. Such concepts do not always translate exactly between different cultures. The lake did have a powerful spiritual dimension to the Washoe. It was, and remains, the spiritual center of their culture, as well as providing summertime fishing, hunting, and gathering.



Washoe family in the Tahoe Basin, ca. 1865.

Special Collections, University of Nevada-Reno Library

The archaeological record tells us humans have inhabited the Tahoe Basin for at least the last 8,000 to 9,000 years. Archaeologists have found evidence of small, mobile bands of hunters at sites along the Truckee River near Squaw Valley and along Donner Creek dating to as long as 8,000 years ago. Populations began increasing about 4,000 years ago, probably as the climate became milder, and people began relying more on plant foods in addition to hunting. The last 1,300 years of prehistoric life is recognized as ancestral to the Washoe. This “King’s Beach” phase, as archaeologists refer to it, is marked by various grinding and processing tools, such as bedrock mortars, which show the importance of seed gathering, fishing, and consumption of pinyon pine nuts. The bow and arrow are also introduced at this time, and distinctively smaller arrow points replace the larger atlatl darts found in excavations of older archaeological sites. The artifacts and archaeological features from this time period reflect a lifeway similar to Washoe life at the time they were first encountered by Euroamericans. Washoe territory also encompasses the mountain, lake, and valley environmental zones which produce the resources which were the mainstay of the King’s Beach Phase diet.

The Washoe lands covered an area along the California-Nevada border extending from Honey Lake, north of Reno, Nevada, south to the West Walker River. From west to east, their territory went from just west of the Sierra Nevada crest to the Pine Nut Mountains, east of Carson Valley. Winters would find the Washoe encamped in

river valleys or the lower slopes of the Pine Nut Range, living on pine nuts, fish, meats, seeds, and dried fruits which had been harvested and stored earlier in the year. With the coming of spring, the heartier, younger members of the tribe journeyed to Lake Tahoe and begin fishing. They would often make return trips to distribute their catch with those who had stayed behind. More and more families came to the lake as summer progressed, and a wider range of plant foods matured and were harvested. The lakeside campsites were named locations, where families returned year after year. They served as residential bases for hunting, fishing, and gathering.

Fish were an important and reliable food source for the Washoe. Summer runs of trout, Tahoe suckers, and Lahontan tui chub all took place in Lake Tahoe and its tributaries. Harpoons, nets and basketry traps, as well as dams and weirs on the tributary streams were all used to catch fish. Scores of edible and useful plants grew in meadowlands like those around the southern edge of the lake. These included grasses from which seeds could be harvested, roots such as balsam, camas, wild onion, mariposa lily, and yampah, as well as leafy plants like wild lettuce and several varieties of spinach. Waterfowl, as well as deer and even mountain sheep, were also hunted, along with a variety of small mammals like marmots, chipmunks, and squirrels. Typically, men hunted the larger game while the women gathered plant foods, and everyone participated in the pursuit of small game.

Lake Tahoe was a destination for the Washoe for a millennium, and probably longer. It was, and is, an important spiritual place. Its significance also lies in the Native American view that the spiritual and material worlds are not separate. There is a material and spiritual aspect to everything. Washoe believe that the supernatural power which made the world, and life, inhabits all things. It is the duty of the Washoe people to ensure that this life giving force is honored and respected. For example, the annual gathering at the start of the pine nut harvest is marked by ceremonial dances and songs which give thanks, and ensure a bountiful harvest. If spirit forces are neglected, there are consequences, like sickness or a turn for the worse in hunting luck.

The Washoe, unlike many Indian tribes in the West, were never granted a reservation. Some tribal members were given plots of land following the General Allotment Act of 1887. This act was an attempt to eliminate tribal ownership of Indian lands by dividing them into individual parcels, which the Indians were expected to work as family farms and ranches. The Washoe did request that areas around Lake Tahoe be included in this program, but none were. In 1917, the federal government purchased two forty acre tracts for the Washoe, and these later became the Dresslerville and Reno-Sparks colonies in which the Washoe live today.

The Washoe continued to use their traditional hunting, fishing, and gathering areas around Lake Tahoe throughout the late 1800s and into the 1900s. Washoe encampments were common on the lakeshore into the 1910s and 20s. Sometimes, tribal members stayed at their own camps while working as wage laborers at the tourist lodges around the lake. They also sold firewood, meat, and fish, and served as hunting and fishing guides. Euroamerican development restricted Washoe access and use of the lake more and more each year, however several families continued to maintain regular summer camps along the south and east shore as late as the 1950s and 60s. Farther

Footpath to Four-Lane

north, the Incline and Third Creek areas also saw Washoe encampments well into the twentieth century. Today, tribal members still make a point of yearly trips to a handful of traditional locations on the lake.

The Washoe did, of course, use the Tahoe Basin wagon roads and highways of the late nineteenth and twentieth century, even as they persevered in their traditional travel. The roads must have followed familiar routes. Modern highways often began as Native American trails, and portions of Highway 50 are no exception. A trail is marked along the southeast shore of Lake Tahoe on an 1861 map, for example. It likely originated as a Washoe trail, since it predates any significant road or trail construction on the lakeshore. The succeeding wagon roads and highways do not follow this trail exactly, but it does mark the beginning of what eventually became the Highway 50 corridor.



Cave Rock

Cave Rock is one of the most prominent Lake Tahoe landmarks. It is a formation of volcanic rock rising almost 500 feet from the water's edge about half way between Zephyr Cove and Glenbrook. Cave Rock is similar to Shakespeare Point and certain other rock outcrops along the lakeshore. It is composed of igneous rock initially deposited in volcanic vents or pipes. The resulting freestanding "neck" was formed as the softer, surrounding rock eroded away. The name "Cave Rock" comes from the caves worn into the formation by wave action during the Pleistocene, when lake level was about 150 feet higher than present.

Cave Rock is easily visible from anywhere on the southern end of the lake, and from much of the shoreline. It is also culturally prominent, and an example of how Washoe and Euroamerican cultures have adjusted—and not adjusted—to one another over the last century and a half.

There is a special role for Cave Rock in the Washoe



Special Collections, University of Nevada-Reno Library

View of Cave Rock from the vicinity of Log Cabin Shores, 1865.

view of the universe, and people's place in it. Lake Tahoe is at the core of Washoe heritage, beliefs, and cultural identity. Cave Rock is an essential part of this cultural landscape, and is critical to maintaining the cultural identity and survival of the Tribe. For the Washoe, Cave Rock is a sacred place of great power which should only be accessible to individuals with proper, traditional qualifications and legitimate spiritual purposes. It also figures in several creation stories which reflect the Washoe world view, including accounts of how the landscape was created. The anthropologist Grace Dangberg wrote about one such

story, in which a quarrel between the weasel brothers and a water baby defined the Lake Tahoe landscape:

The smaller weasel attacked Water Baby and the ensuing wrestling bout of the two, moving counter-clockwise around the lake, was marked by their emergence at a major number of the streams tributary to the lake, which were fished by the Washo, and prominent natural features such as Cave Rock and the outlet of the lake, the Truckee River.

The weasel brothers, Pewetseli and Damalali, are characters in numerous Washoe stories. Pewetseli was the older and wiser of the two, and always careful in his moral correctness. Damalali was reddish and foolish, quick to make jokes, and morally uninhibited. The older brother was patient with his impudent and adventurous sibling, and at times even used his own magic to bring Damalali back to life after he had, through his own thoughtlessness, gotten himself killed. Water babies were small but very powerful magical creatures, resembling dwarf-like old men and women, with very long black hair. They inhabited particular places in lakes and streams, and their magic was best left undisturbed. Cave Rock was known as a favorite water baby abode, and one of their main congregation points.

Cave Rock was a well known landmark for the Euroamericans as early as the 1850s, under the names "Rocky Point" or "Indian Rock." It was the signature scene for artistic portrayals of Lake Tahoe in the nineteenth century. Cave Rock also became part of the region's Euroamerican transportation system. A north-south Washoe trail along the southeast portion of the lake originally passed slightly inland and upslope from the rock. It was used by early Euroamerican

travelers until 1863, when a wagon road was built around the almost sheer, west face of Cave Rock. This portion of the Lake Tahoe Wagon Road was a considerable engineering and construction feat. It included stone buttresses leading to an eighty foot long central wooden trestle across the steepest portion of the rock. It was the most expensive segment of road between the Comstock and Placerville and remained in



Special Collections, University of Nevada - Reno Library

Looking east toward Cave Rock on old Highway 50, 1935. The first Cave Rock tunnel can be seen in the background.



use, with periodic refurbishing, until 1931. The first of two tunnels was excavated that year through Cave Rock, as part of the new highway between Glenbrook and Stateline. The second tunnel was built in 1957, when Highway 50 was widened to four lanes.

The importance of Cave Rock to the Washoe did not change, despite these profound disturbances. Their view of its significance was overtaken by events, but by no means wiped out. The Washoe consistently protested what they saw as the despoiling of Cave Rock. Their efforts met with mixed results. In addition to failing to prevent two different highway tunnels, the Tribe vigorously but unsuccessfully opposed the 1990s improvements to the Cave Rock Boat Launch. Cave Rock had also become an increasingly popular rock climbing destination during this time. The formation was especially well suited to the newest climbing techniques, but to the Washoe the installation of permanent climbing bolts and anchors in the rock was particularly offensive. In 1993, in response to Washoe opposition, the United States Forest Service Lake Tahoe Basin Management Unit issued a ruling prohibiting further rock climbing on Cave Rock. This ruling was affirmed in federal district court in 2005. Other issues regarding use of Cave Rock remain unresolved, essentially caught between two different world views. For the Washoe, Cave Rock should simply be avoided by everyone except those with specific, spiritually valid reasons for being there. It is also appreciated by boaters, hikers, and swimmers, not to mention people using the highway tunnels. The reasons for this appreciation may not be spiritual, but they are also valid.



IV. Pioneers (1840-1859)

Traveling west during the great emigration to Oregon and California of the 1840s and 50s was a tremendously difficult undertaking, beset with physical challenges and unforeseeable complications. The emigrants crossed expanses of essentially uncharted territory. They had maps, and even guidebooks, but these were often of questionable accuracy or lacking in detail. The travelers relied for the most part on hired guides, or their own wits and experience to make their way across two thousand miles of rolling plains, deserts, and mountain ranges. They drove wagons pulled by oxen, horses, or mules, and often loaded with all their worldly possessions. Some walked, rode horseback, or trailed herds of livestock. Others hauled their goods in wheelbarrows or handcarts.

Each party of emigrants started off with a specific journey in mind. It was not unheard of, however, to change the route, or even the final destination. There were constant searches for easier, shorter ways across lower mountain passes, climbing gentler grades, and passing through areas with better forage or water. The sometimes dizzying array of choices was not always based on geography. The emigrants were subjected to harangues and sales pitches by everyone from trail guides to real estate speculators, all of whom had a better place for the travelers to go, and a better way to get there. An 1845 Oregon bound emigrant, for example, recorded in his journal the attempts of Caleb Greenwood, a mountain man and guide, to persuade travelers to change their plans when he visited their camp at Fort Hall, in southern Idaho:

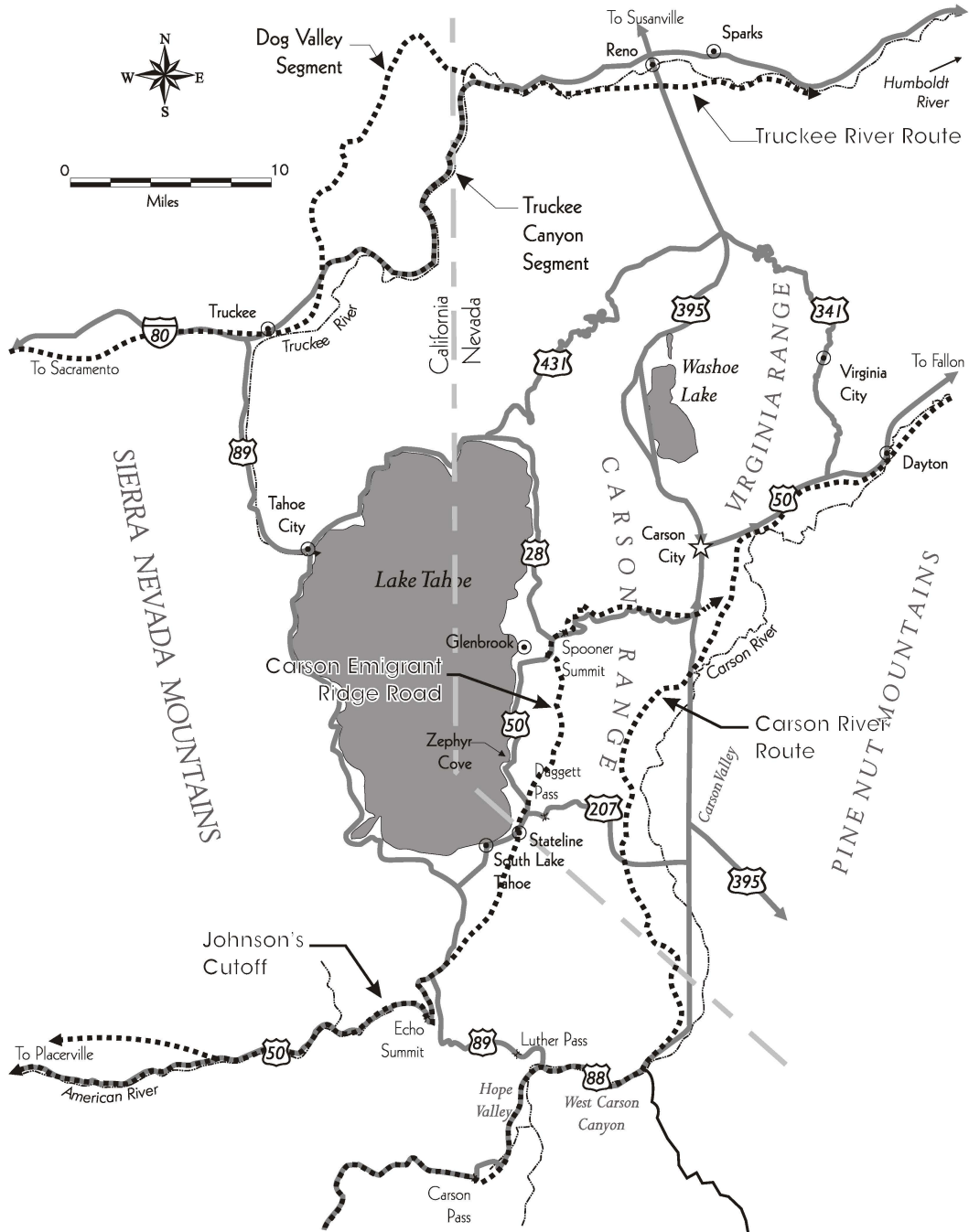
Great efforts were made to induce the emigrants to pursue the route to California. The most extravagant tales were related respecting the dangers that awaited a trip to Oregon, and of the difficulties and trials to be surmounted. The perils of the way were so magnified as to make us suppose the journey to Oregon almost impossible On the other hand, as an inducement to pursue the California route, we were informed of the shortness of the route, when compared with that to Oregon; as also of many other superior advantages it possessed.

As of the 1840s, the major emigrant trails passed north and south of the Tahoe Basin. California bound travelers crossed the Great Basin along the Humboldt River then, near the Humboldt Sink, the trail split. The northern branch, the Truckee River Route, followed the Truckee River canyon up the east slope of the Sierra, along today's Interstate 80. It was the only route through the mountains during the early years of emigration, between 1845 and 1848. The way was difficult. The river's steep, narrow canyon was choked with gravel and boulders from the long ago glacial floods, and the river had to be forded and reforded numerous times as the trail worked its way upstream. In places, there was nowhere to travel but in the riverbed itself.

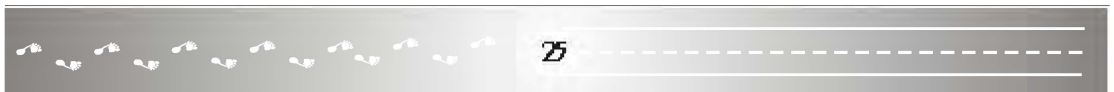
In 1848, a group of Mormons returning to Utah from central California, after participating in the Mexican War, crossed the Sierra Nevada along what eventually became the Carson River Route. The towering Sierra front



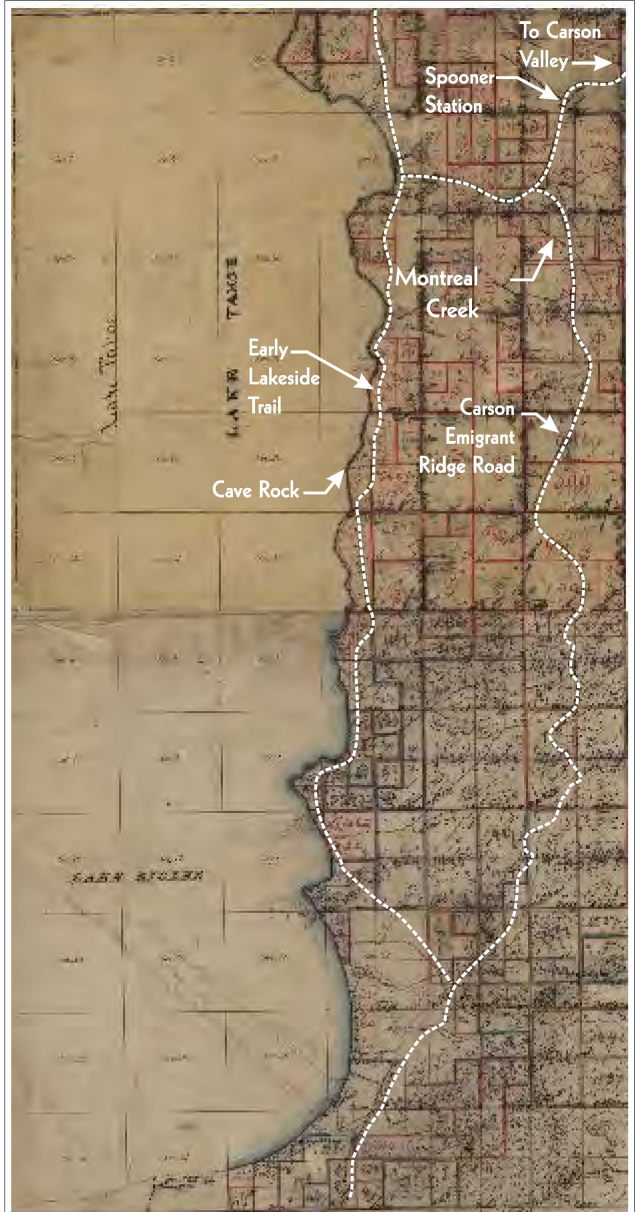
Footpath to Four-Lane



Major emigrant routes.



looked like an impenetrable wall when seen from the east, but the Mormon travelers had approached the mountains from the other direction. They left from California's Central Valley, and followed a series of long, sloping ridgetops east to the crest of the Sierra at Carson Pass. They descended through Hope Valley, down the West Carson River to Carson Valley, and then northeast to eventually rejoin the main trail on the Humboldt. Here they encountered a westward bound wagon train led by Joseph Chiles. Once informed of this new route, the Chiles party decided to give it a try, and the trail turned out to be easier traveling than along the Truckee. The Carson route was not without its difficulties. Two passes, rather than one, had to be crossed to get over the mountains, and the Carson River canyon was narrow and strewn with boulders. But while the Carson canyon was every bit as rugged as the Truckee, the total distance with this type of terrain was less, and the open ridgetops down the west slope of the Sierra were easier for wagon travel than the trail down from Donner Pass. With the beginning of the gold rush in 1849, the Carson River Route had the added benefit of exiting the California side of the mountains in the heart of the major prospecting areas. Within a few years, the Truckee trail was almost completely abandoned. It did return to prominence twenty years later as the site of the transcontinental railroad, and today Interstate 80 follows that same difficult and rocky course up the Truckee River canyon.



Carson Emigrant Ridge Road along the east shore of Lake Tahoe, as shown on 1860s General Land Office survey maps.

Footpath to Four-Lane

The Carson River Route was well established as the primary emigrant trail to California by the late 1840s. But travel across the Sierra Nevada, and through the Tahoe Basin, never remained the same for long. Travelers changed in the coming decades, as emigrants gave way to prospectors, then freight and lumber haulers, and finally tourists. The routes they used changed too, with quicker, easier alternatives springing up to rival existing roads and one another. Toll road operators competed for fees, and merchants and station keepers competed to increase the stream of travelers passing their establishments.

Johnson's Cutoff began the changes in 1852 which ultimately brought travelers through the Tahoe Basin. This was the first roadway along what later become the Highway 50 corridor from California to Nevada. It crossed the Sierra between the southern end of Lake Tahoe and the Carson River Route. It completely "cut off" the West Carson River valley, and also bypassed much of the Carson Valley. Johnson's Cutoff began at Placerville on the South Fork of the American River and ran along Peavine Ridge to the river's headwaters. It crossed the western Sierra crest at Johnson Pass, dropped down to Lake Valley and then skirted Lake Tahoe high on the slope east of the lake. This portion of the cutoff, called the Carson Emigrant Ridge Road, was located far above the lake to avoid the marshes and side canyons found close to the lakeshore. It joined the route of what is now Highway 50 at Montreal Creek, then proceeded east to Spooner Summit. From Spooner Summit, it went down Clear Creek Canyon and emerged from the mountains in northern Carson Valley.

Johnson's Cutoff was described as little more than a glorified foot path or pack trail, but it was the first of the area's roads to be planned in advance, rather than evolving from trails and wagon ruts. It was the idea of John Calhoun Johnson, a Placerville rancher and toll road entrepreneur, and one of the region's early mail carriers. It was about 15 miles shorter than the Carson River Route, and its two mountain passes were lower. Much of the cutoff was also below the 7,000 foot level, which meant less snow cover and an earlier opening in the spring.

Johnson's Cutoff sliced a few miles from the trip between Carson Valley and Placerville, but this did not mean competition from the Carson River Route disappeared. The Carson Emigrant Ridge Road from Friday's Station in present day Stateline to Spooner Summit fell out of favor by 1854. This section actually rose higher than Spooner Summit at several points, and making these climbs, only to drop down again, was a waste of energy for the teams of draft animals. The relatively high elevation of this segment also made snow a problem. But the main advantage of the Carson Emigrant Ridge Road was that it bypassed the West Carson River Canyon. In the early 1850s, the citizens of southern Carson Valley improved the road through the canyon, clearing away boulders and building bridges at several fords on the river. The majority of travelers were drawn back to the Carson River Route, and Carson Valley traders were glad to fill their needs for provisions, equipment, livestock.



LOGAN SHOALS

Location: West side of US 50, 1.7 miles south of the Glenbrook turnoff; 0.9 miles north of the Cave Rock tunnels. The location includes a good sized parking area, just off the highway, and is marked by a US Forest Service sign.

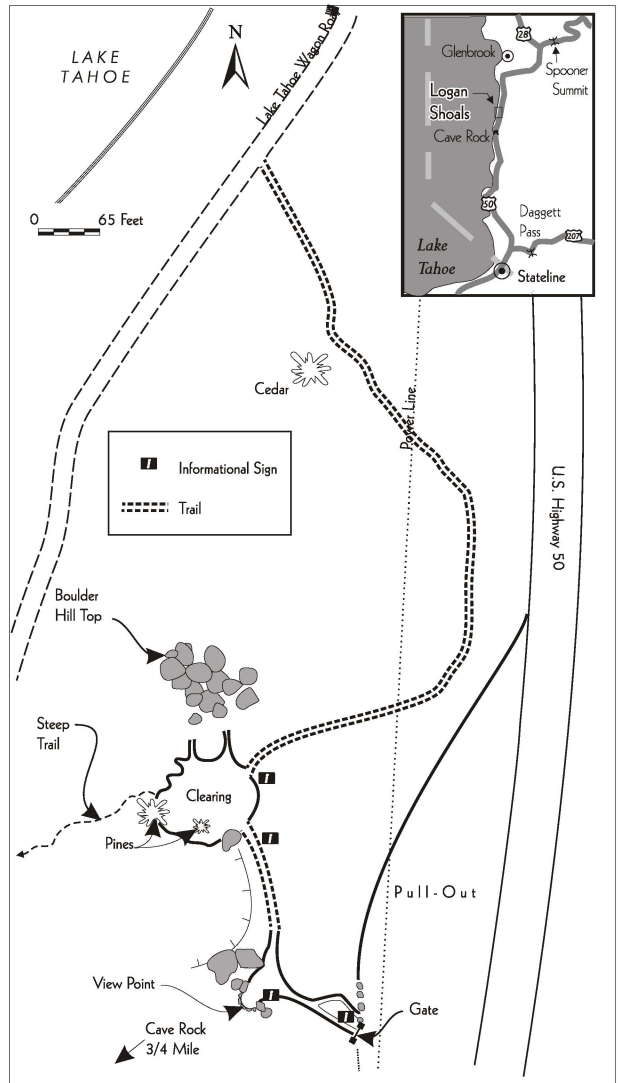
Access: From the southbound lanes of Highway 50 only.

The Logan Shoals turnout is a loop of Old Highway 50, marked by a Forest Service sign, with plenty of space for parking. It is a popular spot with an excellent view of the lake and Cave Rock. A paved path leads from the pullout to a small overlook, where you can get a good look at the southern half of the lake and the west shore skyline. A Forest Service placard explains the significance of Cave Rock to the Washoe, and describes what an engineering challenge it was for nineteenth century roadbuilders to traverse the precipitous, lakeside face of the rock. Further along, the pavement ends but a dirt pathway continues. Another informational sign, entitled "Shoring Up the Comstock," details the importance of Lake Tahoe lumber to the development of the Comstock.

If you care to continue, an unmaintained trail leads into the trees just to one side of this sign.

It's an easy walk for the most part, and takes you on a curving, gradually descending course, dropping more steeply at the end, almost to the lake. The path ends at a much more substantial trail, one which you might surmise is wide enough for a wagon or even an automobile.

You are standing upon the Lake Tahoe Wagon Road and, later, the Lincoln Highway. The quiet is striking. Not



Logan Shoals Trail

silence, because you can still hear sounds from Highway 50. But the modern traffic noise is muted and distant. If you imagined the sounds of a team of oxen, pulling a Washoe Wagon, they might also seem distant—in time. You would hear a variety of sounds as the team passed by your vantage point, and none of them would be familiar. The wagon's wooden joints, and the leather tack and yokes would creak; the animals would strain and huff; the steel rims on the wooden wheels would grind over rocks in the roadway; the load would clank and



Mactec

The Lake Tahoe Wagon Road / Lincoln Highway at the intersection with the footpath.

rattle; the tip of the driver's long, snaking whip would pop like a firecracker. But the quiet of the forest and the lake would absorb the sounds even as they happened. Years later, when a caravan of honking, puttering Model Ts would trundle past, the same thing would occur. Nothing would linger in the air except the smell of engine exhaust.

Like all roads, this one leads in two directions. You have a choice of which way to go. The decision is hardly momentous, however. You can go north for half a mile, or south for about the same distance before you encounter a gate and the transition from historic wagon road to a modern side street. The things to see along the way are intriguing. In several places the road is supported by rock retaining walls similar to the abutments on Cave Rock, though on a smaller scale. The same workmen, however, very likely chiseled both from the same granite. The same teams might have delivered wagon loads of rocks to where they were needed. The same men set them in place, stepped back, and judged the adequacy of their work. If you walk far enough south there is even an odd collection of granite boulders at the edge of the road, possibly set aside as construction material but never used. There are also stumps along the way which could be old enough to have been cut for timbers in the Comstock mines, and some graffiti on a roadside boulder which predates the spray can. And there are points where you can't help but imagine a traveler stopping and staring at Cave Rock. For a Washoe, there would be the sense of the power and danger of the place. A Euroamerican might see the remarkable blue of the lake, and be amazed at the sheer rock outcrop the road seems to be headed straight for.



Mactec



Mactec

Rock retaining walls at the edge of the road.





A Comstock era stump

Madeo



Madeo

Looking north toward Logan Shoals from the Lake Tahoe Wagon Road / Lincoln Highway, (compare with this booklet's cover photo).



V. The Bonanza Road (1859-1869)

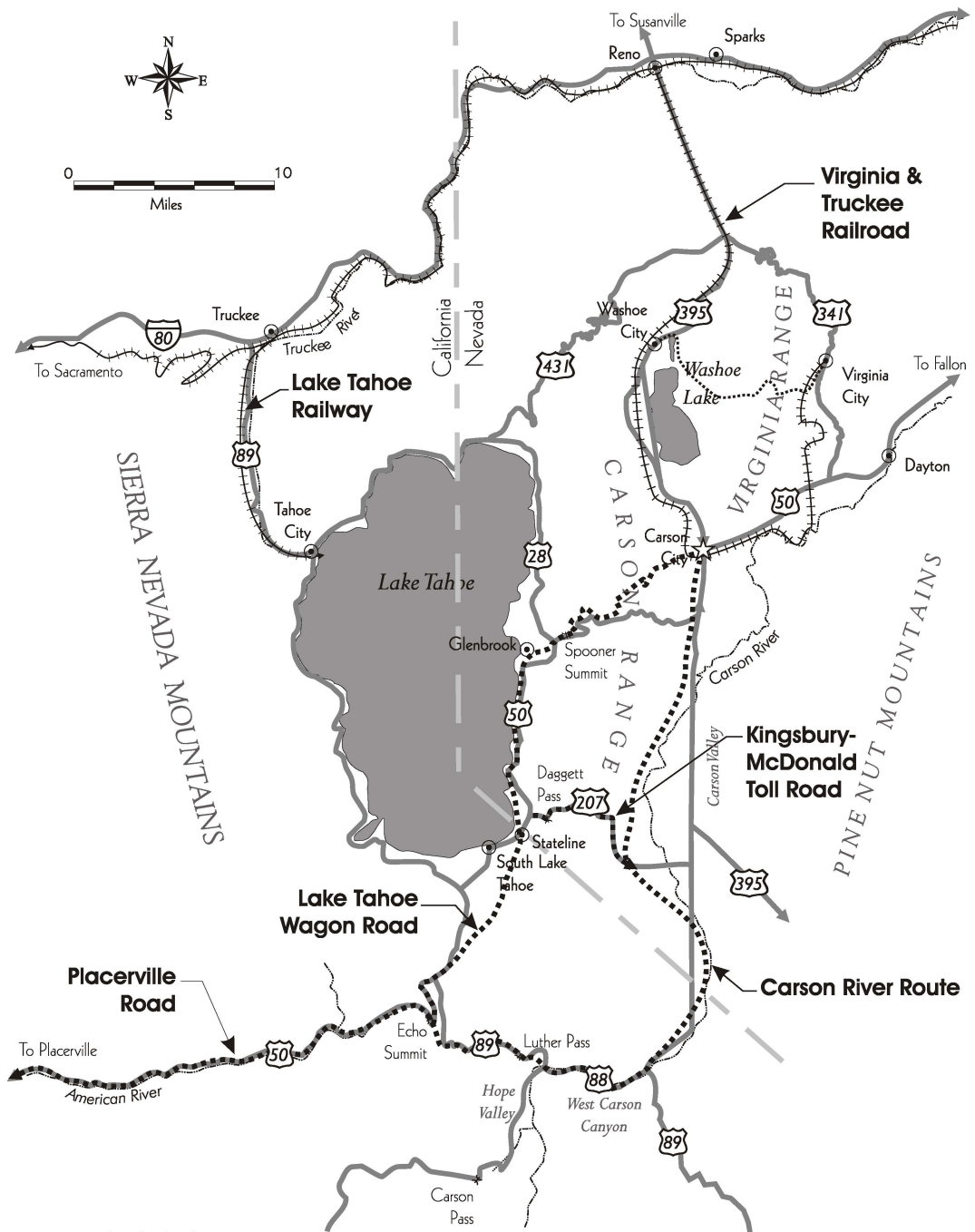
The discovery of silver and gold which became the Comstock Lode was easily the most important historic event affecting transportation in the Tahoe Basin. Prospectors recognized the Comstock's mineral potential in the mid 1850s, but the major discoveries did not come until the late fall of 1859. Word spread, and the "rush to Washoe," as the region was initially named, began in earnest when the snow cleared the Sierra passes in the spring of 1860.

The Comstock was in the Virginia Range, 25 miles northeast of Lake Tahoe, and the first thing the gold rush changed was the direction of travel. The California bound emigrants and prospectors were replaced by gold seekers heading over the Sierra in the opposite direction. Some were the same California prospectors, reversing their steps and now intent on making their fortune in the Comstock. Others were newly arrived from the eastern states and San Francisco, via the Isthmus of Panama, or around Cape Horn. The Comstock strike quickly evolved from small scale prospecting, placer mining, and tunneling by handfults of miners to extensive, underground mining with large and complex milling operations. Within a few years, scores of mines and mills were in operation, and Comstock's population numbered in the thousands. The mining industry and the cosmopolitan centers of Virginia City, Gold Hill, and Silver City demanded all types of industrial and commercial products and consumer goods of every sort.

Nearly everything for mining and processing ore, and the logistical system supporting the mines and miners had to be hauled over the Sierra to the Comstock. Goods and supplies went east, and silver and gold, in the form of unrefined bullion, went west. The list included industrial machinery, wood and lumber, fruit and vegetables, whiskey (and the ornate bars over which it was served), clothing, picks and shovels, and even the sections of cast iron pipe for the waterline which brought lake water from the Sierra Nevada to Virginia City. In addition, a major mining center like the Comstock required constant stage, mail, and telegraph communication with the outside world.

The freight and stage lines connecting the Comstock with its supply centers in central and coastal California needed a very different kind of road than the earlier travelers. The typical California emigrant made a single, one-way trip across the continent. There was travel back and forth between California, Carson Valley, and the eastern United States, but the emigrants asked no more of a road than that it follow an easy route and be clear of trees, boulders and other obstacles which might injure their stock or damage their wagons. The freighthaulers and stage drivers required much more sophisticated planning, design, and construction. Their roads would have to

Footpath to Four-Lane



1860s Wagon roads and railroads.



withstand constant use. They needed to follow the most efficient route, as any wasted effort would be repeated trip after trip. They had to be snow-free and open for travel for as much of the year as possible, and required special features, such as pullouts and wide turns which would allow teams of six to ten animals to turn without slacking their traces.

The Placerville-Comstock connection evolved quickly during the years after 1860 into the transportation corridor called the Bonanza Road. When the gold rush began in the spring of 1860, most California traffic still followed Johnson's Cutoff, except for avoiding the Carson Emigrant Ridge Road by following the Carson River canyon. An alternative route was soon developed over Kingsbury Grade by David Kingsbury and John McDonald. They constructed a toll road in 1860 along Daggett's Trail, crossing the eastern Sierra crest at Daggett's Pass. The Kingsbury Road went from Friday's Station, at the southeast corner of Lake Tahoe, to Van Sickle's Station in Carson Valley. It bypassed the West Carson canyon, and shortened the trip from Lake Valley to Carson Valley by a full day. The Kingsbury Road was heavily used for only a few years in the early 1860s, when it was superseded by the Lake Tahoe Wagon Road. It was the first road to bring large numbers of travelers into the south end of the Tahoe Basin.



Special Collections, University of Nevada - Reno Library
Swift's Station on the King Canyon Road, about 2 miles east of Spooner Summit. Note the triple wagon, and the smaller wagon waiting at the pullout.

The Lake Tahoe Wagon Road was the last, and most important step in the evolution of the Bonanza Road. Sometimes called the Lake Bigler Wagon Road, as the lake was often referred to in the nineteenth century, it took the Highway 50 route from Placerville to Glenbrook. (The General Land Office changed the lake's name to "Tahoe" in 1862, but the California Legislature did not officially change the name until 1945.) From there it went up the north side of Glenbrook Canyon to Spooner Summit, and descended to Carson Valley via King's Canyon. The Lake Tahoe Wagon Road was completed in 1863. It was the most efficient route between California and the Comstock, and quickly became the major conduit of stage and freight traffic. It was shorter and less steep than Kingsbury Grade, and the pass at Spooner Summit was lower than Daggett Pass. The segment

along Lake Tahoe was built along the shoreline, avoiding the ups and downs of the old Carson Emigrant Ridge Road.

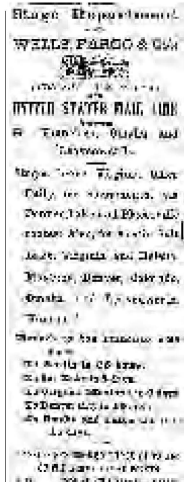
The Lake Tahoe Wagon Road was built by the Lake Bigler Toll Road Company. It was well financed and carefully planned, and combined new construction with a consolidation of the existing, piecemeal road network between Lake Tahoe and Carson Valley. The Walton Toll Road had been built in 1862 along the southeast shore of the lake, reaching Carson Valley through Clear Creek Canyon. The Lake Bigler Company took over Walton's Toll Road in 1863, connecting it to a newly constructed road from Carson City up King's Canyon. Butler Ives, a well known land surveyor of the day, supervised the engineering and construction of the King's Canyon Road. He served as Nevada Land Commissioner, and represented the state in the survey of the contentious Nevada-California boundary. In later years he was chief location engineer for the transcontinental railroad in Nevada and Utah. The Lake Bigler investors, H.F. Rea, Alfred Helm, and Thomas E. Haydon, were



Nevada Historical Society

A fully loaded Concord coach of the Pioneer Stage Company, shown in this 1860s lithograph making its way along the Bonanza Road at the south end of Lake Tahoe.

also prominent and well connected members of the community. Helm served as clerk of the Nevada Supreme Court in 1864, and Haydon became the U.S. District Attorney for Nevada in the late 1880s.



Stage company advertisements from the Daily Tresspass, Virginia City, Nevada, 1867. The Pioneer Stage Company touts its connections with the Central Pacific Railroad, as it progressed eastward from Sacramento, while the Wells Fargo destinations comprised a list of major towns and cities of the western frontier.

Road building along Lake Tahoe in the summer of 1863 was a hot, dusty undertaking. In contrast to a modern construction site, it required hundreds rather than scores of laborers. The deafening roar of heavy equipment would have been replaced with the grating of horse or oxen drawn scrapers and the crack of bullwhips. A newspaper account from 1863 described, "300 laborers . . . working on the 14 miles of new road on the lake's eastern shore. It will average 20 feet in width, with a nominal rise of eight feet in every hundred when completed in September." Nineteenth century roads were built by men and animals, and while oxen, horses, and mules powered most of the equipment, a fair amount of the work was done with picks and shovels. The roadway was cleared and graded with

Footpath to Four-Lane

stock-drawn scrapers. Gullies were filled, and the rises between them lowered to achieve as even a grade as possible. Drags and rollers were pulled back and forth along the road to smooth the surface. Rock was blasted from the roadway with black powder. Granite blocks were shaped with hand chisels to build the retaining walls which, even today, hold the road in place on the steeper slopes.

The Lake Tahoe Wagon Road was nothing less than one of the nation's busiest thoroughfares during the 1860s. Stage companies, like Crandall's Pioneer Stage Lines, carried passengers back and forth between the Comstock and California. Freighters hauled everything from basic necessities to extravagant luxuries into and out of the Comstock. An oversized freight wagon, the Washoe Wagon, was specially developed for the Bonanza Road. Its triple trailers carried ten to fifteen tons of freight and were pulled by teams of eight or ten oxen or horses. In 1863 it was estimated that 5,000 teams, 14,652 mules and horses, and 1400 freighters and stages were working the Placerville-Comstock corridor.

J. Ross Browne, a well known writer in his day, wrote two serialized accounts of his visits to the Comstock for Harper's Magazine. In *A Peep at Washoe*, he describes the traffic on his 1864 trip from Placerville to Virginia City:

From the first hour after leaving Placerville we passed along the road-side numerous teams and trains of wagons . . . I commenced a rough calculation of the number of wagons, but soon gave it up as a hopeless task. It seemed to me that there were enough of them, big and little, to reach all the way over the mountain. At the least calculation we must have passed two or three hundred. Every wagon was heavily freighted—some with merchandise, other with iron castings for the mills, and quite a goodly number with families, fruit, whisky, and furniture. There were horse-teams, and mule-teams, and ox-teams. I never before saw so many teams on one road.

If you stood during the travel season anywhere on the Lake Tahoe Wagon Road with a view in either direction you would always have a wagon, a stagecoach, or travelers on foot or horseback in sight. Even at night, stages would fly by, traveling by lantern light. Most of the time the scene would include a remarkable profusion of activity: the creaking and groaning of the huge, cumbersome, and overloaded wagons; the shouts and curses of the teamsters; the huffing and snorting of oxen, horses, and mules, and the odd tingling of bells on the lead animals. There would also be drovers trailing herds of cattle and sheep, and riders leading strings of mules or burros, loaded with everything from firewood to sacks of beans.

Public Roads or Toll Roads?

Competition for space on a narrow pack trail could be one-sided, as several early travelers in the Sierra Nevada noted. Pack mules were notoriously oblivious, and as likely as not simply brushed opposing traffic off the trail with their expansive bundles. As wagons and stagecoaches superseded the riders, foot travelers, and pack trains, the narrow trails evolved into rudimentary roads. The oversize Comstock ore and freight wagons, and stagecoaches with schedules to keep, needed still more improvements, like gentler grades with fewer switchbacks or sharp curves. The roads had to be wide enough for vehicles traveling in opposite directions to pass, and for faster stage traffic to safely overtake the freight wagons. They also required regular maintenance. Rockslides needed clearing, washouts had to be replaced, and tree fall removed.

Today, we take government involvement in transportation for granted. The construction and maintenance of a good transportation network is seen as one of government's primary responsibilities. But this has not always been the case. In nineteenth century Nevada, government addressed the need for an improved and expanded transportation system mainly by awarding toll road franchises. Toll roads were constructed by private companies and individuals who, in return for building and maintaining a needed road, were granted the exclusive right by the state legislature to collect fees from anyone who used it. These franchises could be highly profitable, and were much sought after. They often included long stretches of road, but could also entail improvements or

maintenance of shorter, difficult segments. Entrepreneurs also constructed bridges, alternate routes, or shortcuts and charged for their use.

There was pressure for more direct government financing of transportation. It was argued that good roads contributed sufficiently to the general welfare to justify the use of tax money for what would appear to be the exclusive benefit of road builders, stage lines, and freight haulers. Throughout the 1850s and 60s, state and local government in California devised various plans to make public money available for road construction in the north-central portion of the state. They focused initially on an emigrant road, to attract settlers to the area. Prominent members of the San Francisco community formed the Emigrant Road Committee, and in 1855 the California State Assembly passed An Act to Construct a Wagon Road Over the Sierra Nevada Mountains. The act intended to finance a road following a variant of Johnson's Cut-off from Placerville to Lake Valley, and then through Luther Pass and Hope Valley to the Carson Valley. It was declared unconstitutional within a year, however, because paying for the road would have exceeded the state's constitutionally mandated debt limit. The movement was not to be denied, however, and in 1857 an act was passed and signed permitting citizens of Sacramento and El Dorado Counties to tax themselves \$25,000 per county to construct a road to the Carson Valley. In 1858, toward the end of the emigration and gold rush periods, a contract was awarded to construct a 12 ft wide road, "cleared of all obstructions" between Sacramento and Carson Valley. In describing this road, George Chorpenning, who first carried mail over the Sierra, remarked that it was of such quality that



stagecoaches could proceed uphill or down at a trot.

Decisions about road building were not always simple. A toll road, for example, might be superior to a non-toll alternative, but still lose out because of its higher cost. Merchants along competing routes would also pressure the operators to keep tolls low and increase traffic, or they could even take it upon themselves to repair or modify a stretch of road. Government financing of initial construction could also produce resentment if, as in the case of the Bonanza Road in California, it was eventually turned over to private operators. William H. Brewer, a traveler on the Bonanza Road, which he calls the "grand artery of travel to Washoe," expressed one man's opinion of just such an arrangement:

This great road deserves some notice. It cost an immense sum, perhaps near half a million, possibly more. First an Indian trail, then an old emigrant road crossed the mountains; when, seeing its importance, the state and two counties, by acts of legislature and appropriations, at a cost of over \$100,000 (I think), made a free road over this general line. But the engineers, honest men, had neither the time nor means given them to do their part of the work well—as a consequence, it was not laid out in the best way. The mines of Washoe were discovered, and an immense tide of travel turned over the road. Men got franchises to "improve" portions of the road and collect tolls for their remuneration. Grades were made easier, bridges built, the road widened at the expense of private companies, who thus got control of the whole route. In other words, the state built a road that these private companies could transport their materials free over to build their toll road. Now, the tolls on a six-mule

team and loaded wagon over the road amount to thirty-two dollars, or thirty-six dollars, I am not certain which sum, and it has paid immensely. In some places the profits during a single year would twice pay the expense of building, repairs, and collection of tolls!



VI. The End of the Bonanza Road, and Logging's Heyday (1869-1900)

The transcontinental railroad and the rise of the lumber industry caused profound changes in transportation along the southeast shore of Lake Tahoe. The qualities of the Tahoe Basin itself moved to the forefront. Lumber resources, and the beauty and atmosphere of the lake and its surroundings became the focus of attention, and travel changed accordingly. The western half of the transcontinental railroad, built by the Central Pacific Railway Company, reached Reno in 1868 along the old Truckee River Trail from Sacramento. The Central Pacific and Union Pacific met at Promontory Point, Utah, in 1869 and completed the cross-country connection. Goods which had been laboriously hauled over the Sierra on the Lake Tahoe Wagon Road could now be shipped by rail to Reno, then brought the few remaining miles by wagon to the Comstock. In 1869, the Virginia and Truckee Railroad was built connecting Carson City and Virginia City, and in 1872 it was extended to Reno. This directly linked the Comstock to the rest of the country, circumventing the Bonanza Road. The effect was dramatic. As one historian put it:

In the short space of a full to crescent moon what had been described as the greatest mass movement of men, wagons, materials, animals and bullion known to history faded from the scene.

The wagon road through the Tahoe Basin was by no means abandoned. Travelers from Placerville, or teamsters with smaller loads of freight, still found the Lake Tahoe Wagon Road economical and convenient. Also, during the Comstock boom of the 1870s, there was the extraordinary demand for Tahoe Basin timber.

Every aspect of life on the Comstock required wood or lumber products, from the deepest mine shaft to the tallest building. The stands of juniper and pinyon pine in the Virginia Range provided nothing beyond minimal amounts of firewood. Anything more had to be imported from the outside. The square-



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Log boom and steam tug on Lake Tahoe, ca. 1880-1890. Logs were linked together, then towed to the mill.

set timbering method used in the Comstock mines required vast quantities of 14 by 14 inch beams to brace the underground shafts, adits, and galleries. Above ground, thousands of wood-frame structures were built between



the mouth of Gold Canyon and the foot of Mt. Davidson. These were not only residential and commercial buildings, but structures housing mining machinery and equipment, and mills where the ore was processed. They also needed frequent replacing. As you would expect from closely packed wooden buildings heated with wood fires and lit with kerosene lamps, they more than occasionally burned to the ground. In 1876, for instance, a good portion of Virginia City was destroyed by fire. The Comstock also consumed huge quantities of charcoal and cord wood. Wood heated all the residences and businesses, the mills required charcoal to process ore, and steam power ran everything from small machine shops and manufacturers to the Cornish water pumps which operated twenty-four hours a day to keep the deeper mines from flooding.

Logging quickly became a major Comstock industry. Cutting began in the closest, most accessible wooded areas on the eastern slopes of the Carson Range, overlooking Washoe Valley. The east side of the Tahoe Basin was next, and then the loggers worked their way around the rest of the lake. Trees were taken for both cordwood and lumber. Sugar pine, which grew in areas between 4,000 and 8,000 feet, was preferred for building because it was clear and relatively soft. Jeffrey pine occurred in the same elevation range and also provided excellent lumber. It was stronger than sugar pine and equally lacking in knots. White fir was cut mostly for cordwood, and cedar was cut and split into shingles.



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Log chute near Glenbrook, ca. 1878. The log has just hit the lake, after sliding down the chute from the cutting area. The chute itself is obscured by smoke from friction generated as the log skids along the greased wooden chute.

As the Tahoe Basin logging industry developed, larger, more diversified companies absorbed the original, smaller operators. The Lake Bigler Lumber Company, formed in Glenbrook by Augustus Pray and two partners, built the first mill on the lake in 1861. The Carson and Tahoe Lumber and Fluming Company consolidated Tahoe Basin logging and milling operations under one well financed and well connected company. Backed by the Bank of

Footpath to Four-Lane

California, it eventually controlled 7,000 acres of Lake Tahoe timberland, the Glenbrook mills, and several other mills in the basin.

The discovery of the Comstock's Big Bonanza in 1873 added to the already high demand for lumber. Transportation in the Tahoe Basin meant moving wood from harvest, through processing and milling, and on to the Comstock. Raw logs and milled wood had to be hauled around or over the lake, across the

eastern crest of the Sierra Nevada, and on to the mines, mills, and towns twenty-five miles away in the Virginia Range. Chutes and flumes took logs from the cutting areas to the nearest road, or shot them directly into the lake. They were loaded into wood wagons and pulled by draft animals along the Lake Tahoe Wagon Road to various harbors, such as the docks at Marla Bay and Zephyr Cove. Here the wood was loaded onto barges or gathered together into log booms and towed to the Glenbrook mills by steam tugs. Milled lumber was initially hauled by



Oxen hauling a load of logs from the cutting area.

Nevada Historical Society



Nevada Historical Society

The Clear Creek Canyon flume, ca. 1890. The flume was 12 miles long, and linked Spooner Summit with the Virginia and Truckee Railroad yard about a mile south of Carson City.

wagon up Glenbrook Canyon to Spooner Summit, and then down Clear Creek Canyon to the Virginia and Truckee railhead in Carson Valley. In 1875, a flume beginning at Spooner Summit was built down Clear Creek Canyon, and the Tahoe Lumber and Fluming Company constructed the Glenbrook Railroad to bring wood to the flume from Glenbrook. The railroad was an eight and three-quarter mile narrow gauge line which looped north of Glenbrook Canyon, then followed the modern route of State Highway 28 and Highway 50 to Spooner Summit.





Nevada Historical Society

Trainload of milled logs on the Carson and Tahoe Lumber and Fluming Company rail line between Glenbrook and Spooner Summit.

By 1876, Glenbrook had become Nevada's leading lumber town. Its mills each supported a small army of mill hands, lumberjacks, cordwood cutters and splitters, railroad workers, teamsters, blacksmiths, and cooks. It was also the location of the Glenbrook Railroad's roundhouse and maintenance and repair facilities. But the 1880s saw the end of the Comstock boom, and a drop in demand for lumber and wood products. The Tahoe Basin had also been almost entirely stripped of marketable timber by then. The Carson and Tahoe Logging and Fluming Company shut their Glenbrook mills in 1897, and the railroad was dismantled and barged across the lake. It was incorporated into the Lake Tahoe Railway and Transportation Company line which, among other things, carried tourists between Tahoe City and the connection to the transcontinental railroad at Truckee.

VII. Tourists: By Coach, Boat, and Train

A tourist comes to a place to experience its special qualities. The emigrant family crossing the Sierra, the prospector on his way to the Comstock, a freight hauler with a load of kitchen goods, or a teamster on a lumber wagon loaded with logs, could all appreciate the grandeur of Lake Tahoe. Many undoubtedly did, but they were just passing through. Their reasons for travel remained elsewhere. This began to change in the late nineteenth century, and throughout the twentieth century, as travelers came for the enjoyment of being at Lake Tahoe. More and more, the purpose of their travel was nowhere but here.



The Glenbrook Hotel, ca. 1866.

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The transcontinental railroad had begun diverting commercial transportation away from the Lake Tahoe Wagons Road as early as 1867. As railroad construction progressed eastward, and freight was hauled to the Comstock over connecting wagon roads, many hotels among the one hundred way stations between Placerville and Carson Valley began presenting themselves as tourist resorts. But even in the busiest times on the Bonanza Road, some hotel owners touted their establishments as more than simple stopovers. Samuel Bowles noted in 1865 that, "Already, though far from large populations, [Lake Tahoe] has its mountain and lake hotel, and draws many summer visitors from California and Nevada." In August of 1863, a former associate of the Lake Bigler Lumber Company opened the Glen Brook House half a mile up the canyon from the Glenbrook mill. Glen Brook House was a story and a half high, fronted the Lake Tahoe Wagon Road, and was considered the finest and most luxurious hotel on the lake. The twenty-one dollar a week cost was expensive for the time, but showed the hotel thought of itself as a destination worth seeking out. In 1867, the Territorial Enterprise reported that, with bathhouses now in place, the Glenbrook lakeshore was a veritable 'Saratoga,' (after the renowned resort in upstate New York). Glenbrook continued as a destination of note through the Big Bonanza times of the 1870s, with prominent visitors including General William Tecumseh Sherman and Presidents Grant and Hayes.

Tourism in the Lake Tahoe Basin came into its own as the Comstock declined through the 1880s and logging dwindled in the 1890s. The transcontinental railroad across Donner Pass spelled the end of the Lake Tahoe Wagon Road as a freight lifeline, but it also eventually opened the basin to more visitors. In 1900, the Lake Tahoe Railway and Transportation Company constructed a railway along the northwestern lakeshore from Tahoe City down the Truckee Canyon to the Central Pacific line at Truckee. Underscoring the



Nevada Historical Society

Friday's Station, in present day Stateline, around 1890. This stopover was strategically situated near the intersection of the old Kingsbury Grade and the Lake Tahoe Wagon Road.

change from a lumbering to a tourist economy, the Lake Tahoe Railway was built with the dismantled Glenbrook logging railroad, and the Lake Valley Line, a short logging railroad at the south end of the lake. The rolling stock and equipment, including used narrow gauge rails, maintenance and machine shops, and employees' housing, were all disassembled, barged across the lake to Tahoe City, and made into the new tourist railroad.

Tahoe Basin transportation during these years was a mix of stage, steamboat, and railroad travel. Ten Lake Tahoe communities warranted post offices by 1905. Several commercial resorts and large estates, and farms to supply them with meat and produce, also dotted the lakeshore. This was a "golden age" of tourism, when a wealthy class of visitor traveled to the basin by stage or rail—and directly to Tahoe City after 1900—from all parts of the country, then crossed by lake steamer to any one of several elegant resorts.

Tallac was among the best known of these resorts. It was located eight miles north of the Lake Tahoe Wagon Road, on the south end of the lake between Emerald Bay and today's South Lake Tahoe. It began in the 1870s as a hotel and small collection of cabins and tent spaces, with a general store, livery stable, and saloon. Additions eventually included a wharf for lake steamers, and a dance hall with a spring mounted dance floor. "Yank's," as Tallac was known in the early years, was every bit the equal of the more publicized Glenbrook House.

In 1880 Elias Jackson "Lucky" Baldwin purchased Tallac. Baldwin was a wealthy man described as a "Comstock Lode stock plunger, California real estate promoter, and glamorous libertine." From the 1880s into the 1910s, Tallac grew into a premier hotel and resort, complete with luxurious rooms, cottages, and outdoor camping. Guests traveled by train to Truckee, and later Tahoe City, and were brought to the resort on the steamer Tallac. They also arrived by any of the several stage routes established in the days of the Bonanza Road, crossing Luther or Johnson Pass, or traveling up Clear Creek or King's Canyon. Bridle trails and promenades were laid out among the

Footpath to Four-Lane



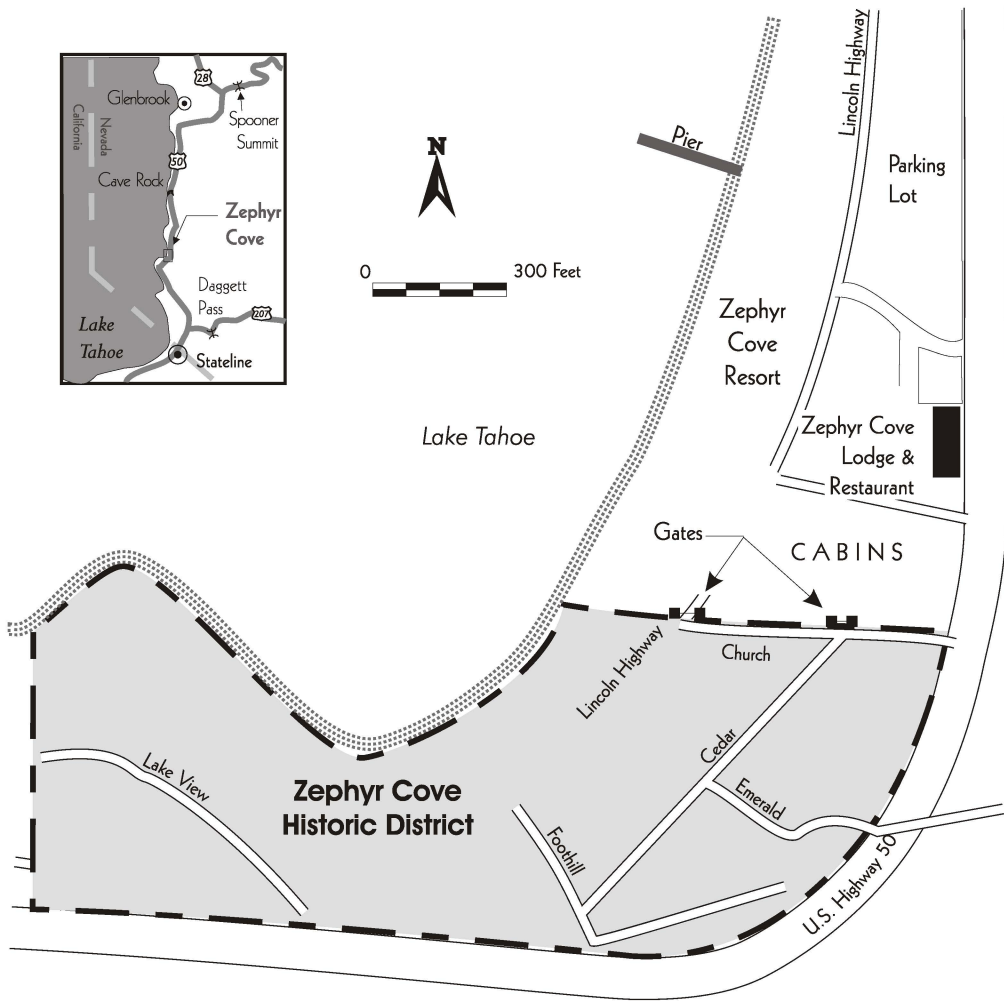
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The casino at Tallac, ca. 1920, with excursion boats in the foreground.

massive pines, which had been left uncut by the property's original owner. The trout fishing was limitless, and boats and Washoe Indian guides were available at the resort. In 1899 a grand new Tallac hotel was built. It was constantly upgraded until Baldwin's death in 1909, with fine dining added, for example, to the already famous hunting and fishing.

The Tallac passed from the scene just as the advent of the automobile, and its transformation from novelty to the typical family's primary mode of travel, opened the Tahoe Basin to the entire nation. The car trip replaced the slower, more expensive rail, stage, and steamer travel, which were often indulgences in themselves. The old Tallac Hotel was destroyed by fire in 1914. The resort stayed open into the 1920s, but in 1927 Lucky Baldwin's daughter, Anita, had the remaining buildings demolished and returned much of the grounds to their undeveloped state.





ZEPHYR COVE HISTORIC DISTRICT

Location: West of Highway 50, just south of the Zephyr Cove Resort.

Access: Turn west at the stoplight at the Zephyr Cove Resort, and park in the public lot adjacent the Dixie Queen pier. Non-resident parking is not permitted within the Zephyr Cove district. Enter the neighborhood through the gate on Church Street, south of the resort cabins. As with any other walking tour, stay on the public streets. Pay particular attention to any no trespassing signs, as some of the private drives are indistinguishable from side streets. One simple rule is all that is necessary: don't do anything you wouldn't want someone walking

through your neighborhood to do.

Architecture has always been part of visiting and experiencing history. There are dozens of distinctive and historic residences and summer homes around Lake Tahoe from the early and middle years of the twentieth century. Some were designed by nationally recognized architects, like Frederick DeLongchamps and Bernard Maybeck. History also resonates in less spectacular, everyday examples of people's homes, or in the case of the early years at Lake Tahoe, people's homes away from home.



This structure is located at the Stewart Indian School in Carson City. It was probably constructed in the late 1920s - early 1930s, and is similar to several rustic style Zephyr Cove residences.

In the late 1920s, the lumber companies which had controlled vast tracts of timberland in the Tahoe Basin began selling off their land. Among the buyers were entrepreneurs who recognized the potential of combining Tahoe Basin scenery with automobile tourism. Lumber company property would become resorts, hotels, campgrounds, and subdivisions of cabins and summer homes. All would be easily accessible on the Lincoln Highway or the new roads encircling the lake and linking it to the rest of California and Nevada. Gertrude S. Church acquired the property encompassing the present historic district in 1926. She filed the development's plat map as President of Zephyr Cove Properties. The subdivision was a success, with building on many lots beginning immediately. The fact that many of Zephyr Cove's vacation homes and cabins were built in this initial period probably accounts for the unified collection of rustic stone and log houses and cabins found in the subdivision today. Additional construction continued through the Depression and World War II, but it was not until after the war that other, more varied styles of architecture began to appear.

The Zephyr Cove District has two important historic associations. The most obvious is the Lincoln Highway, which ran through the center of the subdivision and exists today as the neighborhood's main street. There is an additional connection with the Stewart Indian School, located south of Carson City. The director of the school was apparently one of the subdivision's first buyers. At the time, Indian schools could be found on almost every reservation. One of their primary purposes was to acculturate young Native Americans, that is, to force them to abandon their traditional customs and adopt a Euroamerican lifestyle. Vocational training was an important element of this process, and stone masonry was one of the trades taught at the Stewart School. Washoe students, then, very possibly built the subdivision's 1920s and 1930s stone work.

What you see in the Zephyr Cove neighborhood are private homes and cabins exemplifying the varied elements of rustic architecture. Logs, lumber, and rock are used to create a “rustic” effect, in which the buildings blend easily with their surroundings. The homes are comfortable, but at the same time remind us and their owners that they have succeeded in escaping the crowds and bustle of city life.

You recall that one of the primary elements of a National Register eligible architectural district is its “feeling” and association with a historic time period. Walking through this neighborhood gives you an opportunity to judge for yourself the architectural historian’s assessment that Zephyr Cove does, in fact, retain a strong sense of the 1920s and 30s.

Historic atmosphere is sometimes preserved by design, and sometimes by accident. The district’s association with the Lincoln Highway is important, but whatever “feeling” from that era that exists today is due largely to the fact that Zephyr Cove’s Lincoln Highway was abandoned as a major road in the early 1930s. The main highway was relocated several hundred feet further inland, at the insistence of local residents who realized a thoroughfare along the shore would eat up a tremendous amount of valuable lakefront property. It is easy to imagine the effect Highway 50 would have on the district’s “feeling” if it barreled through the neighborhood today.

This brings up an interesting question. Does the relative quiet of Zephyr Cove reflect another time—the 1920s and 30s—or is it simply the result of the relocation of the main highway? Most people driving through the neighborhood today probably travel at what would be a reasonable clip on the Lincoln Highway. The nature of their travel is different, however. Their minds are on the workday ahead, or home if they’re going in the other direction. Lincoln Highway travelers of the 1920s probably drove a little harder, more intent on reaching a farther destination. But traffic then might not have been very different from today. As you look around, you see streets which are strips of pavement lacking sidewalks or curbs, making their way through stands of trees thick enough that you’re never out of the shade unless you want to be. Is this atmosphere historic or merely pleasant? Or is there something about the architecture of the neighborhood which invokes a “feeling” or association with history?

There are two possibilities for your walking tour. You can try one or the other, or both. The longer one—a quarter mile out and the same distance back—takes you along the Lincoln Highway and onto Lakeview until it dead ends at the western end of the district. Excellent examples of stone and log construction can be found among the cluster of homes at the far end of the street. These include the ubiquitous rustic stone chimney, log houses—one with saddle cut logs, in which the logs are notched so they can overlap much like the Lincoln Logs of the 1950s—and, at the very end of the street, an example of log cabin siding. The shorter walk takes you around an uneven polygon as you follow the Lincoln Highway only as far as Foothill, turn southeast (left), then



northeast (again left) on Cedar to Church, and from there back to Lincoln. The same techniques of log and stone construction are seen here, with the addition of several cabins made of recycled railroad ties employed as square cut logs.

Architectural historians study the stylistic choices people make when they build their homes. From that they interpret the intentions of the designers, builders, and owners. You can see from the houses in this neighborhood that the actual application of a style is uneven. There is more than one

Craftsman home in this neighborhood, and a stucco Tudor Revival. Other houses combine clapboard siding with a properly rustic stone foundation, made of randomly set granite rubble. Several homes include additions of siding made from unpeeled slabs, giving the ultimate rustic appearance of raw log construction, and showing that at least in some form the ideas behind the rustic style are alive and well today.



Railroad tie construction.

John Snyder





Motor camping gear, Lake Tahoe, ca. 1919.

Nevada Historical Society

VIII. Automobile Tourism

The economy of the Tahoe Basin grew during the 1890s. The road network in and around the lake expanded accordingly, transporting farm products, as well as visitors, to the lakeside resorts and towns. In California, the Lake Tahoe Wagon Road continued as a toll road until 1886, when it was purchased by El Dorado County and made into a public highway. It became California's first state highway in 1896, when the California Bureau of Highways was created. On the Nevada side of the lake, an 1891 road connected Lake Tahoe and Reno over Mount Rose Pass. A new road was also built over Echo Summit in 1895, and the Donner Summit road improved in 1909.

Automobile travelers began making their way into the Tahoe Basin by the late 1890s and early 1900s. In 1906, Tallac management feted a Mrs. Joseph Chanslor for piloting her chain driven Simplex automobile from Sacramento to the lake in a mere eight hours. Automobile camping had become firmly established in the area by 1912. In the summer of that year, a University of Nevada student on a class excursion observed the following from the train window as they traveled up the Truckee River:

As the train climbed slowly upward we noticed several camps beside the river and beside every camp stood a huge automobile.



The automobile truly arrived between 1913 and 1919, with the advent of the Lincoln Highway and the designation of the Lake Tahoe Wagon Road between Carson City and Sacramento as the Pioneer Branch. The section in King's Canyon was known as the Osterman Grade, after Henry Osterman, a prominent official of the Lincoln Highway Association. As one of its driving forces, he was responsible for drawing local attention to the effort and persuading wealthy citizens to join in the Lincoln Highway "crusade." Osterman led a colorful life. He was employed as a hotel bellboy, a sailor in the U.S. Navy, a railroad flagman and, for a time, traveled with Buffalo Bill's Wild West Show. He made his mark in the automobile business in South Dakota, and with his Osterman Manufacturing Company, which produced a railroad grain car door which he invented. Osterman died in an automobile accident in 1920.

The route up Kings Canyon and along the southeastern lakeshore remained a graded but otherwise unimproved gravel road. As with many Lincoln Highway segments, no additional improvements were made in the Pioneer Branch. However, in the summer of 1914 the Carson Good Roads Association installed redwood mileage posts and information and warning signs between Carson City and Glenbrook.

In that same summer, Effie Price Gladding traveled by automobile across the newly designated Pioneer Branch. She wrote the following description of her drive from Lake Tahoe to Spooner Summit.

Lake Tahoe on our left was wonderfully beautiful in the morning light. The rich manzanita and other bushes were shining with moisture [from an earlier rain], the tall pines were reflected in the clear depths of the lake, the shores were wild and lovely. The road rose high above the lake, and in one or two places ran along the edge of a precipitous cliff. After leaving the lake, we came into a rather desolate mountain region where the whole character of the country changed. The road was a narrow shelf along a barren, rocky mountainside. The color of the rock and of patches of brilliant yellow flowers, growing along the roadside, gave variety to the landscape. Otherwise it was somewhat dreary and forbidding after the rich forest foliage that we had just left along the lake.

The mass produced automobile became increasingly affordable for middle class Americans within a few decades after its introduction at the turn of the century. Lake Tahoe was completely encircled by automobile roads by 1925. This highway system, combined with the new mobility of the population, made Lake Tahoe increasingly accessible and popular throughout the 1920s and 30s. Less affluent visitors who drove to the lake began outnumbering the wealthy tourists amusing themselves at luxurious resorts. The more affluent automobile tourists traveled to their lakeside summer cabins, but others were happy to rent rustic cottages or camp out. One by one, the elite destinations closed. Facilities like Meeks Bay or Camp Richardson, where rental cabins were named after makes of automobiles and oil companies, took their place. On the southeast shore, the Zephyr Cove Resort

began catering to automobile tourists in the early 1930s.

In 1917, the Lincoln Highway from Carson City to Stateline was made part of the new state highway system, and designated State Route 3. This section of road also qualified as a Forest Highway, which was a class of federal highway constructed and maintained by the federal Bureau of Public Roads. Forest routes were either located within forest reserves, in this case the Tahoe National Forest, or served to connect them. During 1927 and 1928, the Nevada Highway Department built a new highway between the Ormsby County line, a few miles south

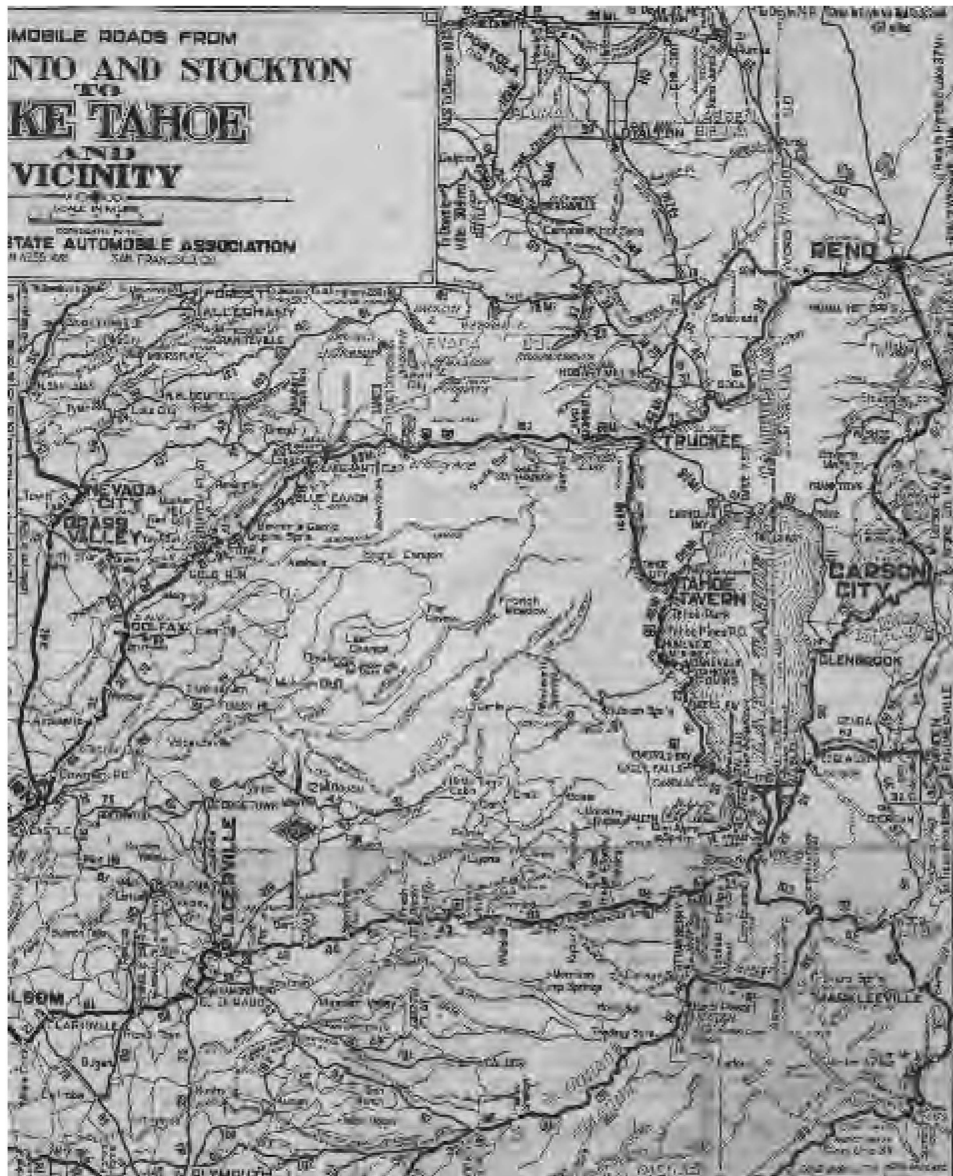


Nevada Historical Society

Camping at Lake Tahoe ca. 1881. These are not recreational campers, however, but the families of men working as loggers in the area.

of Carson City, and Spooner Junction. This road followed Clear Creek canyon, and took the place of the Kings Canyon Road. At the same time, the Bureau of Public Roads used Forest Highway funds to construct Forest Route 3, a two mile segment of new highway on the south side of Glenbrook Canyon between Glenbrook and Spooner Junction. Forest Route 3 was also designated U.S. Highway 50 in the late 1920s. The two mile section between Glenbrook and Cave Rock was graded in 1929-30, and in 1932 a tunnel was blasted through Cave Rock. This bypassed the timber trestle and rock abutments around the precipitous, lake-side face of the rock. By 1934, the Bureau of Public Roads had completely modernized the highway "state line to state line," from the southeastern tip of the lake to the California-Nevada border west of Incline. This newly paved highway was, as the Department of Highways reported, a "thoroughly modern and scenic highway," and a boon to tourist travel to Lake Tahoe and adjacent points in Nevada.

The late 1920s realignment of what was then designated Highway 50 paralleled the Lake Tahoe Wagon Road and Lincoln Highway, which it replaced. It was set inland several hundred feet from the old road, which was a stone's throw from the lake. The new Highway 50, unlike the Bonanza Road, found itself incompatible with Lake Tahoe as a destination. The road which brought travelers to the lake no longer had a place at the water's edge. It was too busy, and too noisy, and represented the very hustle and bustle people came to the lake to escape. The fortunate result for the historic record was that sections of the abandoned road were left undisturbed for decades after the shift inland of the main highway. Side streets absorbed other segments in the small neighborhoods and collections of vacation homes which filled the space between Highway 50 and the lake. Old Highway 50 was not as fortunate when its turn came to be replaced. In 1957 the highway was again realigned and widened in



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California Automobile Association highway map of the Lake Tahoe area, 1930. The main highway from Reno to Carson City is shown as a paved road. The road up Kings Canyon and along the lakeshore between Glenbrook and Edgewood is dirt and gravel.



Great Basin Gallery

View of the new highway, Forest Route 3, at the mouth of Glenbrook Canyon. Glenbrook Bay is in the foreground. Forest Route 3 later became Highway 50.

anticipation of the 1960 Squaw Valley Winter Olympics. Its curves were straightened and the grade leveled. The new road was built with modern, high speed traffic in mind, and it buried most of the old highway under its roadbed.





Great Basin Gallery

Zephyr Cove Resort ca. 1935. Note the pier, the Lincoln Highway closest to the lake, and then old Highway 50. The Zephyr Cove lodge is in the center foreground, just above the word "Zephyr".

Zephyr Cove Resort

The Zephyr Cove Resort is one of the oldest and most popular tourist destinations on the southeast shore of Lake Tahoe. Its sixty acres include rental cabins, camping, a riding stable, beach, pier, and boat ramp, and its history closely tracks the development of automobile tourism in the Tahoe Basin.

Andrew Gardiner homesteaded Zephyr Cove in 1862, and built a way station along the newly constructed Lake Tahoe Wagon Road. He called his stopover the Zephyr Cove House, and it continued serving travelers through the late 1800s. The Carson

and Tahoe Lumber and Fluming Company acquired the property, and it became the scene of small cordwood cutting operations in the early 1900s. By the 1920s, it was primarily grazing land.

The Carson and Tahoe Lumber and Fluming Company was out of the logging business by the 1920s, and its shareholders began liquidating the company's real estate holdings. C.T. Bliss, a shareholder and son of one of the founding partners, recognized the commercial possibilities of automobile tourism. At his insistence, the Carson and Tahoe Lumber and Fluming Company held onto the Zephyr Cove property. In 1930, they began work on a small tourist resort. It



Revere Herald Society

"Cabins among the Pines" at the Zephyr Cove Resort, ca. 1930s.

consisted of a few cabins and tent platforms, along with water lines, sewers, fences, as well as a store and, eventually, a post office. The first season proved very successful, and fifteen additional cabins were added to the resort for the summer of 1931. The resort's architecture is an excellent example of the rustic style which was so popular at the time. While several of the earliest cabins had cedar bark siding, later construction consistently employed log-cabin siding.

The Zephyr Cove Resort was initially laid out along both sides of the Lincoln Highway. When the new 1932 highway was built, the original Zephyr Cove store was moved and rotated to face it. This building is the core of the modern lodge. The Lincoln Highway remains in use as an access road for cabins in

the southern half of the resort. Highway access to the lake was further improved through the mid 1930s, and the resort grew along with it. Still under Carson and Tahoe Lumber and Fluming Company ownership, the pier was expanded to accommodate larger passenger and mail boats, and the resort continued turning a profit of five to eight thousand dollars a season. Company records show that it took only a handful of employees to run the business, including a married couple hired as managers, a bookkeeper, two waitresses, two cooks, a maid, a store clerk, and a handyman. Cabin rentals provided the bulk of the income, but gasoline and oil sales, fees for beach and telephone use, the riding stable, and slot machines also made money.



The Zephyr Cove Lodge, ca. 1940.

Great Images Gallery

The Carson and Tahoe Lumber and Fluming Company was nevertheless continuing to liquidate its real estate, and in 1937 George Whittell, a San Francisco millionaire, bought the block of property which included the resort. The purchase was intended to be part of an extensive, long term commercial and residential development in partnership with Reno developer Norman Blitz. But the project was abandoned, apparently because the reclusive Whittell preferred leaving the area only minimally developed. Whittell did make limited improvements during the early part of his ownership, including completing the main lodge. It was expanded to its modern configuration by later operators between 1953 and

1964. They built the service station and marina facilities, rebuilt the pier, added numerous trailer pads and campsites, as well as a boat ramp, toilets, and snack bar near the beach. The cabins were also continuously improved and modernized. In 1979, the United States Forest Service acquired the resort, and it has been privately operated under special use permits ever since.

The Nevada Department of Highways

The Nevada legislature began the era of modern highways in the state in 1911, when it appropriated \$20,000 for construction and repair of roads. The work was done by convict labor, under the supervision of the State Engineer. The state had no direct role in road construction or maintenance before that time. In 1917, the legislature passed the Nevada State Highway Law. This act, signed by Governor Emmett D. Boyle, was the state counterpart to the 1916 Federal-aid Road Act, which made federal highway money available to the states, providing they designated a state-wide system of highways and dedicated funds for their maintenance and improvement.

The Nevada Highway Department was founded in 1917, and its growth through the twentieth century followed the expansion of the state's transportation system, and the increased demands and expectations of the traveling public. In 1917, the first State Highway Engineer was appointed and the numbered system of state highways was established. The enumerated highways crossing the state consisted of three east-west roads and one north-south road. When the original federal highway appropriations act expired in 1921, new legislation was passed and added to over the years, funding the federal and state partnership which eventually produced today's nationwide highway system. By 2005, the Nevada Department of Transportation's 1,700 workers were responsible for 500 million dollars per year of highway construction, maintenance, and improvement on the state's 5,400 miles of road and 1,000 bridges.

LAM WATAH

Location: West of Highway 50, at the north end of Rabe Meadows.

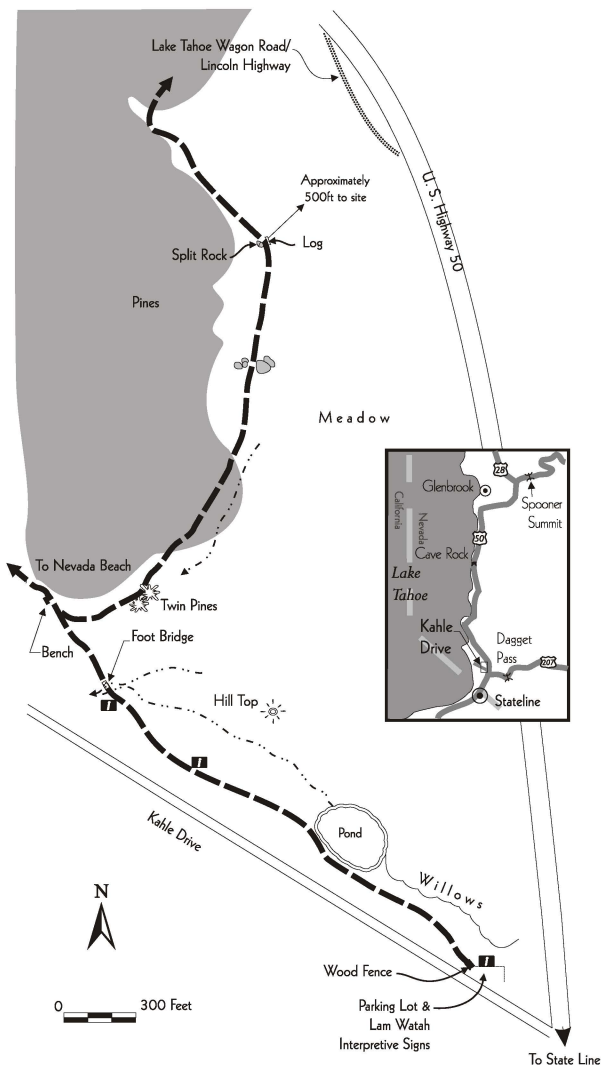
Access: Turn northwest onto Kahle Drive from Highway 50, at the intersection on the northern outskirts of Stateline. Park in the small lot at the head of the Lam Watah interpretive trail, on the north side of Kahle about half a block from the intersection.

There is a long walk ahead of you here, more than three-quarters of a mile altogether. At its end is a short segment of the Lake Tahoe Wagon Road and Lincoln Highway, but in this case the journey is as informative as the destination.

The trail begins at the Lam Watah interpretive site, where the Forest Service has set up informational panels, detailing the geography and geology of Lake Tahoe, and Native American use of the meadows. Lam Watah, as the ancient camp site is called by the Washoe, means “bedrock mortar stream.” Ethnobotanical research (specializing in the study of how native peoples exploit plants as food, fiber, or for their medicinal properties), combined with the knowledge of Washoe elders, shows that as many as forty different kinds of root or seed plants used by the Washoe could have been found in this meadow during earlier times. It is also the kind of

camp to which pine nuts or acorns would have been brought for preparation, from the Pine Nut Range to the east, or the western Sierra foothills. The plants, seeds, or roots were prepared by crushing and mixing, while pine nuts and acorns were ground into flour. Today, Lam Watah remains a living example of the link between the modern Washoe and their heritage.

Follow the main trail toward Nevada Beach along the south side of the pond for slightly less than half a mile. Along the way, there are small placards describing the meadow’s native plants, and recounting some of its history.



Lam Watah Trail.

After crossing Burke's Creek on the wooden footbridge, make a sharp right turn at the bench and follow the path along the eastern edge of the rocky, pine studded rise to your left. After about a quarter mile, you will come to an impressive, split granite boulder to the left of the trail, and a fallen log on the opposite side. With your back to the boulder, look east toward Highway 50 to the grove of pines about five hundred feet away. Your destination is the southern tip of the grove, where it meets the highway. The meadow in front of you is passable all year, but it doesn't dry out quickly



Mactec

The Lake Tahoe Wagon Road / Lincoln Highway.

after the spring snow melt. If you have any doubts, or don't want to chance emerging on the other side with your shoes full of water, follow the edge of the sagebrush on the high ground to your left around to the same spot.

The historic roadway is much harder to spot than at Logan Shoals. Here, remains of the Lake Tahoe Wagon Road and Lincoln Highway consist only of an open lane through the trees, ten to fifteen feet wide and slightly more than a quarter mile long. It is never very far from the modern highway, and it is not all that impressive. But it does demonstrate a basic difference between historic and modern construction. There is a granite outcrop at the north end of the segment, where the historic road is buried under the modern highway grade. The old road, carrying wagons and early motor cars, skirted the base of the outcrop, working its way among the boulders. The new



Mactec

View to the northeast from the footpath. The Lake Tahoe Wagon Road / Lincoln Highway is just behind the treeline, with Highway 50 in the background.

highway drives straight through, reducing the granite to nothing more than a high spot on the way to the next intersection.

The reward for the walk happens when you turn and look back toward your starting point on Kahle Drive. There is a great deal of history within the sweep of your vision. You are standing near a short piece of the Bonanza Road, once one of the busiest thoroughfares in the American West, and the lifeline of the great Comstock silver strike. In the distance, the Stateline casino hotels mine a different sort of silver, and more than one visitor is there





Mactec

Looking toward Stateline from the Lincoln Highway.

intending to make a fortune. You are within sight of Friday's Station, where the Kingsbury Road headed east over Daggett Pass and shortened the trip from Placerville to Virginia City (See "Pioneers 1840-1859"). The site of Tahoe's first airport is off to the right, now occupied by a trailer park. And the Lam Watah meadow is where, as one anthropologist described it, drawing from accounts of Washoe elders, "women and children sat . . . grinding and pounding seeds, nuts, medicinal plants, and dried fish [and] the music of rock hitting rock and the laughter of women and children echoed across the camp."

IX. Conclusion

The gambling, camping, and winter recreation which define Tahoe Basin tourism today have all been part of the Lake Tahoe scene for some time. Gambling was not uncommon at turn of the century resorts such as Tallac, though it was technically illegal. Camping is as old as the first visitors to the lake, and recreational skiing in the Sierra Nevada began as early as the 1880s. The highways leading



Stateline casinos and hotels, ca. 1970.

Special Collections, University of Nevada - Reno Library

to the Tahoe Basin from both California and Nevada have been kept open year round since the 1950s, giving special impetus to winter sports, and the 1960 Winter Olympics in Squaw Valley brought Sierra Nevada skiing to the attention of the world. The last two decades of the twentieth century saw construction of the big hotels and casinos which now mark the Stateline and South Lake Tahoe skylines. Today, a family can drive across the Golden Gate Bridge on a spring morning, with the windows down, and a few hours later be skiing through knee-deep powder on the slopes overlooking Lake Tahoe. The Tahoe Basin can be reached with a quick, comfortable drive over the same route which was once an all day adventure in a Model-T, a twenty-four hour stagecoach trip, or several days' walk among the lingering snowbanks of spring.

We've sent you where you can see the history of transportation first hand, and we've told the story of how people have made their way to, and through, the Tahoe Basin. A place can be a destination, or on the way to one. Studying the interplay between the two offers us our own pathway to history. It's the difference, for example, between spending a summer at Lam Watah or at the Zephyr Cover Resort, or between hauling a load of pots and pans to Virginia City or sightseeing on the Lincoln Highway. We've told the story of travelers, just like you, who have been drawn to the Tahoe Basin for uncountable generations, and perhaps we've even gotten you to ask yourself, "Am I at my destination, or still on the way?"

Suggested Reading

Footpath to Four-Lane draws upon only a few of the many books, articles, and technical reports written about the Tahoe Basin, its people, and its history. Our even shorter list of Suggested Reading consists of works which stand out because they offer the most zealous explorer plenty of new trails to follow. They range from best-sellers by famous authors to cultural resource management reports put together by teams of specialists. They offer a wealth of details and interpretation. Almost all of them have bibliographies, and several even include Suggested Reading sections of their own.

Any bookstore in the area—large or small, new or used—will have a regional section stocked with histories, guide books, and photo essays on the Tahoe Basin. Local public libraries, like the Carson City and Washoe County libraries, also have large selections of regional interest books, many of them older publications no longer for sale. The Nevada State Library and Archives has an extensive Nevada history section, in addition to carrying Nevada State Museum publications. The University of Nevada Reno Library, and its Special Collections department, have a comprehensive collection of scholarly and general interest books, as well as specialized periodicals, journals, and other publications. You will also find historic journals, diaries, newspapers, and photographs at the Nevada Historical Society in Reno. These libraries are, without exception, staffed with courteous and knowledgeable librarians who take pride in assisting historically-minded members of the general public.

Libraries and government agencies are also using the World Wide Web to increase access to their archives and collections. The Nevada Department of Cultural Affairs website (<http://nevadaculture.org>) includes articles on Nevada history (Go to “Special Features” and “This Was Nevada.”), such as Gene Hattori’s “Toll Roads in Territorial Nevada” (<http://dmla.clan.lib.nv.us/docs/dca/thiswas/thiswas46.htm>). The University of Nevada Library Special Collections department has posted their collection of historic Lake Tahoe photographs on line (<http://www.library.unr.edu/specoll/photoweb/tahoe>). The United State Geological Survey has also posted Lake Tahoe data on its website (<http://tahoe.usgs.gov>).

Books of General Interest

The Lake of the Sky: Lake Tahoe in the High Sierras of California and Nevada, by George Wharton James. This description and history of Lake Tahoe, written in 1914, includes many period photographs. The author’s portrayal of Washoe life and culture, including a chapter on Washoe legends, exemplifies the prejudicial attitude of Euramericans toward the Washoe at the turn of the century.

Roughing It, by Mark Twain. This book is Twain’s account of life on the Comstock, and includes his impression of Lake Tahoe’s beauty, and an amusing account of his ill-fated, lakeshore timber ranch (Chapter XXII). There is



also a satirical look at the machinations behind the awarding of toll road franchises in Nevada Territory (Chapter XXV).

Geologic and Natural History Tours in the Reno Area, by Becky Purkey and Larry Garside. This field guide is organized around a number of automobile tours in the Truckee Meadows, Virginia Range, and Tahoe Basin, including Highway 50 from Carson Valley to Stateline, and Kingsbury Grade. Geology and natural history are its main focus, however it also presents historical sites along the way.

Stopping Time: A Rephotographic Survey of Lake Tahoe, by Peter Goin, Elizabeth Raymond, and Robert Blesse. This intriguing book demonstrates the changes which have taken place in the Tahoe Basin landscape over the past century or more by comparing historic photographs with modern photographs taken from the same vantage points. *Foot Path to Four-Lane's* cover illustration and our photograph of the Lake Tahoe Wagon Road / Lincoln Highway, taken near Logan Shoals, duplicate one such combination. *Fire in Sierra Nevada Forests*, by George Gruell, similarly uses historic and modern photographs to document ecological change in the Sierra Nevada. The book includes several 1920s era scenes of old-growth Sierra forests, which are very similar to the original, park-like Tahoe Basin forests.

General Histories

History of Nevada, by Hubert Howe Bancroft and Francis Victor (1888), and *History of Nevada*, Published by Thompson and West (1881). These histories cover early day Nevada, emphasizing the Comstock and related areas like Carson Valley and Lake Tahoe. They include descriptions of the Tahoe Basin lumber industry of the 1860s and 70s, and the transportation network linking the Comstock with the rest of the country. *Nevada: A History of the State from the Earliest Times Through the Civil War*, by Effie Mona Mack, copyright 1936, also focuses on Nevada's early years. The "From Pack Animal to Railroad" chapter follows the 1860s development of Comstock and Sierra Nevada transportation and communication. Russell Elliot's *History of Nevada* is a more recent (1987) standard history of the state and provides an excellent overall context for Tahoe Basin events, as does *The Silver State: Nevada's Heritage Reinterpreted*, by James W. Hulse.

The Saga of Lake Tahoe, Volumes I and II, by E. B. Scott. This detailed and profusely illustrated story of the Tahoe Basin presents its history organized around individual locations, individuals, and themes. All the important events and places between Spooner Summit and Stateline are thoroughly covered.

Washoe History and Ethnography

Wa She Shu: A Washo Tribal History, by Jo Ann Nevers. This book is about the Washoe way of life "before the white man came." It carries Washoe history through the nineteenth and twentieth centuries, as well as

explaining the role and importance of Lake Tahoe in Washoe culture. The book is written from the Native American point of view, and is an excellent introduction to further study of the Washoe.

Handbook of North American Indians, Vol. 11, Great Basin, edited by Warren d'Azevedo. Two chapters of this comprehensive, scholarly work are especially relevant to the Washoe and the Tahoe Basin. "Prehistory of the Western Area," by Robert G. Elston, summarizes archaeological study in the western Great Basin, as of its writing in 1986. The ethnology section includes a chapter on the Washoe, by Warren d'Azevedo, which details Washoe life, culture, and history, and other portions address Washoe subsistence and language.

Monographs about the Washoe include "Ethnographic Notes on the Washoe," by Robert H. Lowie, and "The Washo Indians: History, Life Cycle, Religion, Technology, Economy and Modern Life," by John A. Price. *Washo Tales*, by Grace Dangberg, is a collection of Washoe stories recorded by the author in the 1920s. *Three Views of Lam Watah: Cross-Cultural Interpretation at a Washoe Cultural Site* is a masters thesis by Laurie Walsh addressing the function and importance of Lam Watah for the modern Washoe, and archaeological evidence for the site's long term use. It is available at the University of Nevada Reno Library.

Emigrants, Roads, and Highways

The California Trail, by George R. Stewart. This book on the California Trail is a blend of history and personal stories of individual travelers. "How They Traveled" is an interesting chapter describing wagons and equipment, and laying out the necessary technical requirements of a good wagon road. One illustration shows "How to Cross a Narrow Channel Too Deep for Oxen."

Overland to California is a reprint of the diary of William G. Johnston, who was "a member of the wagon train first to enter California . . . in the memorable year of 1849." It is one of many such emigrant diaries which have been published, and its personal observations are rich in detail. One section is devoted to describing the rigors of wagon travel through the Carson River canyon and over the crest of the Sierra Nevada.

There are several books which combine historic information and maps of the California Trail to create field guides which a modern traveler can use to rediscover the old routes. *The California Trail, Yesterday and Today*, by William E. Hill, is composed of historic maps, nineteenth century guidebooks and journals, and comparative modern and historic photographs of landmarks along the trail. *Maps of the California Trail*, by Gregory M. Franzwa, is a compilation of modern USGS topographic maps onto which the California Trail has been transposed. *Emigrant Shadows*, by Marshall Fey, R. Joe King, and Jack Lepisto, uses contemporary and modern maps, pioneer diary excerpts, nineteenth century trail guides, and numerous illustrations in presenting a guidebook for exploring the routes of the California Trail. It follows the work of the Nevada Emigrant Trail

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Marking Committee (NETMC), and expands upon the guides published by this group.

Our New West by Samuel Bowles, written in 1869, and *A Peep at Washoe* (1860-61) and *Washoe Revisted* (1863), by J. Ross Browne. These are both first person accounts of life and travel in the Comstock era. Bowles' chapter "Over the Mountains and to the Ocean" recounts a stagecoach trip from Virginia City to Placerville. Browne's colorful prose, accompanied by his own illustrations, describes his west-to-east trip across the Sierra during the initial rush to Washoe in 1859.

Thomas Howard's *Sierra Crossing: First Roads to California* is an outstanding recent history documenting the evolution of wagon road transportation across the Sierra Nevada. It explores the complicated interplay of political and economic factors which, just as much as geography, influenced the routes, construction, and use of emigrant trails and commercial wagon roads. The author also uses comparative modern photographs and historic illustrations to identify present-day remnants of nineteenth century roads.

The Lincoln Highway has been written about extensively since its inception, beginning with the first travel guidebooks. The 1916 edition of *A Complete Official Road Guide of the Lincoln Highway* has been reprinted by Pleides Press (1984), and the 1924 edition was republished by Patrice Press in 1993. They include detailed route descriptions, plus period hotel and service station advertisements. In 1935, the Lincoln Highway Association produced an official history entitled *The Lincoln Highway, The Story of a Crusade that Made Transportation History*. A more recent overview of the highway, *The Lincoln Highway, Main Street Across America*, by Drake Hokanson, was published in 1988.

Two additional publications, *The Lake Tahoe Watershed Assessment, Vol. I*, and *The Cave Rock (De'ek Wadapush) Heritage Resources Protection Management Plan*, are, respectively, summaries of Tahoe Basin history and the importance of Cave Rock and Lake Tahoe to Washoe culture. The *Watershed Assessment* was produced by the U.S. Forest Service, in conjunction with the Tahoe Regional Planning Agency and several other research organizations. It is part of a comprehensive study of Lake Tahoe's loss of clarity. The deterioration of the lake's water quality is tied to the overall development of the Tahoe Basin, and Volume I, in laying the groundwork for the rest of the report, includes a detailed summary of human occupation of the basin, from prehistoric to modern times. The Cave Rock management plan was prepared in 1998 for the Tahoe Regional Planning Agency by LSA Associates, Inc. It is a comprehensive ethnographic summary which, combined with interviews with modern tribal members, establishes the cultural significance of Cave Rock to the Washoe people. It also presents Cave Rock's place in the Euroamerican history of the Tahoe Basin. The report is part of a long-term management process which weighs the cultural importance of Cave Rock against potential recreational use, and the spiritual and physical disruptions and damage it invariably produces.

Bibliography

Angel, M. (editor)

- 1881 *History of Nevada with Illustrations and Biographical Sketches of its Prominent Men and Pioneers.*
Thompson and West. Oakland, California.

Bancroft, Hubert Howe and Francis Fuller Victor

- 2004 *History of Nevada 1540-1888.* Reprinted 1981, Vintage Nevada Series, University of Nevada Press.
Reno, Nevada.

Brewer, William

- 1974 *Up and Down California in 1864: The Journal of William H. Brewer.* Edited by Francis P. Farquar.
University of California Press. Berkeley, California.

Brice, J.

- 1960 *Historical Geology.* Wm. C. Brown Co. Dubuque, Iowa.

Bowles, Samuel

- 1973 *Our New West. Records of Travel between the Mississippi River and the Pacific Ocean.* Reprinted
by Arno Press. New York.

Browne, J. Ross

- 1959 *A Peep at Washoe and Washoe Revisited.* Reprinted by Paisano Press. Balboa Island, California.

d'Azevedo, W.

- 1986 *Washoe.* In *Great Basin*, edited by W. d'Azevedo, pp. 466-498. Handbook of North American
Indians, Vol. 11, W.C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Dangberg, Grace.

- 1968 *Washo Tales.* Occasional Paper No. 1 Nevada State Museum, Carson City, Nevada.

Elliot, Russell

- 1973 *History of Nevada.* University of Nebraska Press. Lincoln.

Elston, Robert

- 1986 *Prehistory of the Western Area.* In *Great Basin*, edited by W. d'Azevedo, pp. 135-148. Handbook
of North American Indians, Vol. 11, W.C. Sturtevant, general editor. Smithsonian Institution, Washington,
D.C.

Fey, Christine A.

1991 *A Preservation Plan for the Lincoln Highway in Nevada.* Masters Thesis, University of Nevada, Reno.

Fey, Marshall, R. Joe King, and Jack Lepisto

2002 *Emigrant Shadows. A History and Guide to the California Trail.* Edited by Stanley W. Paher. Western Trails Research Association. Virginia City, Nevada.

Franzwa, Gregory M. and Jesse G. Petersen

2004 *The Lincoln Highway. Nevada.* Volume 5. The Patrice Press. Tucson, Arizona.

Franzwa, Gregory M.

1999 *Maps of the California Trail.* The Patrice Press. Tucson, Arizona.

Gladding, Effie Price

1915 *Across the Country by the Lincoln Highway.* Bretanos, New York.

Goin, Peter.

1992 *Stopping Time. A Rephotographic Survey of Lake Tahoe.* University of New Mexico Press. Albuquerque.

Goodwin, Victor

1971 *Historic Land and Resource-Use Patterns in the Lake Tahoe Basin and their Effect upon it Present Milieu.* Manuscript on file U.S. Forest Service, South Lake Tahoe.

Greuner, Lorene

1971 *Lake Valley's Past. A Guide to Twenty Historical Sites at Tahoe's South Shore.* Lake Tahoe Historical Society.

Gruel, George E.

2001 *Fire in Sierra Nevada Forests. A Photographic Interpretation of Ecological Change Since 1849.* Mountain Press Publishing Company. Missoula, Montana.

Hill, William E.

1986 *The California Trail Yesterday and Today. A Pictorial Journey Along the California Trail.* Pruett Publishing Company. Boulder, Colorado.

Hokanson, Drake

1988 *The Lincoln Highway. Main Street Across America.* University of Iowa Press. Iowa City.



Footpath to Four-Lane

Howard, Thomas Fredrick

1998 *Sierra Crossing. First Roads to California.* University of California Press. Berkeley, Los Angeles, London.

Hulse, James W.

1973 *The Silver State: Nevada's Heritage Reinterpreted.* University of Nevada Press. Reno, Nevada.

James, George Wharton

1956 *The Lake of the Sky. Lake Tahoe in the High Sierras of California and Nevada.* The Charles T. Pownier Co. Chicago.

Johnston, William G.

1948 *Overland to California.* Biobooks. Oakland, California.

Lincoln Highway Association

1916 *The Complete Official Guide of the Lincoln Highway.* Reprinted 1984 by Pleides Press. Sacramento, California.

Lincoln Highway Association

1924 *The Complete Official Guide of the Lincoln Highway.* Reprinted 1993 by the Patrice Press. Tucson, Arizona.

Lincoln Highway Association

1935 *The Lincoln Highway. The Story of a Crusade that Made Transportation History.* Dodd, Mead & Company. New York.

Lindstrom, S., and J. Hall

1994 *Cultural Resources Inventory and Evaluation Report for the Proposed Spooner Summit and East Shore Project (Big Gulp) Timber Sales.* Prepared by Biosystems Analysis, Santa Cruz, California. Forest Service report (TY-93-775, and 05-19-321). Carson Ranger District, Carson City Nevada.

Lowie, Robert H.

1939 *Ethnographic Notes on the Washoe.* University of California Publications in American Archaeology and Ethnology 36(5):301-352, Berkeley, California.

LSA Associates, Inc.

1998 *Cave Rock (De'ek wadapush) Heritage Resource Protection Management Plan.* Copy on file USDA Forest Service Lake Tahoe Basin Management Unit, South Lake Tahoe, California.

Mack, Effie Mona

1936 *Nevada. A History of the State from the Earliest Times through the Civil War.* The Arthur H. Clark Company. Glendale, California.

Nevers, J.

1976 *Wa She Shu: A Washo Tribal History.* Inter-Tribal Council of Nevada, Reno.

Olmstead, R.R.

1962 *Scenes of Wonder & Curiosity.* Originally published in *Hutchings California Magazine 1856-61*. Reprinted by Howell-North, Berkeley.

Price, John A.

1980 *The Washoe Indians: History, Life Cycle, Religion, technology, Ecology, and Modern Life.* Nevada State Museum Occasional Paper 4, Carson City.

Purkey, Becky Weimer and Larry J. Garside.

1995 *Geologic and Natural History Tours in the Reno Area.* Nevada Bureau of Mines and Geology Special Publication 19.

Reno, Ron L. and Charles Zeier

2004 *Cultural Resources Inventory Report Lower US 50 Erosion Control-Storm Water Management Master Plan Douglas County, Nevada.* Mactec Engineering and Consulting, Carson City, Nevada. Report on file Nevada Department of Transportation, Carson City, Nevada.

Scott, E.B.

1957 *The Saga of Lake Tahoe.* Volume I. Reprinted 2000 by Sierra-Tahoe Publishing Company, Antiock, California.

Scott, E.B.

1957 *The Saga of Lake Tahoe.* Volume II. Reprinted 2000 by Sierra-Tahoe Publishing Company, Antiock, California.

State of Nevada, Department of Transportation

1917+ *Nevada Department of Transportation Biennial Reports.* Nevada Department of Transportation, Carson City.

Stewart, George R.

1962 *The California Trail. An Epic with Many Heroes.* McGraw-Hill Book Company, Inc. New York, Toronto, London.

Footpath to Four-Lane

Twain, Mark

1871 *Roughing It.* Harper Brothers Publishers. New York and London.

U.S. Department of Agriculture Forest Service

1985 Evaluation of Significance. Zephyr Cove Resort. Lake Tahoe Basin Management Unit. Manuscript on file, U.S. Forest Service Lake Tahoe Basin Management Unit, South Lake Tahoe, California.

U.S. Department of Agriculture Forest Service

1999 Draft Contextual History, Evaluation Methodology, and Management Plan for Prehistoric and Historic Roads and Trails within the Lake Tahoe Basin Management Unit. Manuscript on file, U.S. Forest Service Lake Tahoe Basin Management Unit, South Lake Tahoe, California.

U.S. Department of Agriculture Forest Service

2000 Lake Tahoe Watershed Assessment, Vol. I. Edited by Dennis D. Murphy and Christopher M. Knopp. USDA-Pacific Southwest Region and Research Station, the Tahoe Regional Planning Agency, the University of California at Davis, the University of Nevada at Reno, and the Desert Research Institute, Reno, Nevada.

U.S. Government General Land Office

1861 General Land Office Survey Plats. T.13N, R.18E and T.14N, R. 18E, Mt Diablo Meridian. Maps on file State of Nevada Department of Conservation and Natural Resources, Division of State Lands. Carson City.

Walsh, Laurie A.

1995 *Three Views of Lam Watah: Cross-Cultural Interpretation at a Washoe Cultural Site.* Masters Thesis, University of Nevada, Reno.

Snyder, John

2001 Historical Architectural Survey Report, SR 28 and US 50 Erosion Control Project. Prepared for the Nevada Department of Transportation, Carson City, Nevada, by P.S. Preservation Services, Sacramento, California. Manuscript on file at the Nevada Department of Transportation, Carson City, Nevada.

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