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Forest Service Pacific Southwest Region March 2012



VOLCANIC LEGACY SCENIC BYWAY ALL AMERICAN ROAD

Interpretive Plan

For portions through Lassen National Forest, Lassen Volcanic National Park, Klamath Basin National Wildlife Refuge Complex, Tule Lake, Lava Beds National Monument and World War II Valor in the Pacific National Monument







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INTRODUCTION

Background Information

The 500 mile "Volcanic Legacy Scenic Byway All-American Road" (called the Byway) celebrates the spectacular scenery of this vast volcanic landscape and the recreation opportunities it offers. This Byway designation grew out of an effort of dedicated citizens who worked to bring national recognition to the rich heritage, geology, and scenic qualities of the region. The Byway enjoys significant support from numerous agencies throughout northern California and southern Oregon. It is one of 31 All-American Roads in the United States with only two in California (Route 1 Big Sur Coast and the Volcanic Legacy). The All-American Road designation affords this Byway the distinction that it so richly deserves as a unique travel experience.

The Volcanic Legacy Experience – A Pathway through America's Pacific West

The entire Volcanic Legacy Scenic Byway is a continuous "volcano to volcano" drive extending from Crater Lake National Park in Oregon to Lassen Volcanic National Park in California. The Byway showcases the area's unique volcanic features and beautiful scenery. It provides a diversity of opportunities to interpret the natural landscape, as well as describe how the land was altered by timber harvesting, mining, hydroelectric power generation, and agricultural use. This connected network of existing highway routes provides access to several national parks and monuments, national forests, national wildlife refuges, State parks, and a host of other interesting destinations. Byway visitors also can learn about Native American tribal history, life on the Emigrant Trails, and places of conflict and war. The uniqueness of the volcanic setting, and the wide variety and frequency of points of interest along the Byway (many of them national destinations) reinforce the Byway as a destination unto itself. It offers a wonderful driving experience with a distinctive setting that represents the best in the nation.

Why an Interpretive Plan?

Interpretive plans are done for people to frame the human experience, not for resource or landscape management, although management objectives should be incorporated as part of the planning effort. An interpretive plan provides a framework for implementing a coordinated, unified interpretive approach. This framework sets the direction for high quality visitor experiences and community involvement.

The influence of interpretive programs on area residents is equally important. Because of the educational nature of interpretive facilities and publications, school groups and other nonprofit organizations often use them. Providing knowledge to residents about Byway resources can serve to boost community pride and enhance resource appreciation.

Interpretive themes are developed from the interpretive goals and objectives for the significant resources of the Byway. A central theme helps tie together the information and ideas that are presented to visitors. Themes are the plot to the movie, the moral of the story. They answer the question, "So what?" or "What's the big deal?"

The theme provides the foundation for all presentations, no matter what media is used. Interpretive messages may be accomplished through signs, exhibits, visitor centers, audio/visual productions, publications, internet, and personal services, such as guided interpretive hikes and campfire programs.

Overarching themes and main themes developed by previous Byway plans are all very similar – with consistent objectives for educating visitors about the resources and history of the Byway. These previously developed themes can be referenced in Appendix A.



Previous Planning Efforts

Interpretive plans for most of the Byway were completed between 1990 and 2007, including plans for the Shasta Volcanic Scenic Byway, Lassen Scenic Byway, Lava Beds National Monument, Lassen Volcanic National Park, and the Oregon portion of the Volcanic Legacy. This document completes planning for remaining portions of the Byway from Susanville to Burney, California as well as the Highway 161 section from Dorris to the Tule Lake area. The plan identifies sites, guidelines and media recommendations for guiding visitor experiences for portions of the Byway traversing through Lassen National Forest, Lassen Volcanic National Park, Klamath Basin National Wildlife Refuge, Tule Lake, Lava Beds National Monument and World War II Valor in the Pacific National Monument for the next ten to fifteen years. Sites within the National Park Service (NPS) system are not addressed in detail in this plan. Each NPS unit requires an in-depth planning process and adherence to design guidelines that are separate from those identified in this plan. Upon completion of the majority of the recommendations of this plan, evaluation of efforts and a new plan will be required.

The coordinated development of all these interpretive plans provides consistency between the themes and envisioned visitor experience for the entire Byway. For more information regarding the other interpretive plans, refer to the Corridor Management Plan, Section 4, Preserving and Enhancing the Visitor's Experience. For copies of these various plans, please contact:

Volcanic Legacy Community Partnership 101 E. Alma St. Suite 100-I P.O. Box 832 Mount Shasta, CA 96067 530-926-5439 or 866-722-9929 info@volcaniclegacybyway.org

Management Opportunities

Communities along the Byway have specific interests and goals that may be unique to their area, or similar to other Byway communities. Based on public meetings held in October 2007, public land managers and community leaders will want to consider these Byway opportunities:

- Promote the development of events and activities during the shoulder seasons to add eight more weeks onto summer.
- Coordinate with Caltrans regarding visitor/ interpretive sign needs and highway improvements.
- Increase road safety.
- Avoid conflicts between user groups and interests (e.g. motorcycle tours, bicycle tours, antique car tours)
- Establish more hiking and bicycle trails along the Byway to reduce the dependency on motor vehicle travel and to encourage visitors to explore on foot or by bike.
- Preserve sites and natural features to maintain scenic values, open space, and access to wildlife viewing. Protect scenic landscapes and visitor experiences that are here now so others can enjoy those 25 years from now.
- Make appropriate use of the national scenic byway logo.
- Improve public recreation facilities and sites along the Byway.
- Provide quality customer services, lodging, food and gas facilities.
- Meet the needs and expectations of international travelers
- Collaborate with Byway communities to network and share resources.

Planning Assumptions

This plan is based on the following assumptions. Significant changes in visitor use, partners, or agency policies may require modifications to this plan.

- The implementation of this interpretive plan is consistent with both the California and Oregon Corridor Management Plans for the Volcanic Legacy Scenic Byway All-American Road.
- The Byway Partnership Coalition will continue to meet, collaboratively plan and implement Byway projects. This Coalition includes agency representatives from the Lassen National Forest, Lassen Volcanic National Park, Lava Beds National Monument, Klamath National Wildlife Refuges, California Department of Transportation, California Department of Fish and Game, McArthur-Burney Falls Memorial State Park, Natural Resources Conservation Service, Volcanic Legacy Community Partnership, Ore-Cal Resource Conservation and Development, Oregon Department of Transportation, Discover Klamath, Klamath/Lake/Modoc/Siskiyou Outdoor Recreation Working Group, and Crater Lake National Park. Other Byway partners include the Chambers of Commerce from Burney, Susanville, Chester, Westwood, Tule Lake, and McCloud. Tribal representatives (from 26 tribes) and members from community businesses are also partners.
- The Volcanic Legacy Community Partnership (VLCP) will continue to work cooperatively with other federal and State land management agencies, State Departments of Transportation, Federal Highways Administration, State Historic Preservation offices, Native American tribes, Chambers of Commerce, business organizations, and other partners.
- Interpretive services will provide quality interpretive opportunities, meet identified community and visitor needs, resolve conflicts and impacts to cultural, historical and natural resources, and contribute to local economic diversification through tourism.

- The VLCP and partners will work cooperatively to find consistent and reliable funding sources to insure Byway interpretive facilities and services are quality products, well maintained, and updated for the traveling public.
- Specific site plans may be needed for some portals and proposed waysides with consideration given to accessibility, winter access, fencing needs, and highway site ingress/egress.
- The established portals will provide visitor information and orientation to the Byway.
 Interpretation recommendations will be specific to each portal location.
- There is a strong desire to have design consistency for Byway signs and facilities while recognizing that various federal and state agencies have internal design standards. Recommendations for a Byway "look" or "brand" should have some generalized design concepts, which may be superseded by agency requirements such as within the boundaries of national parks and monuments.
- All new site and exhibit planning will attempt to incorporate sustainable design principles and apply best practices for the use of sustainable materials, recyclables and longevity.
- Planning and design should be complementary to previous efforts.



BYWAY GOALS AND OBJECTIVES

The overall goal of this interpretive plan is to communicate those values that engender appreciation and understanding, and instill stewardship for the unique resources and history of the Volcanic Legacy Scenic Byway All-American Road. Both management and visitor experience goals are stated below.

Management Goals

Based upon prior goals established in the 2001 Corridor Management Plan, the following management goals specific to interpretation have been identified:

- To minimize impacts to the intrinsic qualities of the Byway and rural lifestyles, while also enhancing visitor experiences.
- To provide a high-quality visitor experiences, using interpretive displays that highlight scenic, natural, historical, cultural and recreational features and which complement the natural beauty of the corridor.
- To provide interpretive opportunities that promote awareness of the relationship between natural resources and humans and the corridor's rich history and cultural traditions.
- To provide opportunities for on-site interpretation of natural, cultural and heritage resources in a manner that helps to protect those values.
- To foster respect for natural, cultural, and heritage resources and the lifestyles of corridor residents.
- To integrate the efforts of local communities and public land management agencies in marketing and tourism.
- To encourage the development of collaborative strategies among Byway communities that best support their economic and tourism goals.
- To provide interpretive facilities that meet universal accessibility standards.
- To maintain an integrated highway signage program that is consistent with the signing policies of the appropriate Byway agencies and incorporates the All-American Road logo.

Management Objectives

By using this plan, managers will be able to:

- Identify and prioritize interpretive needs, products and services that connect people to the landscape.
- Define and promote opportunities for cooperation between the various groups (agencies, communities, and organizations) involved with the Byway.
- Reduce resource damage and overuse of certain areas by encouraging people to visit underused sites.
- Identify funding opportunities and other appropriate partnerships for the Byway.
- Establish design guidelines for sign consistency and architectural themes for both the Oregon and California segments of the Byway.
- Establish critical Byway 'hub centers or portals' at significant or high traffic sites such as highway rest areas.
- Identify the role of public land management agencies for providing expertise, in-kind services, and coordination.
- Acknowledge partnerships at participating sites and facilities.





Visitor Experience Goals

The following interpretive goals and objectives identify desired visitor experiences and outcomes. They differ from management goals by focusing more on the Byway visitor versus management desires and needs. These goals include the following:

- To provide orientation and information allowing visitors to explore the scenic landscapes and recreational opportunities along the corridor.
- Provide a broad range of high quality facilities (restrooms, picnic areas, pull-offs, water) to meet visitor needs and expectations.
- To coordinate various interpretive media formats to present consistent and complete interpretive stories of the Byway region.
- To increase awareness of the effect of people upon cultural, historical and natural resources and to increase visitors' understanding of the agencies' role in managing public lands.
- **Visitor Experience Objectives:**

(these should tie directly to various sites and the messages at each site)

- Visitors will recognize the significant relationship that exists between people and the land through an emotional, social, or intellectual experience.
- Visitors will understand the role of public land management agencies in caring for the land and serving people.
- Visitors will demonstrate increased awareness of the effects humans have upon cultural, historical, and natural resources by following posted regulations.
- Visitors will develop a stewardship ethic for natural and cultural resources by participating in natural resource management discussions, group/ town meetings, respecting forest/park regulations, not littering, and contributing to the local economic base.
- Visitors will gain information allowing them to participate in cultural and heritage tourism, including opportunities on and near the Byway corridors.

- Visitors will become motivated to seek out natural, cultural and heritage experiences, opportunities, and events in the local communities as a result of their experiences on the Byway.
- Visitors will experience a seamless transition in interpretive stories and facilities as they travel the Volcanic Legacy Scenic Byway-All-American Road
- Visitors will linger in Byway communities, participate in local events, and add to the economic wellbeing of the community.
- Local communities will develop a sense of their identity and niche for Byway travelers and determine appropriate development and design guidelines.



BYWAY THEMES, SUBTHEMES, AND STORYLINES

The main theme statement below is intended to showcase the Byway's significant resources and its contribution to human history and development of the region. The main statement for this section of the Byway is:

Discover this country where stories of human resilience and tenacity interweave with diverse scenic landscapes.

Statements of Significance for the Byway

Statements of significance highlight what is special about this Byway. What makes it unique compared to other scenic byway experiences? These statements serve as the guiding purposes under which all interpretive efforts are implemented. They are the principle messages we want to share with our audiences. Storylines are the main topics that will be presented at interpretive sites or in other media formats. The storylines below will be more site specific as media recommendations are developed.

Theme: Logging History

The Byway travels through the forests of northern California's Sierra Nevada Mountains and the Cascades. These forests contributed significantly to the nation's production of timber and to the economic well-being of many local communities in the Lassen region into the 1990s.

Subthemes:

- Company towns once served the logging and railroad industries at the beginning of the 20th century.
- Timber yield declined significantly in the 1990s due to public concern over ecosystem health and the resource impacts from harvest practices.
- As timber needs shifted across the country, local communities have worked to diversify their economies
- Balancing ecosystem health issues with the public's need for wood and water is an on-going challenge to forest managers.

THEME: Resource Use and Management

With growing public demand for natural resources, ensured sustainability of these forestlands, watersheds, wildlife, fisheries, and native plants is a critical management issue.

Subthemes:

- Human influence and timber extraction have contributed to the landscapes we know today.
- The use of timber played a vital role in the industrial era of California development.
- Mining, timber and railroad history are linked together as each one relied upon the other for resource delivery and service.
- Today's timber harvesting methods have changed with modern technologies and new forest science.
- Alternative energy sources such as wind power, solar power, and hydroelectric power add to the equation of balancing land management, wildlife, and human needs.
- Hydroelectric generation and water for agricultural purposes have had a profound effect on some watersheds and native aquatic species.
- Recreational fish planting has changed the aquatic ecosystems of many lakes and streams at a cost to native species while benefiting anglers.
- Wetlands provide critical habitat for migrating waterfowl that travel the Pacific flyway.
- Striking a balance between human uses and maintaining natural ecosystems is a difficult challenge.
- During the 2001 summer drought, a simmering conflict between agricultural and environmental interests in southern Oregon's Upper Klamath Basin turned into a war of protests when the federal Bureau of Reclamation shut down the headgates of the Klamath Project to conserve water needed by endangered species.



THEME: Watersheds and Water-based Recreation

The watersheds originating from the Sierra Nevada and the Cascade ranges sustain vast mountain forests, wildlife populations, wetlands, agriculture, drinking water and recreation for northern California residents making this region a scenic and a high quality place to live.

Subthemes:

- Lake Almanor is one of the largest manmade lakes in California. It was created in 1914 by a dam in the Feather River to provide hydroelectricity. The dam was raised, again, in 1927. The lake that was created is named for the three daughters (Alice, Martha and Elinore) of the president of Great Western Power Company, Guy Earl.
- Lake Almanor has a diverse population of wildlife including a variety of migratory birds that depend on the area for survival during their spring and fall migration.
- Eagle Lake is home to white pelicans, osprey and bald eagles, from which it gets its name. It is home to the Eagle Lake trout, known for their large size and unique ability to survive in these highly alkaline waters.
- Eagle Lake and Lake Almanor are popular recreation sites for water sports, especially boating and fishing.

 The Lower Klamath/Tule Lake National Wildlife Refuges along the Pacific flyway provide recreation opportunities for bird watching, hunting, and outdoor exploration as many bird and waterfowl species stopover for food rest and shelter during their annual migrations.

THEME: Recreation

Recreation opportunities are countless along the Byway. The region is known for summer and winter recreation including snowmobiling, skiing, scenic driving, camping, boating, bird watching, and hiking.

Subthemes:

- There are numerous recreation opportunities along the Volcanic Legacy Scenic Byway. Visitors can hike or bike along the Lake Almanor or Eagle Lake Trails, enjoy bird watching at the Lower Klamath and Tule Lake Refuges, ride on the extensive snowmobile trail system on the Lassen National Forest, cross-country ski, fish, hunt, camp, swim or escape to the backcountry in Lassen Volcanic National Park. In the evening, visitors can stroll through community art galleries and shops before sampling a variety of local cuisine and fine wines.
- The Bizz Johnson National Recreation Trail is located on the old Fernley and Lassen Branch Line of the Southern Pacific railroad, winding 25.4 miles from Susanville to Mason Station following the Susan River Canyon through upland forests of pine and fir.

- Visit the Collins Pine self-guided interpretive trail through the Collins Pine "Park 40, a 40acre parcel of land set aside to be preserved in perpetuity for educational and interpretive purposes.
- Winter recreation opportunities are abundant throughout this region of northern California. Check local maps for specific locations and information on snowmobiling and cross-country skiing. Snowshoe interpretive programs are also offered.

THEME: Geology/Volcanism

Volcanic mountains and soil create the stunning vistas along the 500 miles of the Byway and provide multiple recreation opportunities.

Subthemes:

- Hat Creek Rim was created nearly 1 million years ago, caused by active faulting that gradually dropped a block of the Earth's crust (now Hat Creek Valley) 1,000 feet below the top of the Hat Creek Rim, leaving behind this large fault scarp.
- Bowl-shaped West Prospect Peak is a shield dome volcano, and so is its nearest neighbor, Prospect Peak.
- Spatter Cones Trail is a 1.5 mile loop trail will take you to the origin of the recent Hat Creek Lava Flow, an area with many spatter cones and associated volcanic features.
- Subway Cave is an open lava tube, created by rivers of red-hot lava around 20,000 years ago. As the lava drained away, these tube-like caves remained. They are essentially rivulets that freeze on the outside. The rock on the outside freezes and forms a very good insulator that then allows the interior to remain molten and to continue to flow through.
- Lava tube environments are believed to be similar to environments elsewhere in the solar system and occur as natural outgrowths of flood-basalt type, quiet, flowing lava eruptions. Temperate and moist year round, caves are often very different from the outside world, forming "micro-climates" full of

- fascinating life such as bats, ferns, and sparkling bacteria. Lava Beds National Monument has the most lava tubes and cave environments in the United States.
- Lassen Volcanic National Park, Lava Beds National Monument, and Crater Lake are all volcanic centers with ongoing volcanic activity. In May 1915, Lassen Peak, the southernmost active volcano in the Cascade Range, erupted explosively. Avalanches, mudflows, and flows of hot ash and gas devastated nearby areas. Volcanic ash fell as far away as 200 miles to the east. The Lassen area remains volcanically active today. The volcano hazards demonstrated in 1915 can still threaten not only nearby areas, but also more distant communities. Recent work by scientists with the U.S. Geological Survey (USGS) in cooperation with the National Park Service is shedding new light on these hazards.
- Lassen Peak was not part of this landscape 400,000 - 600,000 years ago when a larger volcano known as Mt. Tehama (Brokeoff Volcano) dominated the area at 11,500 feet high.
- A wide diversity of volcanic rock types can be found throughout the region.
- Large flat valleys amidst volcanic summits allowed for early settlement and development of rich agricultural fields still relied on today for hay, fruit and vegetable crops.
- Tule Lake Refuge wetlands are part of the larger geological system of Medicine Lake and Great Shield Volcano.

THEME: Scenic Vistas

Few places in America can compete with the sheer number of scenic vistas along the Volcanic Legacy Scenic Byway from the captivating Lassen Peak, Mount Shasta, the Lower Klamath and the Tule Lake National Wildlife Refuges, and onto Crater Lake. The views leave travelers awestruck.

Scenery is a widely-enjoyed value which expresses the natural and human interactions of this volcanic region. Residents, agencies and forest vegetation managers along the Byway have made considerable efforts to sustain attractive, largely natural-appearing scenery for

today and tomorrow. High quality scenery is a primary recreational value everywhere, as well as a desired attribute of every community. It takes careful attention and effort to maintain high quality scenery through time, and the Byway should be both proud and vigilant about this value which can also be damaged through carelessness. The Forest Service National Visitor Use Monitoring (from 2003 to 2008) identifies "viewing natural features" as a primary recreation activity within all National Forests. As a primary activity, it has more visitor participation than the activities of camping, picnicking, fishing, bicycling and hunting combined.

Subthemes:

- The Old Station crossing point along the Pacific Crest National Scenic Trail marks the spot where hikers are halfway from Mexico to Canada, on their 2,650 mile journey.
- The Hat Creek Rim Overlook sits on top of an excellent example of a fault, where the earth's crust has been shifted. To the south, you can see Lassen Peak; to the north, Mount Shasta.
- Mount Shasta has attracted the attention of poets, authors, and presidents.
- The Lake Almanor Overlook is a rest area with stunning views of the surrounding mountains.
- The 18,756-acre Butte Valley National Grasslands offers sweeping views of the <u>Cascade Range</u> and <u>Mount Shasta</u> along with opportunities for bird watching.
- The Lower Klamath and Tule Lake National Wildlife Refuges provide vistas of distant mountains and views of Mount Shasta over the shallow marshes in the White Lake Unit of the Lower Klamath National Refuge.
- Lassen Volcanic National Park and Lava Beds National Monument provide many opportunities to enjoy scenic vistas, and view volcanic activity and diverse landscapes.

THEME: Stories of Western Americana

Sites, places, and communities along this Byway document the western experience of American history with stories of Native American settlements, emigrant trails, timber and railroad towns, western expansion and conflict as people sought a better life in this rich landscape.

Subthemes:

- The native Maidu originally occupied the Big Meadows area, now under Lake Almanor, relying upon the rich resources to support their way of life for thousands of years.
- The area around Westwood and Mountain Meadows was originally occupied by the native Maidu.
- Beautiful murals tell the story of Susanville's history with each of the ten murals based on a theme related to the community's growth and heritage.
- The Lassen and Nobles Emigrant trails and the Humboldt Road reveal the history of the mid-1800s as emigrants came here for gold and discovered the bountiful riches of the forests (trees, water, and grasslands).
- The local communities of Susanville, Westwood, Chester and Burney grew due to the expansion of logging and the construction of large mills for processing the timber.
- Westwood was once a company mill town with a rich culture and history.
- Located in Westwood, the 28-foot redwood statue of Paul Bunyan and his blue ox, Babe, is reputedly the largest wood statue in the world carved in one piece from a single tree.
- The Old Station historic Post Office dates back to the early 1900s when Mel and Mary Shearin homesteaded the area. Mary built a small store, which also houses the smallest post office in the U.S. See www.HMdb.org, "Old Station Post Office" for more information.
- The Prattville Cemetery reveals the stories of local pioneers with graves dating back to 1864 and continuing to present day burials.
- The Applegate Trail, the southern route of the Oregon Trail, was blazed in 1846 as an alternate and hopefully safer route for emigrants traveling to Oregon.
- The Tule Lake-Butte Valley Fair Museum in Tule Lake showcases community life in and around Tule Lake over the last one hundred years.

- The Visitor Center at Lava Beds National Monument tells the stories of the native Modoc and Klamath Indians, the era of the Civilian Conservation Corps, geologic formation of the Lava Beds, early exploration of the lava tubes and caves, and discovery of ancient art.
- The new Kohm Yah-mah-nee Visitor Center in Lassen Volcanic National Park has been designed to tell the Park's most significant stories including Lassen's geologic, natural and human history, and resource stewardship.
- The Crossroads exhibits in Lassen Volcanic National Park provide orientation to the entire Byway region in terms of recreation activities, and what to see and do in the area. There are also interpretive exhibits on the Yani Indians and the Emigrant Trails.



Lack of understanding between cultures repeatedly led to tragic conflicts in the Tule Lake region with war, imprisonment, and discrimination against different ethnic groups....Indians, Japanese-Americans, and German and Italian prisoners of war.



Subthemes:

• The Modoc War (1872-1873) was the only major Indian War fought in California. It is considered one of the most costly wars in U.S. history with 60 Modoc fighters and 600 United States soldiers at any given time. "The generalization can be made that considering the number of Indians involved in hostilities this was the most expensive Indian war that the United States ever fought. It was also the only war in which a general of the Army was killed." (*The Modocs and Their War* by Keith A. Murray)

- The World War II Valor in the Pacific National Monument was created in December 2008 by the U.S. Congress.
 - » The segregation center at Newell became the crucible for Japanese-American resistance during World War II.
- » The Tule Lake Civilian Conservation Corps camp was used in the 1930s (Camp FW-3).
- » The Tule Lake Prisoner of War Camp was established as a branch camp
 - from the much larger main camp at Camp White, Oregon in 1944 when 5400 acres were transferred from the Department of Interior, Fish and Wildlife Service, to the War Department. The improvements at the camp included a water tower and tank, a pump house, one paint shop, a hospital, storage buildings, barracks, mess hall, garages, administration building, latrines, laundry room, blacksmith shop and septic tanks. On April, 25, 1946, the site was returned to the Department of Interior, Fish and Wildlife Service, and is now the Tule Lake National Refuge.
 - The story of the Paiute Indian massacre in Papoose Meadows at Eagle Lake aptly illustrates the bitter conflicts between whites and Indians in 1866 as misunderstanding and disputes over property and livestock mixed with lawlessness of the times.
 - During World War II, the Lassen National Forest was intensively relied on for providing turpentine spirits and timber resources for the war effort.



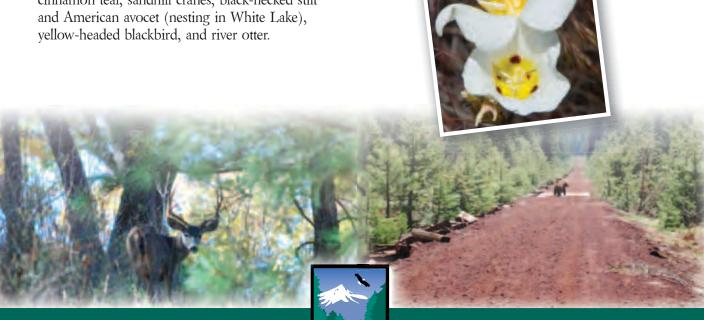
THEME: Wildlife and Plants

Because of the diverse habitats the Byway traverses, plant and animal species are abundant.

Subthemes:

- Wildlife refuges are managed to maintain ecological systems most beneficial to wildlife.
- The productivity of the marshes is important for waterfowl food and shelter, and for maintaining water quality.
- Three-quarters of the Pacific Flyway waterfowl and bird life migrate through the Lower Klamath and Tule Lake National Wildlife Refuges during the fall and spring.
- The Refuges are host to the largest wintering bald eagle population in the lower 48 states with a peak of over five hundred eagles in mid-February.
- Only two white pelican nesting colonies in California are found on the Lower Klamath and Clear Lake National Wildlife Refuges.
- With over 353 bird species documented in the Klamath Basin National Wildlife Refuges, the entire Byway route would undoubtedly exceed 400 documented bird species.
- The Refuges manage the permanent marshes for waterfowl and mammals including: osprey, western and Clark's Grebes, tundra swans, snow and Ross's geese, white-fronted geese, pintail, cinnamon teal, sandhill cranes, black-necked stilt and American avocet (nesting in White Lake), yellow-headed blackbird, and river otter.

- Excellent birding opportunities exist along the birding trail on the Lower Klamath and Tule Lake National Wildlife Refuges and at the Klamath Basin Refuges Visitor Center.
- Fourteen different species of bats inhabit Lava Beds National Monument with the majority living inside caves, although a few species dwell in trees or buildings.
- Due to the geographic location of Lassen Volcanic National Park at the crossroads of the Cascades Range to the north, the Sierra Nevada mountains to the south and the Great Basin desert to the east, there are over 700 flowering plant species documented, 250 vertebrates, and a host of invertebrates including insects.
- Sheepy Ridge's rocky topography provides habitat for Bighorn sheep and mountain lion. These species access the lower marshes for food and shelter when needed.
- Deer and black bear inhabit much of the wild country in this landscape.



VISITOR ANALYSIS

Several studies have been completed to date to determine the characteristics of the travelers and visitors who come to the region. The Shasta Volcanic Scenic Byway and Lassen Scenic Byway nomination reports (for Forest Service Scenic Byway designation) also analyzed visitor characteristics related to the region, primarily focused on northern California. Findings from these visitor analyses can be reviewed in the Corridor Management Plan. The previously developed interpretive plans also provide some visitor analysis. Given these previous analyses, the following generalizations can be made:

Eighty percent of the visitors that enter the Lassen National Forest Visitor Information Center at Old Station on Highway 89 are already recreating along the Byway.

2,340,600 people already visit the Lower Klamath and Tule Lake National Wildlife Refuges, McArthur-Burney Falls Memorial State Park, Lassen National Forest, Lassen Volcanic National Park, Mount Shasta, Shasta-Trinity National Forest, and Klamath National Forest each year.

In 2010, California's population reached 37,253,956, an increase of 3.4 million people or 10 percent since the 2000 Census. This growth and an increased interest in domestic travel and driving vacations will influence visitation to the Byway. Based on these factors as well as annual traffic counts along the Byway, a 5 percent increase in tourism and visitor-related spending is the "Most Likely Scenario" after the National Scenic Byway/All-American Road designation. A conservative estimate indicates this increase would likely occur gradually through 2015. A "Best Case Scenario" indicates visitor levels might increase as much as 10 percent within that same timeframe.

Summary of Visitor Information from Lava Beds National Monument

This survey data, collected from May – June 2007 revealed that:

- Fifty-one percent of visitor groups were in groups of two and 16% were in groups of five or more.
- Sixty-six percent of visitor groups were in family groups.
- United States visitors were from California (47%), Oregon (26%), Washington, (8%) and 18% other states. International visitors, comprising 9% of the total visitation, were from Germany (13%), United Kingdom (8%), and 11% other countries.
- Forty-eight percent of visitors were ages 41-70 years and 35% were ages 30 years or younger.
- Seventy-three percent of visitors visited the park once in their lifetime.
- Prior to this visit, visitor groups most often obtained information about Lava Beds National Monument through maps and brochures (44%), the park website (41%), and friends/relatives/word of mouth (34%).
- Nine percent of visitor groups did not obtain any information about the park prior to their visit.
- Of those visitor groups who spent less than 24 hours at the park, 33% stayed up to six hours.
- Of those that spent more than 24 hours in the park, 41% stayed for two days. The average length of stay was 14.4 hours.
- Regarding lodging that visitor groups used during their stay, 82% stayed in a campground or RV trailer park inside the park, and 71% stayed in a lodge, hotel, motel, or cabin outside the park.
- Most visitor groups (95%) were able to obtain needed support services from communities in the area (with 60 miles of the park). Over one-half (60%) obtained services in Klamath Falls.
- The average group expenditure within and outside the park (within 60 miles of the park) was \$206, with a median (50% paid more and 50% paid less) of \$113. Average total expenditure per person was \$71¹.



Based upon Forest Service National Visitor Use Monitoring for the Lassen National Forest (2010 data), day travelers are spending about \$33/day while overnight travelers average about \$231/day. An average figure of \$144 spent daily was calculated overall. Expenditures from overnight travelers benefit local economies more than day travelers. This encourages Byway communities to develop services, facilities, special events and recreation activities that attract visitors for extended stays.

Travel Spending per County from 1992 to 2009²

California is the premier travel destination in the United States, attracting approximately 204 million domestic and international visitors each year who spend \$95.1 billion, directly supporting jobs for 873,000 Californians and generating over \$6 billion in state and local tax revenues.³ Travel spending within the five counties along the California segment of the Byway reflects increasing visitor interest in exploring northeastern California. Marketing Byway attractions will further strengthen visitation in these scenic, rural areas.

County	1992	2000	2009
Lassen	37.7 million	51.10 million	55.9 million
Modoc	13.3 million	17.2 million	20.2 million
Plumas	68 million	89.10 million	99.4 million
Shasta	215.2 million	283.9 million	341.5 million
Siskiyou	95.8 million	132.10 million	161.3 million

International Visitation: In 2010, international arrivals to the United States posted an 11 percent increase

⁵Ibid

compared to 2009 2010, reflected a dramatic reversal of the visitation decline experienced in 2009 with most states and cities posting significant increases in 2010. California state visitation was up 21 percent due to a 28 percent increase from Asia (35 percent share), and a 40 percent increase from Oceania (11 percent share). Western Europe (40 percent share) registered a 14 percent increase in visits to the state. Total 2010 international visitation to California was 5.826 million.⁴

The top international markets that supply the most travelers to California are Canada, United Kingdom, and Japan. China and India are considered emerging markets with rapidly growing visitation to California. China is projected to move from #9 in total state international visitor volume to #3 by 2014.⁵

Other Travel Findings

Wildland fires and their associated smoke and haze cause visitors to be selective about where they travel. Additionally, fire scarred hillsides change the viewshed, which may have negative connotations for travelers. Interpretive messages related to wildland fire, fire ecology and global warming are recommended to educate travelers about these issues and their relationship to them.

Community amenities play an important role in promoting tourism along the Byway. Inviting exteriors on restaurants, lodges and hotels, community parks and trails, and a sense of place are important to those who travel scenic byways. Communities will want to create and show their unique "sense of place" with pride and enthusiasm. Local citizens voiced a need for the following interpretive amenities to better serve visitors to the area:

- Provide additional directional signs and visitor orientation in some locations.
- Provide interpretive signs, travel guides, and brochures that have more specific information and interpretation related to the California portion of the Byway.
- Expand existing developments such as museums and visitor centers to include more exhibits or artifacts highlighting important events throughout the Byway.

²California Travel Impacts by County, prepared by Dean Runyan Associates, April 2011

³5-Year Strategic Marketing Plan, California Travel and Tourism Commission, 2011.

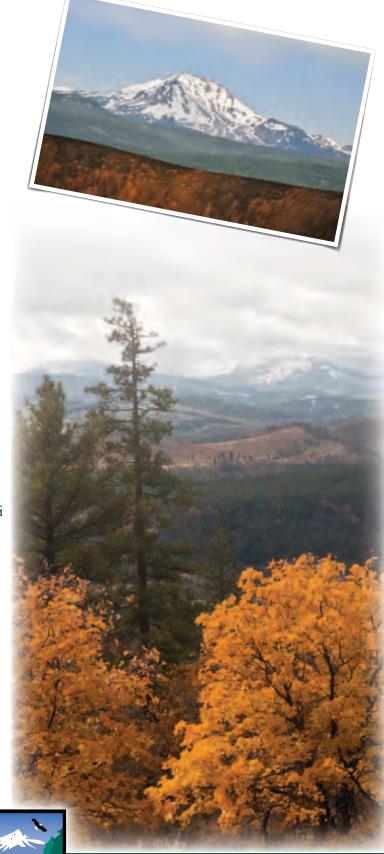
⁴U.S. Commerce Department, Office of Travel and Tourism Industries, TI News, May 23, 2011.

- Increase opportunities for biking and hiking along the Byway such as the Lake Almanor, Burney, McCloud, Mt. Shasta, and Tule Lake
- Construct an interpretation kiosk at the Collier Rest Area on Interstate 5.
- Expand museum exhibits at the Tule Lake-Butte Valley Fairgrounds, Chester and Westwood.

Implications for Byway Interpretive **Planning Endeavors:**

- Use other arrival points in the region to market the Byway (airports, recreation businesses, and tourism centers).
- Visitor spending continues to rise even in a slowing economy. Local residents are choosing the Byway to recreate closer to home. They will be looking for deals and budget options in their leisure experiences.
- The majority of Byway users are participating in a variety of recreation experiences along the Byway, with over 66% being family groups and 50% small groups (2 people). Amenities and facilities should be designed with these users in mind.
- Maximize use of the internet for Byway information
- Post publicity and interpretive materials on the internet in German, Chinese, Japanese, and Hindi as the largest foreign traveling groups coming to California.
- Consider printing publicity and interpretive materials in German, Chinese, Japanese and Hindi as the largest foreign traveling groups coming to California.
- Visiting travelers will expect to see green buildings and recycling capabilities.
- Combine forces between communities, counties and agency resources to coordinate and publicize events.





The Lassen National Forest currently has mixed types of sign materials and graphics:



Lava Beds National Monument



The Klamath Basin Wildlife Refuge has some older signs in need of replacement:



Byway kiosk, constructed 2008

Marsh overlook signs, Hwy 161



Susanville Depot Visitor Center



Hat Creek Rim Overlook



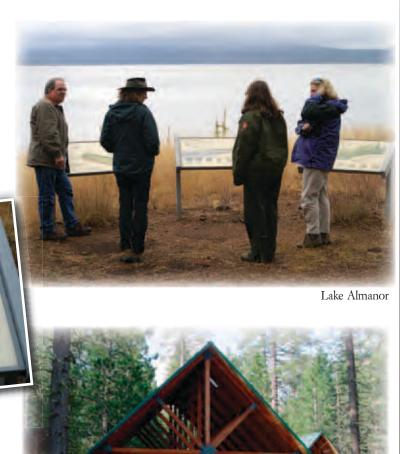
Old Station Visitor Information Center



CURRENT TYPES OF SIGNAGE SEEN ALONG THE BYWAY

Portal Signage

The complexity of land ownership along the Byway has resulted in a variety of sign materials and designs, both graphic and structurally. National Park Service signage follows national park design standards as seen to the left and below.

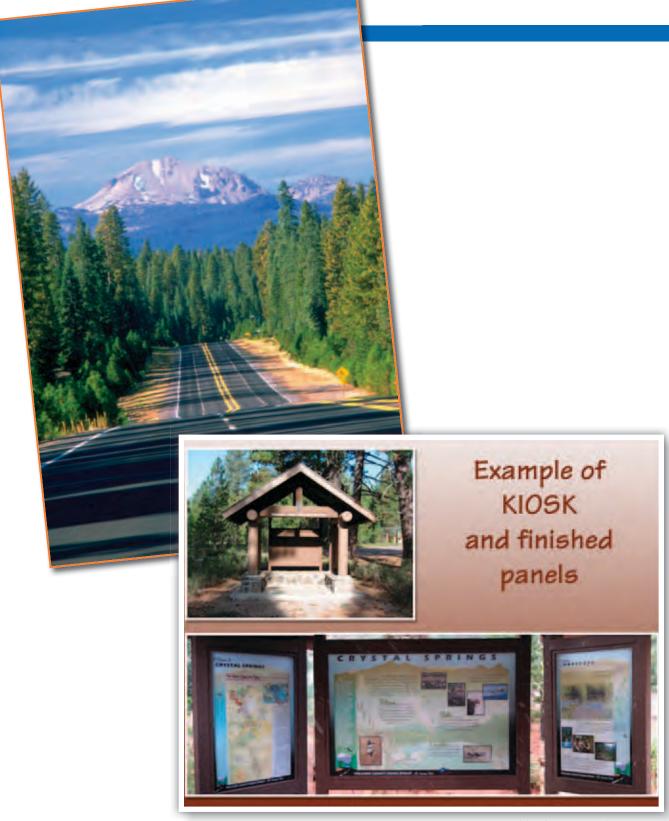


Lake Almanor



Lassen Crossroads Visitor Center

Canyon Lake Dam Boat Launch



Byway portal kiosk constructed in Oregon.



MEDIA AND DESIGN RECOMMENDATIONS

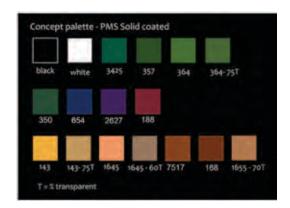
Design Character and Look

The Volcanic Legacy Scenic Byway should have approved kiosk design elements with a standard Byway map and regional map design for visitor orientation. Orientation and interpretive panels will have a standard look/design (logo, sign border, font, fabrication material, etc.) when new ones are installed or existing ones are replaced. There may be some exceptions for interpretive signs in park units or other locations. Recommended design guidelines for exterior interpretive signs are described below.

The design character should feature Cascadian style architecture, consistent with that being used along other Scenic Byways throughout the Pacific Northwest. Use of native materials such as primarily rock and timber fit within the Cascadian style theme. Another example of this rustic character can be seen in the Civilian Conservation Corps projects of the 1930s, which helped to preserve the natural landscape. Several examples of the use of native materials exist at turnouts throughout Lava Beds National Monument. This design theme should be reflected in new sites, as well as in modifications to existing sites along the Byway, if the Cascadian design complements the site's architectural style.

The consistency in the design of interpretive elements, as recommended in the interpretive plans that have been developed, reinforces the notion that the extension of the Volcanic Legacy Scenic Byway from Oregon into California can be continuous and seamless. This allows the traveler to cross over state borders, but still experience the Byway in a consistent way. The Byway does not have a "border." The "Volcanic Legacy" is truly that. Encompassing Crater Lake, Mount Shasta, and Lassen Peak, the traveler will experience some of the most amazing geological features in the world, each with its own unique "story." Together they tell the story of the Cascade Range, extending to British Columbia and ending at Lassen Peak. The entire Byway will be a one-of-kind experience.

The following color palette is recommended for use on signage specific to the Byway, and in publications or materials.



Recommended Byway Information Dispersal System

Using a tiered approach for visitor information, the following criteria will be applied to various sites on the Byway and funded or implemented based upon tier priority levels. Four tiers of Byway information or visitor orientation are proposed.

Visitor Orientation at Tier 1 Byway Portals

Tier 1 Byway Portals are proposed at visitor centers and agency offices to provide general recreation information and orientation specific to the that region of the Byway. They may also be a sales outlet for various permits, interpretive books and materials. These locations will generally have a Byway kiosk with three interpretive panels. One large vertical panel displays the entire 500 mile Byway corridor. The second panel showcases specific recreation or cultural opportunities within the Byway region and where the office or visitor center is located. The third panel provides important things for visitors to know...changing road conditions, safety and wildlife messages, specific community or agency messages, etc. This information will not be on a static panel sign so it can be updated as needed or changed seasonally.

Proposed Kiosk Design for Tier 1 Byway Portals (if complementary with the site's architectural style and location)

Tier 1 Byway Portal Sites Include:

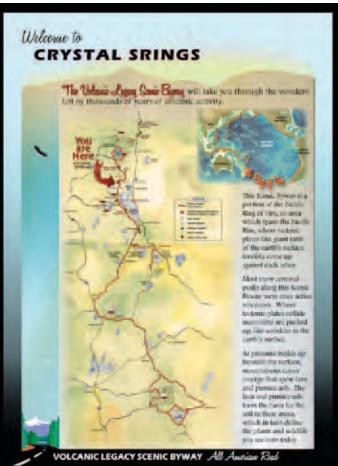
- The Chambers of Commerce in each Byway town (or nearby Byway towns) should be considered Tier 1 Byway Portals. These offices will serve as a main visitor contact point for detailed Byway information.
- National forest offices (Lassen Forest Headquarters, District offices, and the Old Station Visitor Center) should have a lighted, outside kiosk with information for afterhours use by the public.
- State park, national park, monument, and refuge offices or information centers should also have a lighted, outside kiosk with information for afterhours use by the public.
- The following California Department of Transportation (CALTRANS) Rest Areas should be considered as Tier 1 (or Tier 2) Byway Portals:
 - » Honey Lake
 - » Bogard
 - » Shingletown
 - » Lake Almanor

Tier 1 Web Access:

Individual agencies should upgrade their forest, park, monument, refuge, and community websites to provide more detailed and current recreation information for each zone or region of the Byway. Internet mobile use should also be provided in the design of websites.

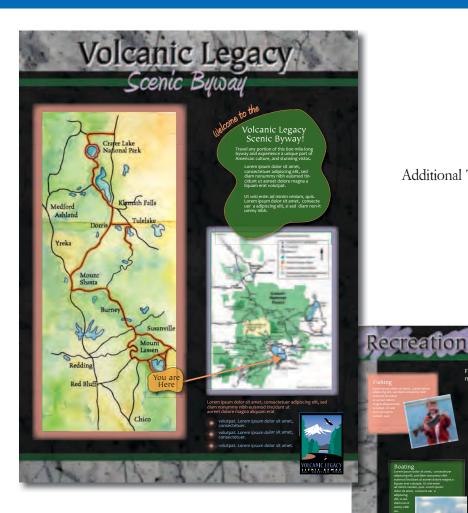






Proposed Tier 1 Byway Portal Signs

VOLCANIC LEGACY



Additional Tier 1 Byway Portal Sign Concepts

Things to Do



Visitor Orientation at Tier 2 Byway Portals

Tier 2 Byway locations should include orientation and seasonal information about the recreation opportunities and facilities within that specific region. These locations will have a two panel roofed kiosk with a map panel of the region (example: Lake Almanor area) with an inset showing the entire 500 mile corridor. A second panel provides information on local recreation, community services, special events, and activities. This may also be a non-static panel to easily change display information.

Tier 2 Byway Portal Sites Include:

- The larger recreation areas such as Lake Almanor, Eagle Lake and Hat Creek Recreation Areas on the Lassen National Forest.
- All OHV staging areas directly on the Byway that are open year-round (Morgan Summit, East Chester and Fredonyer).

Tier 2 Byway Portal sites should have the same kiosk design for both Byway information and for kiosks where campground, fee, regulatory, and other visitor information is posted at the site. This will enhance the appearance of the site and ensure a consistent design and "look" is used throughout.

Tier 2 Web Access:

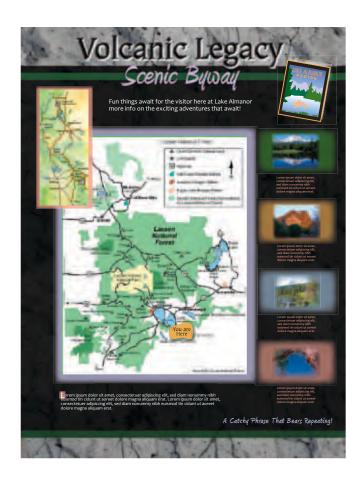
Provide visitor information through mobile applications.

Proposed Tier 2 Byway Portal Signs



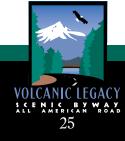






Additional Tier 2 Byway Portal Sign Concepts





Visitor Information at Tier 3 Byway Sites

Tier 3 visitor information sites are proposed at smaller campgrounds directly on the Byway (such as Battle Creek and Gurnsey Creek Campgrounds). They would have a roofed kiosk and one panel sign consisting of a smaller map of regional attractions, an inset of the entire 500 mile corridor, and a message about where visitors and travelers can find more detailed information.

Tier 3 Byway sites should have the same kiosk design for both Byway information and for kiosks where campground, fee, regulatory, and other visitor information is posted at the site. This will enhance the appearance of the site and ensure a consistent design and "look" is used throughout.



Tier 4 Byway Interpretive Sites

Tier 4 sites are individual interpretive sites that tell a unique story along the Byway. Signs at these sites should focus on just 1-2 themes specific to that location such as Subway Cave or the Hat Creek Overlook. Final design of these panels will follow various agency or municipality guidelines, and include a Byway logo.



Byway Sign Panels:

The information contained on all panels will be consistent and coordinated with the Byway website. Depending on locations, final graphic layouts may vary due to various agency and municipality design standards (National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, county and town), but will include the Scenic Byway logo, and the use of design colors and elements as shown above.

Additional Media Recommendations Website

Currently, an excellent website for the Byway is managed through the Volcanic Legacy Community Partnership with concept site maps and general recreation information based upon various regions of the Byway. (See http://www.volcaniclegacybyway. org/)Additionally, other groups manage websites that contain Byway information. A collaborative effort incorporating links or sharing of resources and information would benefit visitors researching the region and provide virtual tours for people who might not have an opportunity to travel the Byway. The website maintained by the Volcanic Legacy Community Partnership should be the Byway's primary site for high quality and current visitor information. Other websites should ensure consistent information is displayed and link to VLCP's web site.

Future web updates could include:

- Trip planning advice with sample itineraries and audio/video podcasts to help visitors make informed choices. Build on the "Byway Bookends" concept – visitor contact points with various visitor experiences in between.
- An interactive internet map displaying significant Byway attractions with a brief Recreation Opportunity Guide (ROG) sheet for each site.
- Tour routes by interpretive theme.
- Tour schedules, special programs and events, links to the campground reservation system and cabin/ lookout rentals.
- Current weather and road conditions and road construction.
- Internet mobile functionality to download information onto smart phones, IPods, and tablets for trip planning and touring.
- Links to local chambers, museums, and visitor centers and other partner organizations in the region.
- Partnership newsletter, sample articles, festivals, etc.

Maintenance and sustainability of the current website must be provided and ongoing. It is recommended the Lassen National Forest break the forest into three Byway travel zones with the interpretive sites listed in each zone (Lake Almanor Region, Eagle Lake/Great Basin Region, and Hat Creek Region). These zones could be used for trip planning similar to the five sections on the Lassen Backcountry Byway Driving Guide. These three zones should also be called the same on the Byway's website.

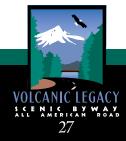
Opportunities exist for the development of Byway specific smartphone applications, and internet resources on Byway history, wildlife, recreation information, road/travel conditions, activities and events, maps, photos, short audio/video podcasts, audio essays, music, and other information.

Tear-off Maps

A tear-off map for the Byway was created in 1999, with copyright ownership, and needs updating with changes in place names, road ways and land ownership. The VLCP obtained a grant to update and redesign the map for multiple uses. It should be developed to provide orientation to the corridor, promote tours, support interpretive themes, and provide general visitor information. The map would be double-sided with short descriptions of Byway sites on the back. Use of this same map file for the orientation signs would provide a consistent look for travelers.

Distribution would be through the cooperating agencies, tourism partners, and local businesses. A standard mailing package can be created using the map, a travel guide book of the Byway, and other local, regional or state tourism information.

Byway-related maps will require an ongoing printing schedule for constant availability to be successful. Strive to make all Byway marketing products sustainable via ad sales, visitor sales, and community/agency partnerships.



Volcanic Legacy Scenic Byway Travel Guide

This user friendly publication would contain a full page Byway map, larger scale regional maps of the Byway, color photo images, artwork, and be multi-paged. It would contain orientation and recreation information, and stories tied to the Byway themes in each region. The guide would be desirable as a visitor souvenir and serve as an effective marketing tool for Byway communities.

Outfitter/Guide Interpretive Training

There is an opportunity to reach large captive audiences through the outfitters and guides that serve visitors to the region. Guide services are generally arranged through local businesses, tourism operators, or local museum and historical societies. Guide training and reference materials help build guide skills/services and enhance visitor experiences. Potential trainers and materials include:

- Interpretive staff from various public agencies.
- Other resource specialists "Leave No Trace,"
 "Bear Aware," geology, and other topics.
- Hospitality training through partnerships with Chambers of Commerce and other tourism partners.
- The National Association of Interpretation (NAI) provides certified interpretive guide (CIG) and interpretive host training. More information can be found at http://www.interpnet.com.

Interpretive Resource Manual

A critical element for a successful ongoing public contact program is an Interpretive Resource Manual. The manual would lay the foundation for conducting and evaluating all public contact activities along the Byway. The importance of this manual should not be underestimated. It will set forth high quality standards for interpreters' performance, establish standard operating procedures, and provide for consistency in communicating resource information and agency philosophy, mission, and messages.

The manual should include:

- Input from the Volcanic Legacy Community Partnership, various land management agencies and communities along the Byway
- Information about each interpretive site that interpreters can refer to.
- Research that supports all interpretive themes and storylines.
- Standard operating procedures for various visitor services, interpretive programs, and mission.

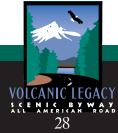
The manual should be reviewed and maintained by the Byway Partnership Coalition.

Family of Publications

All Byway brochures, maps and tour guides should follow publication design guidelines and be consistent. A "Publications Review Committee" composed of representatives from the VLCP, Oregon tourism organizations, and land management agencies is recommended to review all draft publications and ensure publication guidelines are met.

Currently, brochures on the following topics are provided at various sites based on available resources and visitor interest. This practice should be maintained and supported. A criterion for what is agency specific and what is Byway specific needs consensus from the Committee. As a minimum, all maps should display the Byway if the route is within the mapped area.





Brochure Title	Topics Addressed	Who Manages
Lassen National Forest America's Great Outdoors	Map and forest information	Lassen National Forest
Winter Recreation Guide: Lassen National Forest	Snowmobiling, cross -country skiing map	Lassen National Forest
Welcome to Spatter Cones Trail	Volcanic geology/interpretive trail	Lassen National Forest/Hat Creek RD
Lassen National Forest Backcountry Byway Guide	An interpretive guide of the natural and cultural resources along the 186-mile byway through the forest	Lassen National Forest
Lassen Volcanic National Park Auto Tours	Trips and Trails, A colorful guide for exploring the VLSB through the park, volcanic, natural and cultural sites, and history	Lassen Volcanic National Park
Brief History of Modoc War	History/Indian war in CA	Lava Beds/NPS
Story Behind the Flag	History of painting the U.S. flag on Petroglyph Point	Lava Beds/NPS
Gillems Camp Trail	Human culture/heritage & tie to landscape	Lava Beds/NPS
Petroglyph Point Interpretive Walk	Visible petroglyphs and interpretations	Lava Beds/NPS
Lava Beds National Monument	LBNM introduction, hours, programs, facilities and information	Lava Beds/NPS
Lava Beds Campground Info	LBNM camping information within	Lava Beds/NPS
Lava Beds Birds	Bird checklist	Lava Beds/NPS
Lava Beds Mammals	Mammals of LBNM	Lava Beds/NPS
Lava Beds Plants	Plants of LBNM	Lava Beds/NPS
Lava Beds Bats	Bats of LBNM	Lava Beds/NPS
Lava Beds Trails	Hiking/backpacking trails of LBNM	Lava Beds/NPS
Things to See and Do on Your Own	Recreation guide to LBNM	Lava Beds/NPS
The Geology of Lava Beds	Geologic History of LBNM	Lava Beds/NPS
Lava Beds Weather	Annual weather to expect	Lava Beds/NPS
Images in Stone	Explanation of pictographs vs. petroglyph	Lava Beds/NPS
Klamath Basin National Wildlife Refuges, California/Oregon	Introduction to Refuges -features species, maps, information	Klamath Basin National Wildlife Refuges
Tule Lake, CA: Skies of Magic, Land of Fire, Water & Food	Introduction to Tule Lake recreation, heritage & public lands	Tule Lake Chamber of Commerce
Klamath Basin Birding Trail	Birding orientation, information and ethics; goes with maps	Klamath Wingwatchers
Birding Trail Maps	Maps of birding sites/locations	Great Basin Visitor Association Contact: Cindy Deas for more information
You'll Fall for Northern California	Waterfalls of the region	Redding Convention & Visitors Bureau
Park 40: Self-guided Interpretive Trail	Tour of 40 acres of privately managed, forest; interpretation of sustainable forest practices	Collins Pine Company
Gateway to a Getaway: A Guide to Scenic Highways and Byways	Various FS Byway driving tours, including the VLSB	Northern California Travel & Tourism Information Network
Volcanic Legacy Scenic Byway brochure	Driving tour of the VLSB by region	Shasta Cascade Wonderland Association
Come Closer: America's Byways	Brief description of VLSB along with others in CA	U.S. Dept. of Transportation, National Scenic Byways Resource Center
Bizz Johnson Trail Guide	History of the railroad and trail	Lassen National Forest, BLM
Susanville Ranch Park	Trail map of park and environs	Lassen County
Trails West Guidebooks	Stories of pioneer travel along the emigrant trails to CA	Lassen Volcanic NP
Emigrant Trails	Interpretation of the Nobles Trail through the Park	Lassen Volcanic NP
Oregon Scenic Byways and Tour Routes	A Driving Guide Abbreviated, a driving guide of the VLSB in Oregon	Oregon Dept. of Transportation

Recommendations for criteria for new Byway publications include:

- Use themes and subthemes as established in this interpretive plan. Publications and funding sources/grants should be approved by the "Publications Review Committee" that includes the agencies, Volcanic Legacy Community Partnership and Oregon tourism organizations.
- Use consistent design elements with newly produced Byway publications.
- Meet or address topics of cultural or natural significance not currently addressed by other available publications.
- When possible, make available via web sites.
- When appropriate, use ads or visitor sales to finance new publications and re-print existing ones.

Opportunities for new publications include:

- Byway map with more detailed information about sites and attractions (in progress)
- Byway auto tour guide describing sites that reflect the best of the Byway's six intrinsic qualities (in progress)
- Byway auto tour guide that is focused on the significant volcanic and other geologic land features
- Byway tour of plants of the Pacific Northwest
- Building of a Nation a tour of historic sites related to early logging, railroads, the Civilian Conservation Corps and other early industrial development
- Native American tribal histories, timelines, and places of interest
- Other history tours including Emigrant Trails, places of conflict (Indian wars), Segregation Centers
- Mountain biking, hiking and equestrian trails along the Byway broken into trail types or user groups (family hikes, extreme thrill seekers, easy on the knee hikes, trails for horses)
- ATV and dirt bike trail riding in your national forests

- Rivers accessible and good for rafting, kayaking, canoeing, and river camping
- Great fishing spots along the Byway
- State or national memorial sites, markers combined with Emigrant Trail sites and maps
- Snowmobiling in your national forests
- Cross-country skiing in your national forests

Heritage Interpretation

Heritage interpretation is already a large part of many visitors experience along the Byway. Suggestions to add to existing community and agency activities and programs include:

Heritage messages in interpretive signs and media should be designed in coordination with the concept of visitor "immersion" into an experience that accommodates small or family sized groups and budgets allowing participants to get out and away from their car for a ½ day, full day or overnight experiences. Examples could include:

- With an internet downloadable audio/video podcast available from the web site, you can take a walking tour of the region's timber towns, and learn about the logging life in Chester and Westwood.
- After your visit to the Tule Lake Fairgrounds Museum, go on the driving tour of the newly created World War II Valor in the Pacific National Monument.
- A brochure or downloadable audio/video podcast that provides a tour of the great agricultural history and crops of the Tule Lake region.
- Trace the Emigrant Trails with a local trails expert and experience a wagon trail dinner.
- Enjoy activities associated with historic sites, museums and community festivals.
- Interpretive components could include scrapbooks that provide site specific historic information and photos, historic artifacts, and exterior exhibits.



Tour Groups and Hotel Based Media

- Distribute Byway brochures, maps, and literature in hotel rooms and lobbies.
- Step on tour guides for large bus groups to interpret unique sites and events along the Byway.
- Conducted interpretive activities should tier to the themes, subthemes, and storylines outlined in this Interpretive Plan. Interpretive programs can be given aboard the buses by agency personnel or community representatives from that local area.

Conservation Education

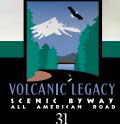
Conservation education typically targets younger audiences, but can be appropriate for adults as well. One strategy could be to develop a badge and a kid's activity book that is tied to various sites and resources along the Byway.

Welcome and Orientation Video to the Byway

A short Byway video clip can be used for local TV spots and in hotel room channels. Present recreation information, suggested Byway trips in that particular area, safety messages, and resource interpretation. One is currently posted on the Byway web site.

Audio/CD/DVD Tour

Develop interpretive audio tours to highlight significant interpretive sites. The tour could be thematically presented by section of roadway and zones, or by themes allowing users to select information of interest. This tour could also be developed in partnership with local or regional tourism initiatives, and completed in phases for various Byway segments. A general outline of the entire tour should be developed and reflect the diverse nature of sites and scenery along the roadway. Another option is to consider using local radio broadcasts. Portions of this media should also be posted on the Byway website for downloading on any mobile device.





APPENDIX A

Previous Themes from Other Interpretive Plans for the Byway

Oregon Volcanic Legacy Scenic Byway – Overall Interpretive Theme:

• The Volcanic Legacy Scenic Byway travels through some of the Nation's most scenic and biologically significant natural wonders!

Oregon Volcanic Legacy Scenic Byway – Main Themes:

- The High Cascade Volcanoes and geologic forces have created the scenic landscapes you see along the Scenic Byway and a rich variety of ecosystems and habitats.
- The Volcanic Legacy Scenic Byway's ecosystems and habitats nourish wildlife, waterfowl, plants, and people.
- Life along the Byway is connected, part of the circle of life, and constantly changing.
- People connect and interact with nature based on their needs and values.

Modoc Section/Lava Beds National Monument – Overall Interpretive Themes:

- The causes, details, and significance of the Modoc War of 1872-1873.
- The activity of Medicine Lake volcano about 10 of whose land area lies within the monument boundaries. The geology of the volcano, its relative age, size and significance in the regional context.
- Individual features of the volcanic geology
 pure obsidian flows, ice caves, tree molds, cinder cones, lava flows, and lava tubes.
- The culture of the Modoc people (past and present), their ancestors, and their influence on the region's history as well as the legacy of their culture.
- The wildlife, the plants, and their ecological relationships.

- Mutually beneficial land management in and around the wildlife refuge to support wildlife and agriculture.
- In the high country, the management of forestlands for multiple use.

Shasta Section - Overall Interpretive Theme:

 The Byway's volcanoes have created a beautiful, abundant home for waterfowl, wildlife, plants and people.

Shasta Section - Main Themes:

- Volcanoes and geologic forces have created the beautiful landscapes you see along the Byway and a rich variety of ecosystems and habitats.
- Nature nourishes wildlife, waterfowl, plants, and people.
- The abundance and beauty of nature's resources have attracted people to settle here.
- Everything is connected and part of the ecosystem that nourishes us.

Lassen Section – Overall Interpretive Theme:

 The Lassen Scenic Byway traverses a diverse landscape shaped by natural forces and human interaction with its plants, animals, minerals, and water.

Lassen Section - Main Themes:

- The Lassen Scenic Byway traverses diverse landscapes.
- Natural forces formed the region's landscape.
- People have depended on the natural environment for thousands of years.
- The region's landscapes are shaped by people.

Lassen Section - Interpretive Topics:

- Byway orientation and information.
- Four bio-geographical regions.
- Cultural and natural diversity.



Lassen National Forest Master Interpretive Plan Themes (2001) and Lassen Backcountry Byway Driving Guide (2007)

Excerpts from Lassen National Forest's Interpretive Plan and other plans are on file at the headquarters for the Lassen National Forest in Susanville, CA.

Central Theme

"The Lassen National Forest (LNF) is located in the heart of a fascinating part of California, a crossroads of people and nature. This is where the Sierra Nevada, the Cascades, the Modoc Plateau and the Great Basin meet; a diverse landscape shaped by natural forces and human interaction with its plants, animals, minerals and water, all to be managed for sustainable outdoor recreation, watershed, wildlife, and commodity purposes to provide for future generations."

Subthemes

- This rich environment has thousands of annual visitors who come to explore the forest, fish the waters and reflect in the exceptional scenery.
- Natural forces formed the region's landscape.
- Recreation opportunities exist on every part of the forest; choose your form of adventure!
- Forest managers must constantly make decisions about the best practices in land use to provide for the growing demand for recreation and natural resources.

Topics and Storylines

The forest provides an opportunity to educate visitors about the sustainability of natural and cultural resources, conservation ethics and the Forest Service's responsibility to manage for multiple uses such as timber, outdoor recreation, range, watershed, wildlife and fish.

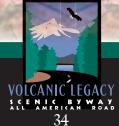
Topic: Recreation

The Forest provides a variety of quality recreation experiences. The preservation of heritage sites on the Forest honors our past while enriching the lives of current and future generations with their stories.

- Information on the recreation opportunities the Forest offers
- Safety messages for visitors
- Land use regulations and what visitors should know

Storylines:

- People love the great outdoors, but are often unaware of the impacts they can have on forest resources, fish and wildlife.
- Irresponsible use and vandalism have damaged or destroyed natural and cultural resources.
- Conservation education and interpretation help the public understand their role in preserving healthy ecosystems.
- Tread Lightly and Leave No Trace messages help visitors enjoy their public lands with minimum impacts.
- People have been connected to the land for thousands of years for recreation, food, water, and employment.
- Be aware of bears, rattlesnakes, mountain lions, poison oak, and giardia in the water you drink There are hazards in the woods, so be prepared and be safe.
- Winter survival requires special skills. Here is what you need to know.
- There are hundreds of miles of scenic hiking trails in the national forest.
- The Lassen National Forest provides many roads and trails for off-highway vehicle driving, snowmobiling, and mountain biking. Pick your form of adventure!
- Camping is family fun! Check out the many campgrounds along the Byway.
- Looking for some solitude? Escape to one of the many wildernesses in northern California.



- The Lassen National Forest manages one of the few fire lookouts available for rent by the public.
- The Forest Service and National Park Service welcome all kinds of volunteers to assist them with a variety of tasks. Come volunteer your hands and heart to your public lands!

Topic: Fire History and Disturbance Ecology

• Fire has played a very important role in both the ecology and the management of the Forest.

Storylines:

- Many of the ecosystems in the Forest area have evolved with the cyclic influence of natural fires.
- Fire sustains the health of forests by eliminating competing vegetation among trees and shrubs.
- Some species, especially conifers, have developed strategies to avoid mortality from fires, and others are nearly fire-dependent by having seeds that are dormant until heat releases them from their cones.
- The heat of fire actually opens some types of cones (called serrotinous cones) so that the seed falls to the ground and regenerates the species. Lodgepole pines have serrotinous cones.
- Ponderosa and Jeffrey pines have adapted to fire by developing insulative bark, shielded meristem (the growing tips of the trees), moist needles and by self-pruning the lower branches. Consequently, fires may move through stands of pine with limited mortality.
- Pine forests once had frequent fires, on the average of 10-15 years, that acted to dispose of dead limbs and needles (fuels) and thinned vegetation.
- Windfall, disease and fire help create openings for new trees to become established.
- Other plants and animals evolved in the presence of fire. Much of the diversity in a fire ecosystem is related to the periodic occurrence of fire.
- Drought affects the frequency and intensity of fires. In 1987, a fire in Hat Creek consumed 23,000 acres. Prolonged drought has occurred many times in California history.
- Fire history is complex and important in understanding the successional stages and composition of native forests, and human influence on forest landscapes.

- Fire is not the only source of rapid change in the forest. Volcanic eruptions, windstorms, droughts, heavy snowfall years and combinations of these factors all affect forest cycles of disturbance and renewal. The clearing of land for agriculture and grazing has also brought change. Where there was once continuous forestland, now there are towns, fields and pastures. Consequently, the habitat requirements for some plants and animals have been limited or altered.
- Prescribed fire is a management tool used to reduce unnatural fuel loads, restore historic landscapes, and improve wildlife habitat.
- Fire suppression, like a two-sided sword, helps and hinders the forest. Human caused fires and stand destroying fires may kill huge areas of the forest, allowing insects and disease to spread through the dead and dying trees into the healthy forests. On the other hand, fire suppression has allowed the buildup of fuels that account for many stand-destroying fires and changed the character of the forest by allowing brush and competing vegetation to flourish. This in turn, allows pests and disease, normally destroyed by frequent fires, to flourish and spread.
- Fire suppression has allowed brush-type vegetation (bitterbrush, manzanita, rabbit brush, etc.) to dominate on previously forested sites.
- Fire monitoring, prevention and prescribed fire have become the accepted tools for preventing intense wildfires that destroy wildlife, homes, commercial timberland, and recreation resources.
- At one time, an extensive fire monitoring system of lookouts were scattered throughout the Forest. Some of these lookouts still exist today and are staffed during the fire season (summer and fall). Prospect Peak is the second oldest lookout in the United States and is on the National Register of Historic Places. Antelope Lookout is known as the first solar powered lookout in the United States.
- Fire prevention messages are essential in decreasing the growing number of human caused fires and the devastating effects they have.
- Cycles of catastrophic disturbance are necessary for healthy ecosystems. Forest managers, users and residents are challenged as they cope with the effects of natural and human change.

Topic: Conservation

The wise stewardship of land is a concept that humans are struggling to understand and embrace. It involves a well-defined land ethic, backed by laws and conscious choices to ensure healthy forest ecosystems.

Storylines:

- Lassen Peak and Cinder Cone National Monuments were established in 1907 in Lassen National Forest. They were incorporated into Lassen Volcanic National Park in 1916 following two years of eruptive activity.
- Originally established in 1905, the Lassen Forest Reserve became the Lassen National Forest in 1908.
- The Lassen National Forest manages the land for a variety of uses. The Forest Service maintains wilderness areas and natural environments for fish and wildlife. Renewable resources such as timber, range, and hydropower are managed for sustainability and to minimize environmental impacts. The Forest Service also manages nonrenewable commodities such as minerals.
- The Civilian Conservation Corps (CCC), a civilian work project in the 1930s, built many campgrounds, trails and public buildings in the Forest. The Mineral Work Center is an example of their skilled labor.
- The balance between environmental protection and resource extraction is politically polarized, but are not incompatible goals.

• The Forest is working hard to restore historic landscapes through activities such as aspen

and oak regeneration and the restoration of streams and riparian areas.

 Visitors can become active partners in the conservation of the Forest's unique resources.

Topic: Natural Resources and People

The Lassen National Forest is comprised of four ecological provinces: the granite of the Sierra Nevada, the lava of the Cascades and the sagebrush of the Great Basin and Modoc Plateau meet at the "crossroads." The Forest is rich in the geological and biological worlds. Its clean waters, scenic landscapes, flora and fauna, have drawn people to reside in the region for centuries.

General Topics and Themes:

Geology – Volcanic landforms, faulting and mountain building, soils, erosion processes, glaciation/ice age, volcanic processes, inland seas, Klamath mountains, minerals/mining, Cascade geology, Sierra Nevadan geology, hydrology of streams, geomorphology.

Biology/Ecology – Influence of the Cascade and Sierra ecosystems, influence of the Great Basin and Klamath Mountains, wildlife/fisheries, special area management, cave ecology, volcanic disturbance, fire history, geographical influences, forest vegetation types, habitat distribution, effects of climate, species diversity, rare/endangered/sensitive species; plants/animals, plant associations.

People in the Forest – Prehistoric Native American, early settlement, early exploration, trapping/fur company, emigrant trails (Lassen, Nobles, Applegate), settler/Indian conflicts, effects of Lassen Peak eruption on the Forest, railroad history, establishment of the Forest, early mining

history, ranching industry (cattle and sheep), timber industry (mills/sawyers), recreation activities, tourism, hydroelectric power, historic use and effects of humans on the landscape, historical presence of species such as elk, turkey and sheep.



Storylines: Geologic/Volcanic

- The Lassen region contains all forms of volcanic formed mountains.
- Lassen Peak's eruption created a mudflow that flowed through Hat Creek Valley.
- Cascade volcanoes were formed by the slipping of one plate (Gorda) underneath the North American continental plate resulting in a pool of magma which is continuing to create the Cascade volcanoes.
- Cascade volcanics have buried older volcanic layers, as well as the northern edge of the Sierra Nevada and eastern edge of the Klamath Mountain granites. West Prospect Peak is an example of a shield volcano formed by repeated eruptions from a single vent of highly fluid lava forming huge upside down bowl-forms.
- Volcanic soils cover the area; most are shallow and well drained.
- Large blocky lava flows cover much of the forestlands. They can be found near Eagle Lake, Fall River Mills and Timbered Crater in the northern part of the Forest.
- Lava flows beneath the ground create "tubes" such as Subway Cave.
- Examples of fault escarpment and uplifting can be seen along the Hat Creek Rim.

Storylines: Glaciation

- Glaciers once carved many of the highland areas.
- During the last Ice Age, prior to 10,000 years ago, the area was buried in glacial ice.

Storylines: Erosion and Climate Factors

- The actions of frost and ice trapped in rock surfaces break them into smaller fragments.
 Because of this, the area is continually crumbling apart.
- Runoff from melting snow and ground water has carved deep valleys and canyons into the volcanic landscape.
- Debris flows formed during eruptions of Lassen Peak and surged down Lost Creek and Hat Creek during the eruptive events in 1915.

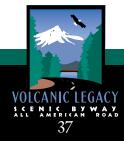
 The Sierra and Cascade ranges block much of the Pacific moisture coming in from the coast, resulting in drier areas of the forest that host many Great Basin species of plants and animals.

Storylines: Hydrology

- Major streams originate in the volcanic highlands.
- Lakes are abundant.
- Numerous lakes were formed by previous volcanic activity, including Eagle Lake.
- Eagle Lake is an example of a "closed basin lake", one without a drainage channel, similar to neighboring Great Basin lakes.
- Hat Creek and Lost Creek drainages are classic examples of subterranean basins that trap and release water over a large area covered by lava flows.
- The bogs of Willow Lake contain some vegetation previously believed to be extinct.

Storylines: Flora and Fauna

- The Forest habitat hosts several species of rare or sensitive plants.
- Some Sierran species of plants such as bear clover (<u>Chamaebatia foliosa</u>) reach the northern most part of their range. Bear clover is not only at its northern most occurrences, but is separated from its nearest Sierran site by over 65 miles.
- Several Cascadian species of plants reach their southernmost occurrence in or near the Forest. (see appendix for in-depth information)
- The Modoc Plateau and the eastside of the Sierra/Cascade crest are dominated by plants of the Great Basin cold desert. These species, such as basin sagebrush (<u>Artemisia tridentate</u>) and bitterbrush (<u>Purshia tridentate</u>), are adapted to cold, dry areas.
- Pronghorn, a Great Basin species, is found in drier areas of the Forest. Other species of large mammals such as black bear, mountain lion, mule deer, black tailed deer and elk find homes within the Forest.
- The Forest identifies and protects habitat for bald eagle, American marten, peregrine falcon, goshawk, northern spotted owl, and California spotted owl.



- Hat Creek is known as one of the best trout streams in California and attracts thousands of people each fishing season.
- Eagle Lake is home to a species of fish that has adapted to its highly alkaline waters. A unique species of rainbow trout, the Eagle Lake rainbow may be a remnant population from the great post-glacial Lake Lahontan. Prior to human alterations of the drainage system, mature Eagle Lake trout would migrate 28 miles upstream to their spawning grounds in the headwaters of the Pine Creek watershed. Today, young trout are raised in hatcheries.
- Native salmon once used the Feather River and Pit River systems as seasonal spawning grounds.
 Due to dam construction, only remnants of the Feather River spawning areas are now accessible or used by the salmon.
 - » Mill, Deer and Antelope Creeks are home to the last native runs of spring run Chinook and fall run steelhead trout.
 - » Habitat management is an important aspect of wildlife management.
 - » The Forest is in the process of restoring fish habitat by improving pools, gravels and water clarity.
- The Tehama deer herd is the largest migratory deer herd in California. These deer can be seen in the Lake Almanor area during the summer and in Ishi country year-round.

Storylines: People in the Forest

- For thousands of years, human populations have had a profound effect on the Forest's animal and plant communities.
- Native Americans have occupied the Forest for thousands of years, reflecting a long and diverse cultural history.
- Native American peoples who occupied the Forest relied on its natural resources to provide food, clothing, shelter, tools, equipment and spiritual wellbeing.
- The displacement and extermination of the Native American people became a dark chapter is this area's history. Many people died of disease and violence.

- In 1911, the last survivor of the Yahi-Yana Indians, Ishi, came out of hiding and into the history books. Ishi was a living cultural resource, sharing the lifestyle and culture of a vanished people.
- Hudson Bay Company trapped in the Forest in the 1820s and 30s.
- Important emigrant trails crossed through the Forest, which brought settlers and miners into California.
- Ranching became another important economic use of the Forest. Much of the Forest is still used for seasonal cattle grazing.
- Towns like Fall River Mills, Mineral, Chester, Susanville, Westwood and Burney are steeped in historic events that characterize the settlement of the west. Museums, such as the Fort Crook Museum in Fall River Mills, document these pages of history with artifacts and exhibits.
- Many colorful and notorious individuals lived some or all of their lives in the area including Peter Lassen, William Nobles, John C. Fremont and other pathfinders. Shavehead, the Browns, the Walkers, the Doyles and many others helped found and build communities.
- Gold mining since the 1850s contributed to the Euro-American settlement and development of California.
- The U.S. government has managed public land and resources since the turn of the 20th century.
- Hydropower became an important source of energy for mills and power companies. Mills and towns were developed around these water resources.
- The Forest has a history of use by the logging industry, typified by the Red River Lumber Company.
- Forest Service archaeologists are studying the past and providing new interpretations on the history of human-landscape relationships.

Storylines: Forest Legislative Kistory and Mandate

- The Lassen National Forest was originally set aside as the Lassen Peak Forest Reserve in 1905 to manage and protect the nation's forests and watersheds in northeastern California. Now it's over 1.2 million acres and provides a variety of public uses and benefits from timber, mining and grazing to wildlife, wilderness and recreation.
- The Lassen National Forest has a rich history that dates back to its designation as a national forest in 1908.
- The "use conservatively" philosophy prompted the establishment of the National Forest System in 1908. This philosophy was reinforced with the passage of the 1960 Multiple Use Sustained Yield Act and the 1976 National Forest Management Act. Essentially, these Acts charge the Forest Service with the responsibility to:

Provide a sustained flow of renewable resources--timber, outdoor recreation, forage, water, wilderness, wildlife, and fish and administer the nonrenewable (mineral) resources of the National Forest System in a combination that best meets the needs of society now and in the future.

- One of the values that Lassen National Forest clearly serves today is outdoor recreation.
- A variety of winter and summer recreation activities occur throughout the forest.
- Eagle Lake is known as the second largest natural lake in California and is a popular fishing destination.
- The Caribou and Thousand Lakes Wilderness offer spectacular scenery in a high alpine lakes setting. The Ishi Wilderness straddles the low elevation watersheds of Deer and Mill Creek.
- The Volcanic Legacy Scenic Byway and Lassen Backcountry Byway are rated as two of the most spectacular scenic drives in the State.



APPENDIX B

Additional Resource Information from Lassen Crossroads Interpretive Plan and Revised Crossroads Information, circa 1995 - 1999

Flora

The Lassen National Forest lies at the intersection of four physiographic provinces: the Cascades, the Sierra Nevada, the Great Basin, and the Modoc Plateau. The intersection of the four provinces accounts for the unusual association of plant species.

Sensitive Plants

Sensitive plants are species which are managed by the Forest Service to ensure that they do not become Threatened or Endangered (as listed by the U.S. Fish and Wildlife Service according to the Endangered Species Act). These rare species have very specialized habitat requirements and often very limited distributions.

Some examples of Sensitive plants are Constance's rock cress (<u>Arabis constancei</u>), Feather River stonecrop (<u>Sedum albomarginatum</u>), and cut-leaved butterweed (<u>Senecio eurycephalus var. lewisrosei</u>), which are limited to serpentine rock and soil areas, mostly in the Feather River drainages. Another example is the tiny fern northern spleenwort (<u>Asplenium septentrionale</u>), which is found on dacite volcanic rock outcrops in and near Lassen Volcanic National Park. The only other place in California this fern grows is one location in Sequoia National Park.

One other interesting Sensitive plant is American scheuchzeria (<u>Scheuchzeria palustris var. Americana</u>). It was thought that this plant was extinct in California, since the only recorded location for it (last collected in 1897) was buried by the creation of Lake Almanor. However, in 1988 American scheuchzeria was found growing in the floating bog at Willow Lake in the Lassen National Forest, a most exciting discovery! Since then, it has also been found at Domingo

Lake (on the Forest) and Little Willow Lake (in Lassen Volcanic National Park).

The Forest Service inventories for Sensitive plants in proposed projects such as timber sales or new campgrounds, and designs activities so that Sensitive plants and their habitat are not harmed. Known locations of Sensitive plants are monitored to check for changes from year to year. Such changes could be due to climatic variation, management practices, or interactions with animals (such as pollinators or herbivores) or other plants.

"Sensitive plants" is strictly a Forest Service term. This discussion could be broadened by labeling it "rare plants", and including some rare LVNP plants such as Smelowskia ovalis var. congesta, which grows nowhere in the world, but the top of Lassen Peak.

There are lots of other subjects which could be covered, such as lichens as indicators of air quality, or successional stages on a lava flow.

Beth Corbin, Forest Botanist April 30, 1991

The Eagle Lake/Great Basin Region Basin and Range

Northeastern California and Nevada are part of what is called "Basin and Range" territory. For millions of years, this land mass was a high plateau, bowed upward by the direct east-west collision of the North American and the oceanic plates.

Then, about 25 million years ago, this collision process began to stop. The plateau sagged and eventually collapsed along many linear, north-south trending faults, forming the rugged Basin and Range landscape.

Some of these faults, or cracks, extended through the continental plate and tapped basalt magma within the mantle. The lavas flowed into the basins to form plateaus.

The higher and younger Cascade Mountains to the west cut off the flow of moist air, leaving much of this

country as a region of sparse pines, sagebrush and other drought-resistant plants.

Western Expansion

Western migration on the Lassen and Nobles Trails brought settlers to the Eagle Lake area. In 1854, the Roop brothers established Roop's Fort along the Nobles Trail in the Honey Lake Valley. This homestead-ranch had a small store along the trail and became known as Rooptown. Two years later, a small gold rush occurred just south of the trading post, resulting in the establishment of a permanent settlement named Susanville - after Isaac Roop's teenage daughter.

"As we entered Honey Lake Valley, we found two brothers by the name of Roop, busily engaged in erecting a log house and planting a small field. They had been there but a month. The lands around them at the head of the valley are very susceptible of cultivation and are luxuriantly covered with grass and abundantly supplied with water by Susan River and other small streams." ---Lt. E. G. Beckwith, July 3, 1854

When new emigrants arrived, they saw the first forests they had seen in many months. It must have been quite a sight after 2,000 miles of prairies, arid mountains and deserts. One traveler wrote... "[There was] enough timber on one mile on each side of the road, from the valley to the summit, to build a double railway track to the Missouri River." ...John A. Dreibelbis, 1853

Eagle Lake

Eagle Lake is the second largest natural freshwater lake in California. It is an example of a closed basin lake, one without an outlet, like many in the Basin and Range territory. It was formed by the active faulting and down-dropping in the area. In a geologic cycle that alternately affects the lake's size, basalt magma takes advantage of channels in the subsurface faulting, filling the basin and reducing its size. Then, active faulting and down-dropping increase the size of the basin, and the lake grows.

Eagle Lake has two distinctly different environments spanning its shore. Evergreen forests and sandy beaches surround the south shore, while high desert vegetation, sage and juniper, follow the rocky shoreline of the north side.

Numerous waterfowl, such as pied-billed and western grebes, American coots, and mergansers, make their homes and nurseries at Eagle Lake. Many years ago, the nesting sites of the formerly abundant white pelicans were destroyed, but now these birds are returning to the lake.

The beautiful and fleet pronghorn antelope inhabits many high plateaus in the Basin. Not a true antelope, it is one of the swiftest running mammals. Pronghorns can be spotted in the sagebrush flats near Eagle Lake running at speeds of up to 40 miles an hour.

Failed Irrigation Project

The Bly Tunnel was bored in 1917 in an attempt to carry irrigation water from Eagle Lake to local farmers and ranchers. Flaws in the design, the 1930s droughts and the lack of financial backing all contributed to the failure of the tunnel project.

Early Eagle Lake Residents

One of the earliest homes in the region was the Spalding cabin, built on 120 acres homesteaded by Noah Spalding in 1880. While most of the original buildings are just faint remnants, the icehouse remains standing along with the restored cabin.

Gallatin House, built by Malvena Gallatin in 1913 after she was widowed, was the first residence built at Eagle Lake in the architecture style of summer homes of the period. Her husband, Albert Gallatin, was a pioneer in the development of hydroelectric energy and power transmission. Today, the house and grounds are part of the Ronald McDonald camp for children with serious illnesses.



The Hat Creek Region

The streams and rivers of the Hat Creek region offer a rich environment for many species of wildlife.

Look for bald eagles, osprey, many different songbirds and a great variety of waterfowl, both resident and migrant. The open meadows, plentiful wetlands and ponds attract many animals including black-tailed and mule deer, bats, beaver, badgers and Rocky Mountain elk.

Black bears inhabit areas with stands of mountain alder, willows, serviceberry and western chokecherry. Mountain lions are rarely seen and usually keep a distance from people - they would rather watch you than be seen by you.

The Hat Creek Rim

Uplifts in the Earth's crust broke its surface into huge blocks. As the surface stretched over millions of years, central blocks were dropped to form valleys between huge cliffs. These faulted valleys are called grabens. You can see the Hat Creek graben by stopping at the Hat Creek Rim Overlook on Highway 44. There are spectacular views of the 900 foot escarpment that forms the eastern side of the graben. Look for dozens of volcanic cones in the surrounding area that have risen along the faults and fissures created by the graben.

Early Trappers

The first known European Americans to enter the region were Hudson Bay Company trappers traveling through the area in the early 1800s.

These expeditions followed Indian trails along the Pit River, up Hat Creek and across the mountains to their destination, the Sacramento Valley. The rich resources in furs attracted trappers until as late as 1843.

Naming the Pit River and Pit River Indians

The arriving European Americans named the Pit River for the pits which the Ahjumawi Indians dug to trap large game animals.

In 1843, a company of pioneer residents from Shasta County set off to find a northern trail to Sacramento. While traveling down the river, Pierson B. Reading recorded the party's first introduction to a game pit:

"One of own company, Mr. McGhee, who was walking ahead a short distance, very suddenly disappeared. In a few minutes we saw the top of his head rising in the path, he having met with the misfortune of stepping into one of these traps." ---Pierson B. Reading, 1843

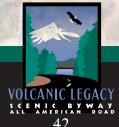
Geology

Through the mists of time, we can look back into the distant past of the Lassen Crossroads.

Many millions of years ago, island chains of volcanoes and fragments of wayward continents carried along by oceanic plates collided repeatedly with the western edge of the North American continent. The geologic interactions produced cycles of mountain building and volcanism that created the Sierra Nevada. The ancient mountains grew and eroded several times.

About 25 million years ago, in what is now eastern California and Nevada, a different volcanic process started. Uplift, stretching and, later, sagging of the continental interior was accompanied by explosive volcanism which laid down thick sheets of ash and lava. As the continental crust was stretched, this pulling apart produced fault lines. The down-dropping of the long, central blocks along these north-south trending faults created a basin and range landscape, which now extends into the Lassen Crossroads region.

Beginning about 12 million years ago in this area, a renewed episode of oceanic plate collision with the continental land mass built a new volcanic mountain range - the Cascades. Hundreds of volcanoes make up this range. In the big picture of geologic time, each volcano has been but a blink of an eye, but over many millennia they have built the great Cascade Range. A few much larger and long-lived volcanoes cap the range and form its crown - Lassen Peak is one of these.



In the last few million years, the geology of Lassen Crossroads has been dominated by repeated episodes of faulting and Cascadian and Basin and Range eruptions, which have mostly buried the older rocks of the Sierra Nevada.

Land of Volcanoes

For 400 million years, the Crossroads has been a zone of collisions between the North American continental plate and oceanic plates. In this naturally unstable combination, the diving of oceanic terrains under the continental plate created conditions for the formation of volcanoes.

In the Crossroads, you can see examples of the Earth's major volcanoes. The composition of a volcano's lava determines the mountain's shape.

Shield volcanoes, like Prospect Peak, are built up of thin, "runny" lavas repeatedly erupting from a single vent.

Composite or stratovolcanoes are composed of both volcanic ash and lava flows. Many eruptions of thicker, more viscous lavas over a long period build large, symmetrical cones like Mount Shasta.

Dome volcanoes have very thick lavas that cannot flow out and thus pile up over their vents. There are many dome volcanoes in the Crossroads, like Lassen Peak.

Cinder cones are small volcanoes that are piles of cinders erupted from a vent. They are often surrounded by lava flows erupted from the base of the cone.

We live on a dynamic, ever changing planet. Volcanic eruptions build mountains, but erosion relentlessly wears them down. The more fluid lavas build plateaus, but faulting chops them into linear, cliff-bound valleys.

Subway Cave

Journey underground on a 1/3 mile trail to see how basalt lava flows created and preserved subterranean, "tube-shaped" caves called lava tubes.

The Almanor Region Volcanic Vistas

Driving through the miles of irregular peaks near the town of Mineral and in the Warner Valley, one would hardly know that in this area there are deeply eroded remnants of long extinct Cascade Range volcanoes.

The Sierra Nevada

South of Lake Almanor rises the Sierra Nevada, an ancient mountain range of granitic, metamorphic and volcanic basement rocks. The entire Sierra Nevada continues to be uplifted to great heights by Basin and Range faulting. In the Crossroads area, these old basement rocks are visible among the more recent volcanic flows of Cascadian and Basin and Range origin.

Lake Almanor

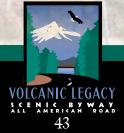
Sparkling Lake Almanor is one of the largest manmade lakes in California. The lake fills the Almanor graben, a down-dropped valley bounded by large faults. This valley was created by Basin and Rangetype faulting, which is still active today.

Encounter History

Over centuries, two very separate peoples were drawn to this country for its abundant game and rich resources. It was home to the Maidu Indian tribe. When the European settlers arrived, they found it equally rich for their own development.

Settlement

However, getting to this region was difficult. After traveling over 2,000 miles, settlers on the Lassen Trail had used up nearly all of their provisions. Many wagons had teams of starving oxen and were abandoned in disrepair. The emigrants themselves suffered terribly from scurvy.



The Emigrant Experience

"Thousands of dollars worth of property was buried at and near this place [Big Meadows] by persons who had lost all or most of their team and was unable to take it any farther...beside many nonessential and useless ones that was hawled here to be thrown away, breaking down the teams and causing distress and suffering beyond description. So much for the avaricious disposition of some men of the world. If they alone had suffered little pitty would have been due them but women and little children had to bear the greater hardships & suffering."

Simon Doyle, October 5, 1849

Before the Dam

"...this valley is over flowed by the rains of winter and the melting snow of spring, this making a broad but shallow mountain lake of from sixty to eighty miles in circumference. Ducks, swans and wild geese cover its waters and elk, black-tailed deer and antelope [are] numerous on the bottoms; while the tracks of the grizzly bear, the wolf, and the cougar [are] frequent on the hills..." Alonzo Delano, September 10, 1849

Discovering the Riches

Beginning in the 1820s, the Lassen Crossroads was traversed by those seeking California's riches.

Trappers seeking beaver pelts from the Sacramento River tributaries followed the Pit River and Hat Creek through the Crossroads from 1826 through 1843.

Gold! Beginning in 1848, emigrants flowed through the Crossroads. Many emigrants traveled over 2,000 miles on their journey to California's gold fields.

In 1849, J.G. Bruff describes a common scene along the Lassen Emigrant Trail:

"... overhill and plain, very stony and dusty. Passed 2 dead oxen and part of several broken wagons."

The Gold Rush and its aftermath forever changed the lives of the Crossroads indigenous people. Conflicts over resources led to their extermination or removal from their homeland to reservations.

Harvesting the Riches

Throughout the second half of the nineteenth century resource extraction dominated the relationship between people and the lands within the Crossroads.

Beginning in the late 1850s, water was harnessed to serve gold mining operations. In the southern reaches of the Crossroads, many ravines were washed to bedrock in search for gold.

Since the late 1800s, hydroelectric power generated from streams in the Crossroads has served electrical needs in California.

The forests were harvested for timber, lumber, shakes and fuel to serve the mines, California's growing towns and the agricultural industries' need for produce boxes.

By the 1860s, the meadows and valleys throughout the Crossroads provided summer forage for livestock. A few ranchers settled in the Crossroads' lush meadows and valleys.

Logging Provided Jobs

In 1912, the Red River Lumber Company once owned much of the surrounding Almanor Basin and employed many of the settlers who stayed here. Although these forests have been logged several times, magnificent fir and pine groves still cover the region. Many of the original logging roads now provide access for fishing, hiking, bird watching and other recreation activities.

Lake Almanor is Formed

One of the largest man-made lakes in California, Almanor was created in 1914 by a dam, which was built for hydroelectric purposes. A new and higher dam was constructed in 1927. Guy Earl, president of the Great Western Power Company, named the lake for his three daughters, Alice, Martha and Elinore. The lake still serves as the headwaters for the hydroelectric facilities of the Feather River.



APPENDIX C

Guidelines Applicable for Exterior Interpretive Signage and Design References

Interpretive signage should present professional representation of the Byway and include the logos of the participating partners. The following general guidelines should be used.

Mounting Height

Attractive, maintained, and well-designed signs are still a main source of information for most Byway travelers. Vertical kiosks should be installed at heavily visited stops and portals. Some have already been completed. When temporary signage for special events or seasons is required, it should be consistent with other Byway signs. These kiosks should contain standard information related to the various regions of the Byway, and be similar in graphic design elements.

Overlooks and interpretive stops should have low profile signs or small, low-to-ground signs at high elevation areas so as not to impact the viewsheds. Sign mounts should be consistent in the use of markers, wood, or stone to identify land features (lakes, peaks, etc.), and to mimic the historic and natural character of the various regions of the Byway. A mounting height of 24 to 30 inches with a 30 to 45 degree angle toward the viewers will be accessible to most visitors. The front edge height of low profile exhibits should be 32".

Site Compatibility

Make sure the sign is compatible with the site and the Forest Service Built Environment Image Guide (BEIG) and the Recreation Opportunity Spectrum classification as far as color, size, frame, etc. It should enhance the site, not detract from it.

Simplicity

The main body of text should be no more than two paragraphs of three or four short sentences. Keep

text to no more than 150 words (up to 250 words maximum if using captions and smaller fonts for secondary text or captions).

Text

The text should be written with the "3-30-3" rule in mind. You have 3 seconds to hook the visitor, 30 seconds if they are hooked, and 3 minutes if they are very interested. A sign should be designed and written so that it contains three levels of text with each level conveying a feeling of the theme, thus providing all visitors with an interpretive opportunity regardless of how long they stay. For example, a short title at the top of a sign might be the only text some visitors read, so it is important the learning objectives for the site be met to some degree even at the 3-second timeframe.

Titles

The titles of a sign or brochure should be a statement of a theme. For example, "Salvaging Blow down – A Treemendous Renewable Resource" sets the stage for talking about how trees are a renewable resource.

Typeface

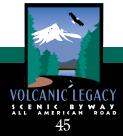
Use a sans, slab, or simple serif typeface, upper and lower case, with a minimum 18-point type size on signs. Titles: 72 – 60 point, Subtitles: 48 – 40 point, Body Text – 24 point, Captions: 18 point. (These sizes are suggested for the visually impaired by the National Park Service.)

Captions

Captions for graphics can be used to meet learning objectives and capture the theme; some visitors look only at graphics so the graphic and its caption should be a learning opportunity on its own.

Layout/Design

In general, signs should contain 1/3 graphics, 1/3 text, and 1/3 blank space.



Margins

Margins on text should be flush on the left side and ragged on the right.

Graphic Identity

By using logos, similar colors, and graphic images or icons, a look of consistency threads throughout the Byway.

Guidelines Applicable to All Media Accessibility

For specific guidelines on accessibility, see the Smithsonian Institution Accessibility Program, edited to conform to Forest Service Guidelines http://www.fs.fed.us/recreation/programs/accessibility/smithsonian.htm

Also, refer to the Americans with Disabilities Act and Architectural Barriers Act (ADA/ABA) Accessibility Guidelines www.access-board.gov

Color and Contrast

Use contrasting colors for text and background for ease of reading. Use the following websites to check your colors for those visually impaired or color blind. http://www.lighthouse.org/colorcontrast.htm http://www.vischeck.com/

Corporate Image

Consider using the Lassen National Forest fish logo.

APPENDIX D

Site Inventory and New Recommendations

Lake Alamanor Region, Susanville and Westwood Region, Eagle Lake and Great Basin Region, Hat Creek Region, Klamath Basin National Wildlife Refuge Complex, Lava Beds National Monument, WWII Valor in the Pacific National Monument Region.

The attached inventory is listed numerically to correspond with maps developed for each section, and for the entire byway map, and corresponds with the portions of the byway addressed in this plan. Appendix D begins on page 49. See other plans for sites outside these section areas.



APPFNDIX F

References and Citations

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- 2. Fairfield, Asa Merrill, Fairfield's Pioneer History of Lassen County, California



APPENDIX F

Acknowledgements

Members of the Project team who have provided input and expertise to complete this plan include:

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Federal Highways Administration



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VOLCANIC LEGACY SERICAN ROAD Interpretive Plan

Site Inventory and New Recommendations



"Do not try to satisfy your vanity by teaching a great many things. Awaken people's curiosity. It is enough to open minds: do not overload them. Put there just a spark.

If there is some good inflammable stuff, it will catch fire."

~Anatole France





VOLCANIC LEGACY

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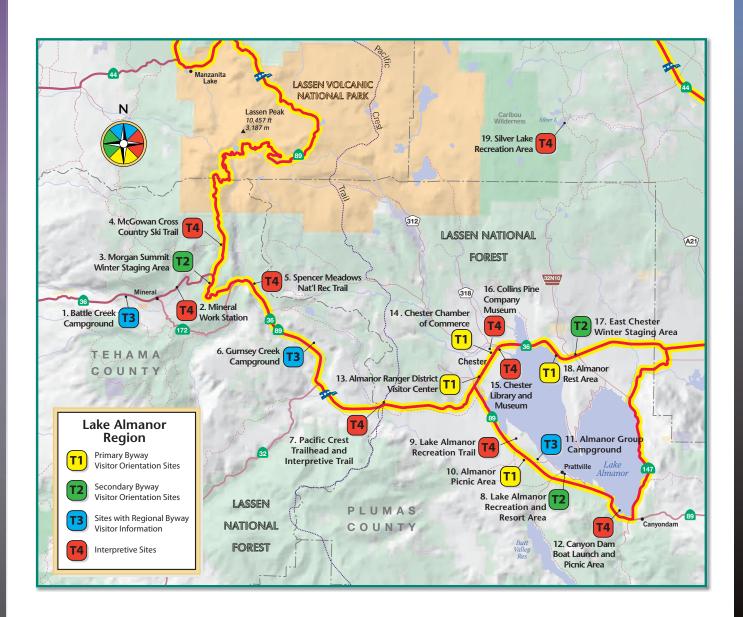
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1. BATTLE (REEK CAMPGROUND ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media: None.

Existing Facilities and Status:

Campground, restrooms, and small picnic area with parking.

Proposed Main Messages and Media:

- The Battle Creek watershed is part of the greater Sacramento River watershed.
- The watershed is important for water and fisheries including two fish species that are on the Threatened and Endangered list.
- Fishing regulations.
- Gateway to Lassen Volcanic National Park. Post a map of the Park for visitor orientation.
- Display another map showing nearby recreation trails on the Forest (Spencer Meadows, Heart Lake, and the Lassen Backcountry Byway).

Tier 3 Byway Information Site Themes:

- General visitor information about the Byway
- While staying at the Battle Creek Campground, there are many opportunities to explore the Forest and the Park on foot or by car.

Potential Partnerships:

Lassen Park Foundation

Objectives - As a result of this interpretive effort, visitors will:

- Understand 3 main points about the Battle Creek watershed.
- Learn about nearby recreation opportunities within the Forest and Park.
- Learn about the Volcanic Legacy Scenic Byway and Lassen Backcountry Trail, and how to obtain more detailed information.

Signage Recommendations:

1 interpretive sign

Estimated Cost:

1 sign/\$5,000

Current Land Manager and Responsible Party for Maintenance of Site

Lassen National Forest, Almanor Ranger District











2. MINERAL WORK CENTER ON HIGHWAY 36

Civilian Conservation Corps (CCC) era Compound

Current Main Messages for Site (Theme) and Current Interpretive Media:

None.

Existing Facilities and Status:

This CCC era compound is a working center for fire operations for the Forest Service. It was determined eligible for inclusion on the National Register of Historic Places.

Proposed Main Messages and Media:

Six interpretive panels possibly broken into the following topics:

- The evolution of the national forest system came into being with Gifford Pinchot and President Teddy Roosevelt who foresaw the importance of conserving watersheds and forest resources.
- CCC era of development on national forest lands was part of President Franklin Roosevelt's "New Deal" program to create jobs and construct trails and recreation facilities throughout the country.
- Agency decisions are guided by the use of science, monitoring, and public input regarding resource management and conservation.
- The Forest Service has a long history in the area and the land use that has occurred.
- The lifestyle and duties of the first forest rangers were very different then, but rangers still serve the same mission today.
- Harvey Abby, an early ranger, was the first to see the volcanic eruption of Lassen Peak in 1916 and walked to the top and back in one day.
- Additionally, an audio/video podcast about Forest Service history could be accessed from a web site and downloaded to add to this experience.

Tier 4 Interpretive Site Themes:

Human influence and timber extraction have contributed to the landscapes we know today.

Potential Partnerships:

Forest Service Capital Improvement funds, CCC organization

Objectives - As a result of this interpretive effort, visitors will:

- Understand the creation the National Forest system.
- Recognize how the Forest Service has managed America's forests.
- Support and appreciate Forest Service land management policies.
- Understand the importance of CCC programs to the State and the nation.







List of Graphic Needs:

- Map of Lassen National Forest
- Photos of positive land management examples.
- Historic CCC camp life photos and photos of CCC workers in the forest.

Notes/Design Instructions:

The Forest Service plans to develop a day use and picnic area at this site with restrooms and a self-guided trail. The signs/topics identified would be appropriate along the trail or at other locations within the compound.

Signage Recommendations:

6 signs, low profile, 24 x 36 inches in Hopewell style frames. Also audio/video podcasts featuring various aspects of Forest Service history.

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Almanor Ranger District



3. MORGAN SUMMIT WINTER STAGING AREA ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

A 4 panel kiosk is currently located at the site. Messages include: The Forest Service multiple use mission, winter survival, gateway to Lassen Volcanic National Park, and the different uses and regulations between the National Park Service and Forest Service.

Existing Facilities and Status:

This site serves as a winter staging area with a large parking lot, restrooms and a warming hut for snowmobile users. The site is also used as a year-round highway rest area. The present kiosk needs to be replaced with a larger one reflecting byway design guidelines.

Proposed Main Message for Site and Interpretive Media:

- Provide Tier 2 orientation to the Volcanic Legacy Scenic Byway.
- Information about summer and winter recreation opportunities on the Forest and Lassen Volcanic National Park.
- Seasonal maps of nearby summer and winter trails and other recreation sites on the Forest such as the Lassen Backcountry Byway.
- Maps of Lassen Volcanic National Park and Lassen National Forest.
- Wilderness survival and preparation for backcountry trips (both summer and winter).
- Issue a forest order prohibiting parking by commercial vehicles and any vehicle weighing over 24,000 pounds.

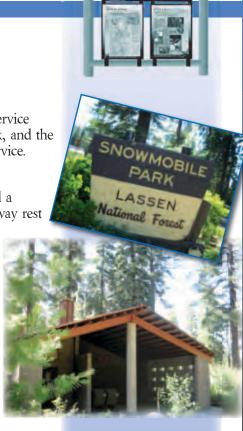
Tier 2 Byway Orientation Site Themes:

- Welcome to the Lassen National Forest and the gateway to Lassen Volcanic National Park
- Welcome to the Volcanic Legacy Scenic Byway and the Lassen Backcountry Byway.

Summer Storylines:

- Enjoy the many campgrounds, roads, and hiking trails in the Morgan Summit and Highway 36 area.
- Summer recreation takes many forms on the forest and requires knowing some wilderness survival skills, safety information, and Leave No Trace ethics. Pack in/pack out message.
- National forest lands provide natural resources for public use and consumption, but are managed differently than the adjacent national park. Be aware of what you can do within national forest vs. national park lands.
- Important regulatory differences between the national forest and national park.





TIER 2 Byway Interpretive Site

Winter Storylines:

- Winter recreation is a big sport on the forest with abundant trails and places for visitors to enjoy the snow.
- Be prepared for winter conditions, know the signs of hypothermia, avalanche conditions and how to survive overnight in the forest.
- The trails map provides information on winter recreation and the location of snowmobile and cross-country ski trails.

Potential Partnerships:

Snowmobiling and cross-country ski groups, local community groups in the Mineral area, State OHMVR Division

Objectives - As a result of this interpretive effort, visitors will:

- Be able to list wilderness travel and survival skills.
- Understand summer and winter recreation opportunities on the Forest and Park.

List of Graphic Needs:

One summer recreation map of the Morgan Summit/Highway 36 area, including the Lassen Backcountry Byway. The winter map already exists.

Notes/Design Instructions:

Kiosk needs to be reconstructed.

Signage Recommendations:

Replace current 4 panel kiosk with one that meets Byway design guidelines. Include Byway orientation information including welcome, maps, seasonal summer/winter recreation opportunities, safety and necessary regulation information.

Estimated Cost:

\$26,000

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Almanor Ranger District





4. MCGOWAN CROSS-COUNTRY SKI TRAIL ON HIGHWAY 89

Current Main Messages for Site (Theme) and Current Interpretive Media:

None.

Existing Facilities and Status:

None. This site is an undeveloped trailhead (it's a wide spot on Highway 89 that is plowed in the winter).

Proposed Main Messages and Media:

- Winter recreation and safety.
- A restroom and warming hut are needed with a ski trails map and Morgan Summit identified.

Tier 4 Byway Interpretive Site Themes:

- Winter recreation opportunities are abundant throughout this region of northern California.
- Winter recreation is a big sport on the Forest with abundant trails and places for visitors to enjoy the snow.
- Be prepared for winter conditions, know the signs of hypothermia, avalanche conditions and how to survive overnight in the forest.
- The winter recreation map provides information on winter safety and the location of snowmobile and cross-country ski trails.

Potential Partnerships:

Cross-country ski groups

Objectives - As a result of this interpretive effort, visitors will:

- List 3 ways to survive in a snowy winter environment.
- Learn about winter recreation opportunities on the Lassen National Forest.

List of Graphic Needs:

A winter recreation map currently exists.

Notes/Design Instructions:

A developed parking area, restroom and a small kiosk are needed at the site.

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Almanor Ranger District

TIER 4 Byway Interpretive Site

5. SPENCER MEADOWS NATIONAL RECREATION TRAIL ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media: None.

Existing Facilities and Status:

One trailhead kiosk

Proposed Main Messages and Media:

- Orientation to the Spencer Meadows National Recreation Trail with a trail brochure
- Abundant flowers in the springtime, wildlife, trees, many photo opportunities, and gateway to Lassen Volcanic National Park.



- Safety information and a map of the trail.
- This rich and diverse ecosystem offers many opportunities for viewing over 700 flowering plant and animal species, including insects.
- Understand the different regulations between the national forest and the national park.

Potential Partnerships:

Sierra Club, American Hiking Society, Lassen Park Foundation

Objectives - As a result of this interpretive effort, visitors will:

- Recognize three ways that Spencer Meadows is used by people today.
- Realize the difference between national forest and national park use policies.

List of Graphic Needs:

- Trail brochure and map
- Prepare a list of the most likely plants and animals hikers may encounter on the trail along with select photos in the brochure.

Signage Recommendations:

Replace the existing sign structure with a covered roof two panel kiosk

Estimated Cost

\$12,000 for the kiosk and \$20,000 for other trail improvements

Current Land Manager and Responsible Party for Maintenance of Site

Almanor Ranger District, Lassen National Forest







6. GURNSEY CREEK CAMPGROUND ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

None currently at this site.

Existing Facilities and Status:

Family campground and group campground.

Proposed Main Messages and Media:

Tier 3 Byway information along with a map of the area.

Tier 3 Byway Information Site Themes:

- General visitor orientation to the Byway.
- Information about nearby attractions in the Forest and Lassen Volcanic National Park.
- Information about community services.
- The watersheds originating from the Sierra Nevada and the Cascade ranges sustain vast mountain forests, wildlife populations, wetlands, agriculture, drinking water and recreation for northern California residents making this region a scenic and a high quality place to live.
- Where water comes from, where it goes, and why it is important for humans, plants and wildlife.
- Beavers play an important role in maintaining a healthy watershed.

Objectives - As a result of this interpretive effort, visitors will:

Know why the watershed is important

List of Graphic Needs:

- Map of this area of the Byway along with a map of Lassen Volcanic National Park and immediate Forest area around the campground.
- Graphic illustration or image of watershed area.
- Beaver structures near this site.

Signage Recommendations:

Two interpretive signs

Current Land Manager and Responsible Party for Maintenance of Site

Lassen National Forest, Almanor Ranger District









7. PACIFIC CREST TRAILHEAD AND INTERPRETIVE TRAIL ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

Collins Pine Company interpretive trail brochure is available at the trailhead, the Chester/Lake Almanor Chamber of Commerce and some Chester motels.

Existing Facilities and Status:

Informal parking area off Highway 36 at the crossing of the Pacific Crest Trail

Proposed Main Messages and Media:

- Collins Pines Park 40 provides an opportunity for people to be educated about forest ecology. One side of the Pacific Crest Trail shows what forests looked like prior to European settlement and the other side shows the heavy, stagnated fir thickets that developed as a result of the exclusion of fire.
- Collins Pines Park 40 interpretive trail signs and trail guide about sustainable forest management and the history of forests in this area.
- Possible construction of a kiosk with information about the Pacific Crest Trail, Leave No Trace, backcountry safety, and a trail map.

Tier 4 Byway Interpretive Site Themes:

- Forest history and ecology
- Sustainable forest management by a private forestry company
- Leave No Trace is easy if you know how
- Backcountry safety tips
- Information about the Pacific Crest Trail

Potential Partnerships:

Leave No Trace, Project Learning Tree, Pacific Crest Trail Association, Collins Pine Company

List of Graphic Needs:

- Orientation map of the Pacific Crest Trail in both directions.
- Leave No Trace graphic.

Signage Recommendations:

If a kiosk is not constructed, consider installing 2 sign panels (one in each direction of the Pacific Crest Trail)

Estimated Cost: 2 signs/\$7,000

Other Recommendations:

Gravel the parking lot. Install 2 approach signs on Highway 36 as the site is easy to miss unless you know where it is.

Current Land Manager and Responsible Party for Maintenance of Site:

Located on Collins Pine Company property







8. THE LAKE ALMANOR RECREATION AND RESORT AREA ON HIGHWAY 89

Current Main Messages for Site (Theme) and Current Interpretive Media:

None at the resort areas on the east and west sides of the lake. The Lake Almanor Trail has some interpretive signage. The Lake Almanor Recreation and Resort Area has facilities for golf, boating, fishing, swimming, tennis, camping, hiking, and bicycling, etc. Membership only areas are available within the resorts for interpretative signing. There are two Forest Service Campgrounds, one beach/picnic area, one boat launch, and an amphitheater. The campgrounds are near the northern terminus of the paved, 11 mile Lake Almanor Recreation Trail. The Almanor boat launch and parking area were reconstructed and opened to the public in 2009. Site plans exist to reconstruct the Forest Service campgrounds. The recently railbanked Almanor Railroad between Chester and Clear Creek Junction will soon become a 12 mile public trail, managed by Collins Pine Company in Chester.

Proposed Main Messages and Media:

- Visitor information about the Lake Almanor region and what there is to see and do.
- Information about community services and special events in Chester, Westwood, and Susanville.
- Safety messages.
- Forest Service regulations.
- Bears are opportunistic and feed ravenously over summer months in preparation for winter hibernation; campgrounds hold a special attraction for them.
- Be bear aware and store food properly.
- Forest travel management information.

Tier 2 Byway Orientation Site Themes:

- Visitor orientation to the Almanor region of the Byway.
- There is a variety of recreation opportunities within the Lake Almanor area (the Almanor Recreation Trail, Bizz Johnson Trail, the soon-to-be Almanor Rail Trail, Lassen Backcountry Byway, boating, fishing, horseback riding, and resort facilities, etc.)
- Community and special event information about Chester, the Peninsula, and Westwood.
- Orientation information and a map of Lassen Volcanic National Park.
- Camper safety information be bear aware, fire safety.
- Nature study through amphitheater "campfire" programs, guided walks, and environmental education activities.
- Discover the natural world that surrounds the recreation area.
- Stay on designated roads and trails to protect forest resources.



TIER 2 Byway

Interpretive Site



Potential Partnerships:

PG&E, Scenic Byway grants, Plumas County/Chester schools, Forest Service Capital Improvement funds

Objectives - As a result of this interpretive effort, visitors will:

- Have a greater appreciation for the recreation opportunities that the area offers.
- Learn more about the history, plants and wildlife in the area.
- Learn about local community events and services.

List of Graphic Needs:

- General area map of Lake Almanor including the location of: roads, developed recreation sites and communities.
- Maps of the Lassen Backcountry Byway, Almanor Recreation Trail, Bizz
 Johnson National Recreation Trail, soon-to-be Almanor Rail Trail, and Lassen
 Volcanic National Park.

Notes/Design Instructions:

Forest Service campgrounds are proposed for reconstruction under the PG&E FERC relicensing process. A conceptual design of the new facilities has been prepared, and funding for phase 1 of the reconstruction has been obtained. An additional 4-6 phases will be needed to fully reconstruct the campgrounds.

Signage Recommendations:

Map panel of the Almanor area.

Estimated Cost:

To be determined

Current Land Manager and Responsible Party for Maintenance of Site Lassen National Forest, Almanor Ranger District







TIER 4 Byway Interpretive Site

9. LAKE ALMANOR RECREATION TRAIL ON HIGHWAY 89

Current Main Messages for Site (Theme) and Current Interpretive Media:

Current programs and signs describe birds in the area and bird migrations, wildlife, and watershed resources.

Existing Facilities and Status:

There is an 11 mile, 10 foot wide paved hiking and biking trail along the west shore of the lake. There is an informal parking area off Highway 89 at the northern terminus of the trail, but no other facilities are provided. There is one mid-trail parking area at Dyer View with a restroom, kiosk, picnic tables and an interpretive sign. The southern terminus of the trail is located at the Canyon Dam boat launch, which has a large parking area, restrooms, interpretive signs, and picnic tables.

Proposed Main Messages and Media:

- Develop interpretive signs that tell stories of native Mountain Maidu use of the Big Meadows area and their way of life. There were once nine Mountain Maidu villages in Big Meadows and their traditional land stewardship practices continue to this day.
- Original vision and story that led to the creation of Lake Almanor for hydropower and agriculture, now recreation based. Use interpretive signs.
- Watershed story, and bird migratory pathways. Develop as a tactile exhibit.

Tier 4 Byway Interpretive Site Themes:

- The native Maidu originally occupied the Big Meadows area, relying upon the rich resources to support their way of life for thousands of years.
- One of the largest man-made lakes in California, Almanor was created in 1914 by a dam in the Feather River to generate hydroelectricity. It is named for the three daughters, Alice, Martha and Elinore, of the president of Great Western Power Company, Guy Earl.

Potential Partnerships:

Mountain Maidu, PG&E, Almanor Basin Watershed Advisory Committee

Objectives - As a result of this interpretive effort, visitors will:

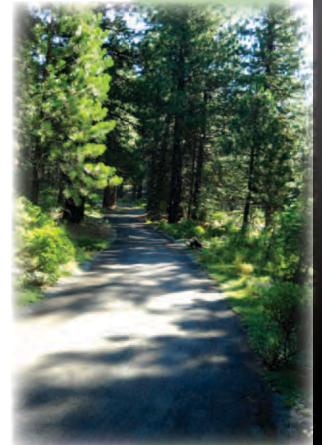
Learn about the Mountain Maidu, the creation of Lake Almanor for hydropower, and native birds.

List of Graphic Needs:

Historic photos of Mountain Maidu, Big Meadows before the dam, and during construction of the dam.

Notes/Design Instructions:

Develop a tactile exhibit to tell the watershed story and bird migrations.



Signage Recommendations:
Audio of Mountain Maidu songs with interpretive signs.

Estimated Cost:

\$7,500

Current Land Manager and Responsible Party for Maintenance of Site: Lassen National Forest, Almanor Ranger District



10. ALMANOR PICNIC AREA ON HIGHWAY 89

Current Main Messages for Site (Theme) and Current Interpretive Media:

Recreation, sensitive plants, and how driving vehicles off road can damage them. Information on closed areas to protect natural resources.

Existing Facilities and Status:

Currently, there are two SST restrooms, a picnic area, paved parking lot, and one interpretive sign near a vernal pool. The parking lot needs to be enlarged and repaved. This site could be used as a winter staging area for snowmobilers, snowshoers, and cross-country skiers.

Proposed Main Messages and Media:

- Construct a Tier 1 Byway orientation portal at the southern end of the Byway. Include community information about Chester, the Almanor Peninsula, and Westwood along with descriptions of nearby recreation opportunities and facilities.
- There are numerous recreation opportunities along the Volcanic Legacy Scenic Byway. Visitors can hike or bike along the Lake Almanor or Eagle Lake Trails, cross-country ski, fish, hunt, camp, swim or escape to the backcountry in Lassen Volcanic National Park. In the evening, visitors can stroll through community art galleries and shops before sampling a variety of local cuisine and fine wines.
- Winter recreation opportunities are abundant throughout this region of northern California.
 Post local maps for specific locations and information on snowmobiling, cross-country skiing, and snowshoe interpretive programs.
- List local events and services in Chester and Westwood.
- Display Forest travel management information.

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse, scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross-country skiing and snowmobiling.
 - » Finding your way around the Lake Almanor region is easy with a variety of recreation activities for everyone.
 - » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.



Potential Partnerships:

CALTRANS, PG&E, State OHMVR Division

Objectives - As a result of this interpretive effort, visitors will:

- Obtain general recreation and community information about the Lake Almanor region of the Byway.
- Gain a better understanding about why some areas are closed to vehicle or pedestrian traffic in order to protect sensitive plant or animal species.

Notes/Design Instructions:

A final site plan is needed to determine the location of the picnic area, pads,

and information kiosk. A current schematic of the site exists, but it may need to be modified due to proposed snowmobile/winter use.

Signage Recommendations:

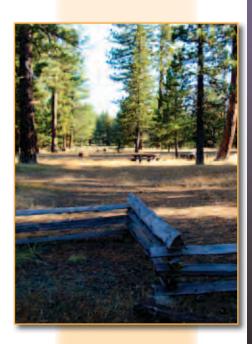
Tier 1 Byway Portal kiosk and panels with a map of the Byway, map of the Almanor area, recreation opportunities in the area, and interpretive messages that are site specific.

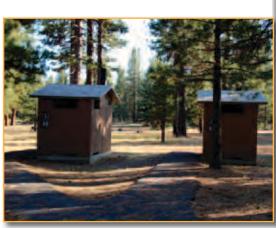
Estimated Cost:

\$42,000 for the kiosk and interpretive signs.

Current Land Manager and Responsible Party for Maintenance of Site Almanor Ranger District, Lassen National Forest









11. ALMANOR GROUP CAMPGROUND ON HIGHWAY 89

Current Main Messages for Site (Theme) and Current Interpretive Media: None

Existing Facilities and Status:

None exist. Construction of the group and family campground is planned for completion in 2012.

Proposed Main Messages and Media:

- General recreation information about the Lake Almanor area and what there is to see and do locally.
- Lake Almanor has a diverse population of wildlife including many migratory birds that depend on the area for survival during their spring and fall migration.
- Bears are opportunistic and feed ravenously over summer months in preparation for winter hibernation; campgrounds hold a special attraction for them.
- Be bear aware and store food properly.
- Forest travel management information.

Tier 3 Byway Information Site Themes:

- Recreation orientation to the Lake Almanor area via maps, photos and recreation opportunity guides.
- General visitor orientation to the Byway.

Potential Partnerships:

PG&E

Objectives - As a result of this interpretive effort, visitors will:

Learn about the many recreation opportunities in the Lake Almanor region and nearby community services.

List of Graphic Needs:

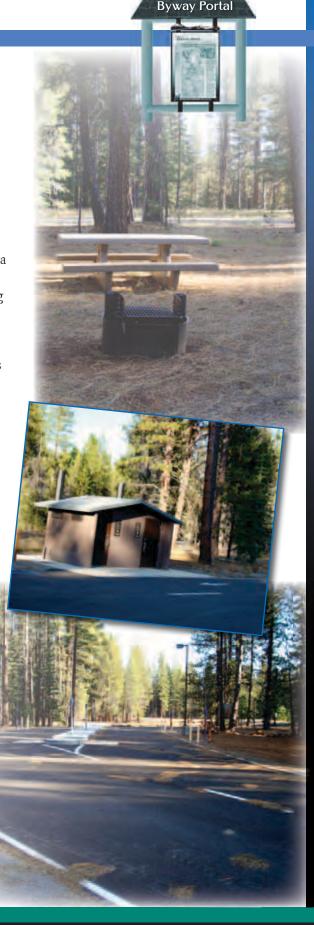
- Illustration of Pacific flyway
- Photos of local wildlife

Signage Recommendations:

Map panel of the Almanor area. Estimated Cost:

Current Land Manager and Responsible Party for Maintenance of Site

Lassen National Forest, Almanor Ranger District



12. CANYON DAM BOAT LAUNCH AND PICNIC AREA ON HIGHWAY 89

Current Main Messages for Site (Theme) and Current Interpretive Media:

One 3-panel interpretive kiosk with one sign on birds. One panel for regulatory information on boating and fishing.

Existing Facilities and Status:

This site is a day use picnic area with swimming and fishing access, boat launch, two restrooms, two large parking areas, and two kiosks. It is also the southern terminus of the paved 11 mile Lake Almanor Recreation Trail. The boat launch will be reconstructed in 2011-2012.

Proposed Main Messages and Media:

- Migratory birds and other animals likely to be seen at Lake Almanor.
- Orientation map of the paved trail and recreation facilities along the trail.

Tier 4 Byway Interpretive Site Themes:

- Learn about native birds and wildlife.
- Become familiar with the recreation opportunities and facilities in the Lake Almanor area.

Potential Partnerships:

Lassen Park Foundation

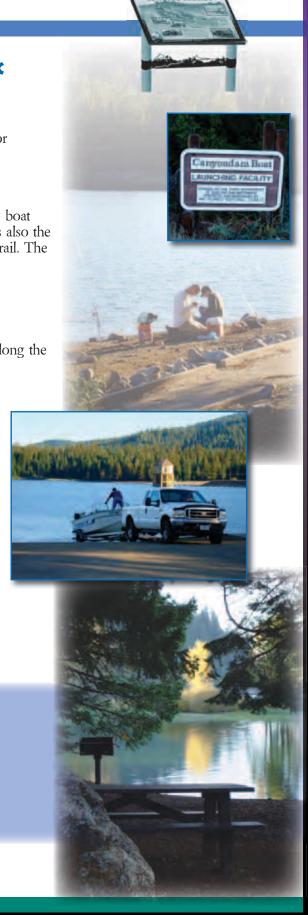
Other Recommendations:

Most picnic tables are poorly placed for use and need to be on a wide, level pad. Many tables are old and need replacement or refurbishing. Create at least one accessible picnic spot for handicapped access.

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Almanor Ranger District





TIER 4 Byway Interpretive Site

13. ALMANOR RANGER DISTRICT VISITOR CENTER ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

Orientation and information about the Lake Almanor region, recreation opportunities, wildlife ecology, history of the area and Native American cultures.

Existing Facilities and Status:

The District office provides visitor information, a large tactile map display of the region and taxidermied wildlife mounts. A staffed information desk is open to the public during normal work hours.

Proposed Main Messages and Media:

- Tier 1 orientation to the Volcanic Legacy Scenic Byway via a map of the Byway and brochures.
- Recreation orientation to the Lake Almanor region via maps, photos, and recreation opportunity guides.
- Forest travel management information.

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross-country skiing and snowmobiling. At the end of a busy day, visitors can stroll through local art galleries and shops, and then sample the area's finest cuisine in the evening.
 - » There is a variety of recreation activities for everyone in the Lake Almanor region.
 - » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.

Potential Partnerships:

Chester Chamber of Commerce, Plumas County Visitors Bureau

Objectives - As a result of this interpretive effort, visitors will:

- Learn how to find campgrounds, hiking/ biking trails, fishing streams, ski trails, and snowmobile areas.
- Become familiar with the route of the Volcanic Legacy Scenic Byway and know where to obtain additional information.







List of Graphic Needs:

- Map of the region's recreation sites, trails, and the Lassen Backcountry Byway along with select photos.
- Maps and a brochure providing basic information about the Volcanic Legacy Scenic Byway.

Signage Recommendations:

- Inside lobby area: Interactive graphic signage that is hands on showing the location of campgrounds, trails, the Lassen Backcountry Byway and the Volcanic Legacy Scenic Byway (etc.)
- Tier 1 Byway Portal Kiosk A lighted, exterior kiosk with signage containing seasonal information panels and orientation maps about the Almanor region and the Byway.

Estimated Cost:

Byway Portal site design and construction: \$30,000 Interpretive panel design, fabrication and installation: \$12,000

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Almanor Ranger District



14. CHESTER CHAMBER OF COMMERCE OFFICE ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

The Chamber of Commerce is located in a storefront brick building; t-shirts and real estate information greet the traveler.

Proposed Main Messages and Media:

If there is space, a Tier 1 Byway orientation portal could be located at this site. Additional exhibits should inform visitors about local recreation sites, amenities and businesses. Maintain regular business hours for service or make use of a Tier 1 Byway Portal kiosk to expand self-service information.

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse, scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross-country skiing and snowmobiling. At the end of a busy day, visitors can stroll through local art galleries and stores, and then sample the area's finest cuisine in the evening.
 - » There is a variety of recreation activities for everyone in the Lake Almanor region.
 - » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.

Signage Recommendations:

Tier 1 Byway Portal design guidelines

Estimated Cost:

Byway Portal site design and construction: \$30,000 Interpretive panel design, fabrication and installation: \$12,000

Other Recommendations:

Consider developing an interpretive walking trail that connects this site to others in town (Chester Library/Museum and the Collins

Pine Museum). Additional interpretive signs and benches would complement the walkway. This site would benefit from a landscape plan to incorporate the Byway Portal into the site and to develop a parking area away from the building entrance.

Current Land Manager and Responsible Party for Maintenance of Site

Town of Chester







TIER 4 Byway Interpretive Site

15. CHESTER LIBRARY AND MUSEUM ON HIGHWAY 36

Current Main Messages and Current Interpretive Media:

The library has an interior exhibit room, which serves as the Chester Museum with various types of displays, extensive collections and good use of creativity in the presentation of mixed topics.

The key messages are: logging history, community life in a timber town, rescue of the Dinky railroad engine, and Native American history. Provide interpretive messages in the display cases along with numerous historic artifacts.

Existing Facilities and Status:

The Chester Library/Museum has a warm community feel to it. The log cabin structure has its own history with some building features that hail back to earlier logging days. The entrance leads directly into the library, where a receptionist/librarian directs visitors. The museum is in a separate front room. Several local historians and dedicated community leaders worked to create the museum.



Proposed Main Messages and Media:

This site could become a Byway attraction in Chester. The library, museum room and the Feather River are powerful draws for Byway travelers, but most outsiders do not know they exist. Maintain the focus at this site on the local heritage of the area and the community.

Tier 4 Byway Interpretive Site Themes:

- Mountain Maidu life in the Almanor region
- Early settlement of Chester
- Logging history and logging life in Chester

Potential Partnerships:

Chester service organizations, Mountain Maidu, Collins Pine Company, Plumas County

Objectives - As a result of this interpretive effort, visitors will:

- Understand how the community of Chester has evolved over the past 200 years from the time the Mountain Maidu called this area home to present.
- Learn about logging history and how the industry has also changed over time.

List of Graphic Needs:

The museum would benefit from an updated exhibit plan to best showcase the community's rich collection of historic artifacts.

Notes/Design Instructions:

A Byway Portal Tier 1 Station should be located at the Chester Chamber of Commerce Office and linked to this site via a connecting walkway.

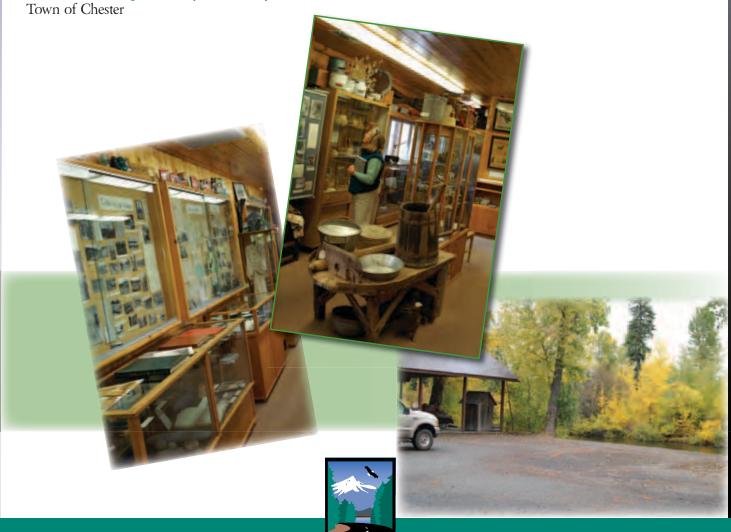
Signage Recommendations:

Consider interpretive panels near the river and along a pathway to the Collins Pine Company museum.

Other Recommendations:

- This site would benefit from a landscape plan to rehabilitate the river bank. Pull vehicle parking back from the bank and develop an inviting plaza with seating, picnic tables, and a walkway that travels down the side street and connects with the Collins Pine Museum.
- Change the function of the carport area on the end of the building as part of the plaza development. The carport could be remodeled for use as an inviting picnic area or location for outdoor community presentations, programs, or living history demonstrations.
- Consider developing the yard behind library as an area for historic structures, equipment or
 household items from yesteryear (like the outhouse currently in the carport and a small cabin
 with windows that visitors could look into and see how a logger's family lived at the turn of
 the century).
- The location of a coffee cart or small coffee business nearby would also encourage visitors to linger and learn.

Current Land Manager and Responsible Party for Maintenance of Site



16. COLLINS PINE COMPANY MUSEUM OFF HIGHWAY 36 IN CHESTER

Current Main Messages for Site (Theme) and Current Interpretive Media:

The museum showcases the resource based economy of Chester and provides visitor education on sustainable forest management and how trees are converted to lumber products.

Existing Facilities and Status:

Collins Museum resembles a western sawmill with exhibits. The interior is spectacular in types of wood use and architecture. Exhibits in the museum increase the visitor's understanding about how trees are made into lumber and what products come from different parts of the tree. Historic information about the Collins Pine Mill and flat panels on sustainable forest management practices are displayed. An outside trail provides interpretive information about the various equipment used in logging and milling operations.

Proposed Main Messages and Media:

- The predominant theme for this site should remain Collins Pine forest management and how trees are converted to lumber.
- A small exhibit plan is recommended for additional interior exhibits.
- Other exhibits and logging equipment are located on the grounds outside the museum.
- A nature trail starts at the back end of Chester Park, and makes a loop through the area between the Feather River and Stover Creek. A trail guide exists for the nature trail. There is another trail that crosses Stover Creek and provides access to the Chester Library/Museum.
- Consider installing an exterior kiosk at the museum that tells the Collins Pine history and logging related to community life both past and present.

Tier 4 Byway Interpretive Site Themes:

- Collins Pine Company uses a variety of management activities to manage their forest lands for sustainable harvests and a variety of wood types for lumber products.
- Wood products continue to be desirable for construction homes, furniture, instruments, and multiple other uses by people today.

Potential Partnerships:

Collins Pine Museum, Collins Pine Nature Trail, Chester Library/Museum

Objectives - As a result of this interpretive effort, visitors will:

- Understand important aspects of private forest management.
- Recognize Collins Pine's contributions to Chester.
- Learn about research-based forest management of a private timber company.

Current Land Manager and Responsible Party or Maintenance of Site:

Collins Pine Company





TIER 4 Byway





17. EAST CHESTER WINTER STAGING AREA ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

A 3-panel kiosk is currently located at the site. Messages include: Winter recreation opportunities on the forest, winter survival, and Forest Service regulations.

Existing Facilities and Status:

This site serves as a winter staging area with a large parking lot and restroom for snowmobile users. The site is also used as a year–round highway rest area. The parking lot has been used in the summer for a concession-operated go cart track.

Proposed Main Message for Site and Interpretive Media:

- Provide Tier 2 orientation to the Volcanic Legacy Scenic Byway.
- Information about summer and winter recreation opportunities on the Forest.
- Seasonal maps of nearby summer and winter trails and other recreation sites on the Forest.
- Wilderness survival and preparation for backcountry trips (both summer and winter).
- Forest travel management information.

Tier 2 Byway Orientation Site Themes:

- Welcome to the Lassen National Forest.
- Welcome to the Volcanic Legacy Scenic Byway.
- Community information.

Summer Storylines:

- Enjoy the many campgrounds, roads, and hiking trails in the Forest.
- Summer recreation takes many forms on the forest and requires knowing some wilderness survival skills, safety information, and Leave No Trace ethics. Pack in/pack out message.
- Be bear aware.
- National forest lands provide natural resources for public use and consumption.
- Seasonal information about community events and services.

Winter Storylines:

- Winter recreation is a big sport on the Forest with abundant trails and places for visitors to enjoy the snow.
- Be prepared for winter conditions, know the signs of hypothermia, avalanche conditions and how to survive overnight in the forest.
- The trails map provides information on winter recreation and the location of snowmobile and cross-country ski trails.
- Information about community services (motels, restaurants, etc.)



TIER 2 Byway

Interpretive Site

Potential Partnerships:

Plumas County, local snowmobiling groups, State OHMVR Division

Objectives - As a result of this interpretive effort, visitors will:

Be able to list wilderness travel and winter survival skills. Understand summer and winter recreation opportunities on the Forest.

List of Graphic Needs:

One summer recreation map of the Almanor area. The winter map already exists.

Signage Recommendations:

Include Byway orientation information including welcome, maps, seasonal summer/winter recreation opportunities, safety and any necessary regulation information.

Other Recommendations:

Issue a forest order prohibiting parking by commercial vehicles and any vehicle weighing over 24,000 pounds.

Current Land Manager and Responsible Party for Maintenance of Site:

Plumas County





18. ALMANOR REST AREA ON HIGHWAY 36

(Scenic overlook of Lake Almanor)

Current Main Messages and Current Interpretive Media:

Orientation to area and map of California, water safety, waterfowl identification

Existing Facilities and Status:

This is a CALTRANS rest area with restrooms, two-sided information kiosk (4 panels), large parking area, and plaza for walking and picnicking. The views overlooking Lake Almanor to the surrounding mountains and Lassen Volcanic National Park are spectacular.

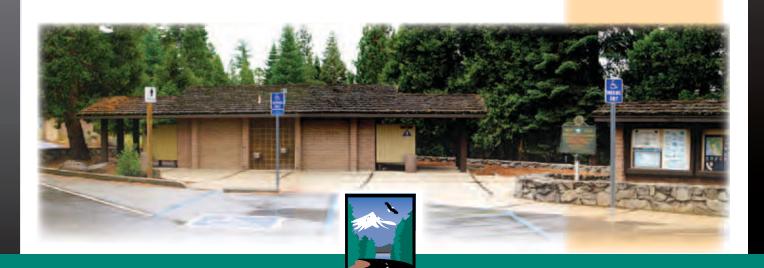
Proposed Main Messages and Media:

- Hydroelectric story of the lake and benefits from hydropower generation.
- Profile of the distant peaks and other significant geographic features interpretive signs and two spotting scopes (one accessible).

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse, scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross-country skiing and snowmobiling. At the end of a busy day, visitors can stroll through local art galleries and boutiques, and then sample the area's finest cuisine in the evening.
 - » There is a variety of recreation activities for everyone in the Lake Almanor region.
 - » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.





Storylines:

- The watersheds originating from the Sierra Nevada and the Cascade ranges sustain vast mountain forests, wildlife populations, and wetlands.
- The Mountain Maidu Indians occupied Big Meadows for centuries before the arrival of European settlers.
- Water from these mountains serves California residents in many forms: hydropower generation, recreation, agriculture and drinking water.
- Water from the Feather River feeds powerhouses along the river to create hydropower.
- What do visitors see in the view? Identification of important features in the viewshed.
- Change in the landscape from Big Meadows to Lake Almanor.

Potential Partnerships:

CALTRANS, Scenic Byway grants, PG&E.

Objectives - As a result of this interpretive effort, visitors will:

- Know where to find campgrounds, boat launches, hiking trails, fishing streams, and bike trails in the Almanor area.
- Become familiar with the route of the Volcanic Legacy Scenic Byway and know where to get additional information.

 Learn about community facilities and special events in Chester and Westwood.

List of Graphic Needs:

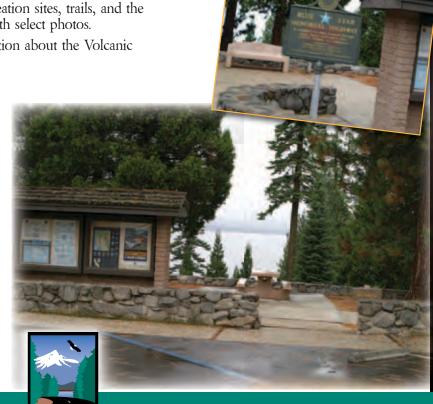
- Map panel of the Almanor area recreation sites, trails, and the Lassen Backcountry Byway along with select photos.
- Map panel providing visitor information about the Volcanic Legacy Scenic Byway.

Estimated Cost:

Interpretive panel and Almanor area map panel design, fabrication and installation: \$12,000

Current Land Manager and Responsible Party for Maintenance of Site:

California Department of Transportation



19. SILVER LAKE RECREATION AREA OFF HIGHWAYS 36 AND 44

Current Main Messages for Site (Theme) and Current Interpretive Media: None.

Existing Facilities and Status:

This recreation area consists of two campgrounds, and two picnic areas. The setting is very scenic. High numbers of eagles and osprey are visible. Fishing is major activity with smaller boats, canoes and kayakers. The site accesses the south entrance into the Caribou Wilderness. The lake is also a destination for snowmobilers.

Silver Lake Cabin is an old historic, ranger cabin. There is public interest in restoring it as a year-round public rental. The forest may eliminate one campground due to low occupancy. This site needs a design plan to better define road access, parking areas, picnic areas and proposed development around the old ranger cabin. It would also benefit from a landscape plan to create scenic views through selective tree thinning.

Proposed Main Messages and Media:

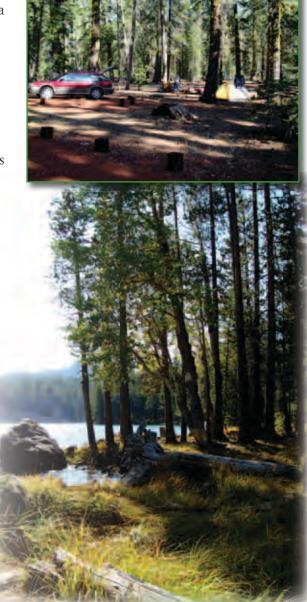
- Natural and geologic features
- Bears are opportunistic and feed ravenously over summer months in preparation for winter hibernation; campgrounds hold a special attraction for them.
- Be bear aware and store food properly.
- Animals and plants depend upon on this mountain lake
- Information about the Caribou Wilderness and wilderness regulations
- Forest travel management information

Tier 4 Byway Interpretive Site Themes:

Animals adapt to survive the harsh mountain winters using one or more of three basic strategies---hibernate, insulate, or migrate.

- Specific animals use various survival strategies to survive the extreme temperatures (identify specific species in exhibit design).
- When bears and people meet, it can frighten both parties.
- Geology of the area.
- Wilderness management.





Storylines:

- » Deer and black bear inhabit much of the wild country in this landscape.
- » How to avoid interactions with bears. What to do if you encounter a bear.
- » Maintain a clean campsite.
- » Geology of Silver Lake and the Caribou Wilderness.
- » Why Wildernesses are different than other managed forest land.

Potential Partnerships:

Potential partners include State OHMVR Division, Recreation Trails Program, CALTRANS Scenic Byway grants, Lassen Land and Trails Trust, Lassen Park Foundation, and volunteers from various snowmobile clubs and cross-country ski groups

Objectives - As a result of this interpretive effort, visitors will:

- Understand the geologic features of this site.
- Identify several strategies animals use to survive.
- Be bear aware.
- Learn about Wilderness management and regulations.

Notes/Design Instructions:

- Forest needs to decide how to manage this site and facilities needed.
- Decision on campground closure should be completed.
- A site plan of the area is needed to reconstruct the facilities and relocate the roads.
- The historic cabin needs to be evaluated for restoration.
- The site plan for the cabin area should define areas for parking, outdoor BBQ and dining, a hand carry boat launch and beach site, restroom, water, and perhaps a volleyball/badminton play area. A landscape plan for the

cabin is also desired to enhance the views and to address forest health issues.

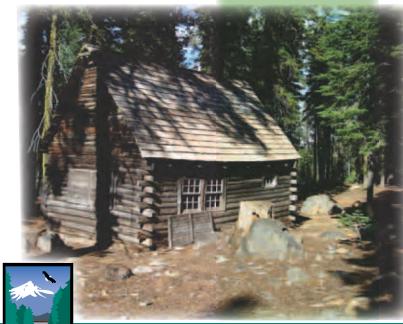
 Develop a capital improvement plan to identify funding strategies and other partnerships to invest in the site.

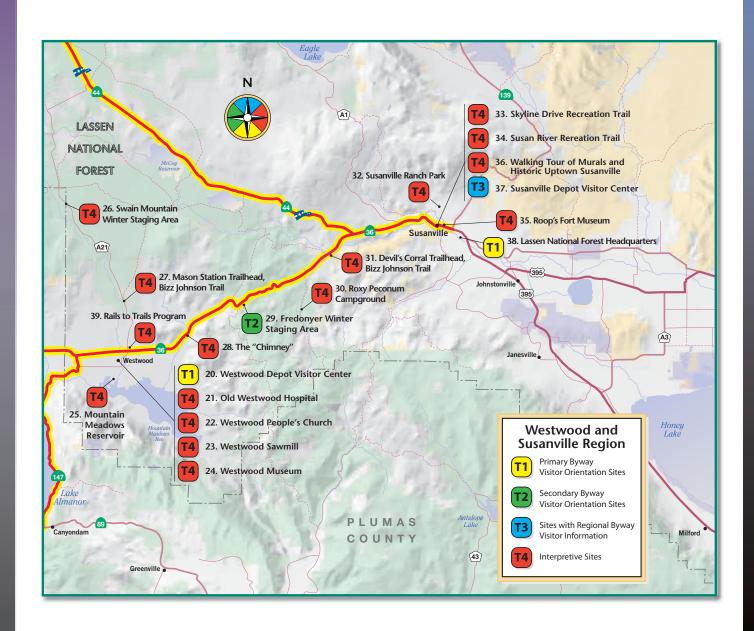
Estimated Cost:

TBD

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Almanor Ranger District





20. WESTWOOD DEPOT VISITOR CENTER

(Depot is on Third Street)

Current Main Messages for Site (Theme) and Current Interpretive Media:

Westwood's logging history, Bizz Johnson National Recreation Trail, local artist exhibits.

Existing Facilities and Status:

Located in a replica of the historic Westwood Railroad Depot, this new facility provides visitor information about the Westwood area and serves as the Lassen County Visitor Information Center (LCVIC). The Westwood Chamber leases the space in the Depot. Visitors to the Depot average about 20 per day. Exhibit space on the first floor is plentiful while the upstairs provides office space. A porch wraps around the building with exposure in the back to the railroad. Robber's Creek is located on the other side of the rail line and connects to Mountain Meadows Reservoir. The creek is well known for viewing willow flycatcher and other waterfowl.

Exhibits in the building are mostly historical with some temporary displays. Exhibit decisions are made by the LCVIC. Local artists' works are also displayed. A small concrete building (approximately 12 foot x 14 foot x 9 foot tall) sits on a plaza area in front of the Depot drawing the traveler's eye and curiosity. This is the last remains of a bank vault that once existed on the site, but has no historical significance. The Depot address is

Lassen County Visitors Center Westwood Station 462-885 Third Street Westwood, CA 96137

Proposed Main Messages and Media:

- The Depot provides an outstanding opportunity for Westwood and the LCVIC to provide visitor information, and a local destination place for special events and recreation opportunities. Onsite recommendations include:
- Tier 1 Byway portal information that gives hours of Depot operation, a welcome and map of the area, and announcements about Westwood events. Post information and a map of the Bizz Johnson Trail. Provide visitor information about the Lake Almanor area and Susanville.
- Wayside signs on the exterior of the building that draw visitors to walk around it. Add period benches/tables on the porch and period picnic tables on the lawn to invite visitors to linger.
- Permanent exhibits inside the Depot that tell the various themes significant to Westwood....Maidu occupancy of the Westwood area before the mill, their culture and stories; the Walker family, lumber trade, the old mill, legend of Paul Bunyan, railroad history, community life; Mountain Meadows Reservoir, willow flycatchers, and Robbers Creek, etc.







- Establish a walking trail on Third Street from the Depot to Robber's Creek if
 crossing the active rail line is possible. Have interpretive signs with photos of
 the old mill and why willow flycatchers are a rare, but not endangered species.
- Develop a short trail from the Depot that leads to business part of town, and restaurants.
- Develop a walking trail on top of the berm that confines the millpond and install light bridges where there are 3 breaches in the berm. This trail could go all the way around the south end of the millpond and connect to Pinetown. A future connector trail to the north shore of Mountain Meadows Reservoir is also desired.
- In Red River lumber days, a boardwalk across the millpond connected Westwood with Pinetown. If rebuilt, such a boardwalk would offer close views of the willow wetlands in the millpond, and complete a loop trail around the pond.
- Extend the Bizz Johnson Trail into Westwood, terminating at the Depot, possibly within the right-of-way of a pipeline that connected the millpond to a pond downstream from Duck Lake at the headwaters of Goodrich Creek. The Westwood Community Services District may own an easement along this route.
- Walking tour of historic Westwood.
- Video footage of historic Westwood and audio/video podcasts from Westwood residents and the lifestyles of this community. Podcasts should be downloadable from the internet.
- Acquisition of an historic home with exhibits focusing on the life of a lumberjack or mill worker. Consider the development of a community park around the Depot with displays of logging equipment and perhaps relocating a home here.
- Create an inviting plaza near the Depot with amphitheater style seating for festivals, a possible native plants garden or community garden site for hosting events such as concerts, art shows, dances, Babe and Paul Bunyan look alike contests, and wine and cheese festivals, etc.
- Use part of the Depot and plaza as an art gallery with known artists presenting talks or demonstrations. Educational presentations could be provided on a scheduled basis for a small fee.
- The concrete vault building should either be rehabbed for use or torn down.

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse scenic landscapes.
- There is an abundance of cultural and recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross country skiing and





- snowmobiling. At the end of a busy day, visitors can stroll through local art galleries and stores, and then sample the area's finest cuisine in the evening.
- » There are a variety of recreation activities for everyone in the Westwood, Lake Almanor and Susanville areas.
- » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.

Other Storylines:

- Welcome to Westwood and Lassen County where you can stroll amidst yesteryear and experience the life of a mill town.
- Learn about Maidu life
- Discover Lake Almanor and all that it offers.
- Visit nearby Susanville, gateway to the Crossroads.

Potential Partnerships:

Scenic Byway grants, Westwood Chamber of Commerce, Lassen County Historical Society, Lassen County, Forest Service, State Historic Preservation Office, State Park Bond funds

Objectives - As a result of this interpretive effort, visitors will:

Discover the cultural and recreation opportunities in and around Westwood, Lake Almanor and Susanville. Find Westwood to be a delightful experience of northern California and spread the word.

Notes/Design Instructions:

Complete an interpretive/exhibit plan for the Depot, in conjunction with space planning for the building and the exterior area. Include special events planning as part of the effort. Complete a landscape plan for the Depot site.



Signage Recommendations:

Based on interpretive/exhibit plan for this space.

Estimated Cost:

Completed interpretive plan for site: \$15,000

Develop and implement a landscape plan: Costs to be determined.

Byway Portal site design and construction: TBD

Interpretive panel design, fabrication and installation: \$12,000

Other Recommendations:

See attached site plans for use of the surrounding area. There is potential to link to other historic history of Westwood on the site with trails and additional site planning.

Current Land Manager and Responsible Party for Maintenance of Site

Lassen County, Westwood Chamber of Commerce

Other reference information taken from:

http://www.up.edu/portlandmag/2004 summer/bunyans/westwood.htm

Westwood, California sits nestled in pine trees on the southeastern slopes of the Cascade Range. The 28-foot redwood statue of Paul Bunyan (along with his blue ox, Babe) is reputedly the largest wood statue in the world carved in one piece from a single tree. The statue holds an axe in his left hand and a long saw blade in his right. He wears a red and black plaid shirt and sports a luxuriant mustache.

In 1912, the Red River Lumber Company transformed the remote Robbers Creek wilderness into a building frenzy. T.B. Walker, then the fifth richest man in the world and owner of the Red River Lumber Company, had cleaned out the timber stock in Minnesota and purchased nearly 750 million acres of virgin pine forest in Northern California to feed the mill town he planned to create. Over the next few years, an opera house, a hospital, a skating rink, scores of bunkhouses, and all the businesses needed for Westwood to be self-contained, including a town bakery (called "Westloaf, the Toast of the Town") sprang up. In the center of town was a massive pine mill. In the 1930s, the Guinness Book of World Records cited Westwood as having the largest pine sawmill in the world. Ripley's Believe It or Not featured the mill as having the world's largest pile of sawdust, used to fuel Westwood's central boilers for steam heat. Before long, more than 10,000 people lived in Westwood.

With low crime rates, year-round work, and guaranteed health care, Westwood must have indeed seemed a paradise — or at least an anomaly in the timber business. The conservative Methodist Walker family oversaw Westwood's growth, managing everything from church attendance to liquor consumption. Eveline Walker left a bowl of change outside her front door so that no resident of Westwood would go hungry. While the opera hall ultimately failed to draw well-known acts, Mrs. Walker was usually good for a few hymns on a slow weeknight.

The Walker family hired a cousin and former logger, William Laughead, to lead marketing for the Red River Lumber Company. In 1914, Laughead made Paul Bunyan the company's mascot. He elaborated on the stories he'd heard about Bunyan in timber camps and printed them in pamphlets sent out with shipments of lumber. Laughead named Bunyan's ox, Babe, and invented Johnny Inkslinger, Sourdough Sam, and many other characters. He combined the face of a local foreman with the mustache of one of the French Canadian cooks at the mess hall to create the portrait of Bunyan he used to illustrate the stories.



Except for a poem written about Paul Bunyan for a Detroit newspaper two years earlier, no known written record of Paul Bunyan existed before Laughead put Bunyan to work as a shill for timber.

By 1940, the Red River Lumber Company had printed eleven editions of Paul Bunyan stories, totaling tens of thousands of copies. People wrote to Westwood from around the world requesting the stories. Laughead's work publicizing Red River lumber was so successful that a minister of propaganda in the Soviet Union reportedly requested copies of the pamphlet to use as a model for his own work.

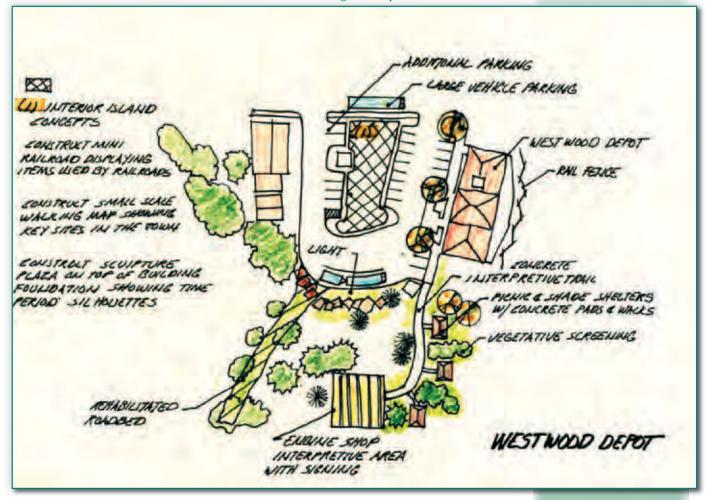
As the Walker family had created Westwood, so too did they engineer the town's demise. When the opulent stands of sugar pine surrounding Lassen Peak had nothing left to give, the family sold the mill to a fruit-crate-making company and left town. Two years later, the cardboard box was invented, throwing the crate company out of business. By 1957, Westwood's population had plunged from 10,000 to fewer than 200 people. Families picked up and moved, boarding up houses and abandoning dogs. Once again Westwood made the record books when the Guinness Book of World Records cited Westwood as the town with the most dogs per capita.

Some observers of Westwood's history are not so generous about the town's bucolic past. They mention 1917, when 50 million board feet of pine went up in flames, rumored to be a casualty of an I.W.W. protest. They point to the 1938 riot, when hundreds of men took picks and axes to each other on the town's wooden sidewalks and gravel streets in an effort to join the union and resist a 17.5 percent pay cut. It may have been difficult for the immigrant workers segregated to the shanty of Pinetown bordering Westwood to ignore the Walker Mansion and its trophy room festooned with the spoils of African safaris. It may have galled some of the town's workers to be asked to clear a wide strip of timber up the mountain so that the Walker family would have a clear view from their sunroom of Mount Lassen's eruption. Some residents of Westwood may have resented being paid with scrip, which was only accepted in Walker-approved businesses carrying Walker-approved merchandise at Walker-approved prices.

But Walker cynicism is a minority view in today's Westwood. Today, the town's 2,000 inhabitants rely on tourism, the State prison in Susanville, and the mill in Chester to provide their livelihoods. Each summer, Westwood celebrates its past with a Paul Bunyan festival with blues music and logging competitions.



Site Design Concept



Site Design Concept Cost Estimate (2012)

	wood Depot Cost Estimate			Unit of				12/20/20
Item	Description		Qty.	Measure	Unit Price	Total	Notes	
	General Requirements			ivicasure				
	Mobilization		1	ls	\$17,168.45	\$17,168.45	10% of Tot	al Contract
	Quality Control		1	ls	\$3,366.36	\$3,366.36	2% of Total	
	Construction Surveying & S	Staking	1	ls	\$4,916.00	\$4,916.00		tilizing Forest Surveyor
	Construction Signing		1	ls	\$4,800.00	\$4,800.00		
	Sedimentation Control		1	ls	\$2,000.00	\$2,000.00		
	As-Built Drawings		1	Is	\$1,200.00	\$1,200.00		
	A3-Duilt Drawings			equirements	. ,	\$33,450.81		
	Site Work		General K	equirements	Jubiolai	333,430.61		
	Excavation Placement and Compaction		121 5	CV	\$35.00	¢4.252.50		
			121.5	cy sf		\$4,252.50	ćr 7.00/cr	211. 611. 672./7
	Asphalt Paving		2001	SI	\$7.00	\$14,007.00	\$5-7.00/SF	3" top 6" base \$73/Ton
	Concrete flatwork/sidewalk		2012	sf	\$10.00	\$20,120.00	2012 SF 6" thick 4" agg base \$7-10.00/S \$130 CY	
	Concrete Curb and Gutter		202	ıc	¢25.00	ć7 050 00	282 LE C&G 6" High 2' Dan 6" Thick 625 /	
	Concrete Curb and Gutter		282	If	\$25.00	\$7,050.00	282 LF C&G 6" High 2' Pan 6" Thick \$25/	
							\$3000-\$5000 EA 3 Poles spaced as	
	Light Poles		3	ea	\$5,000.00	\$15,000.00	needed on site	
	Power line in trench		220	If	\$50.00	\$11,000.00	\$50/LF Approximate distance 220 LF	
	r ower mie in trefftii		220	ii.	\$30.00	\$11,000.00		
								ce Wooden Logs \$25/LF May
	C 10 D 11 E		4.40	ıc	¢25.00	¢2 500 00	-	e needed at mid slope on the
	Split Rail Fence		140	If	\$25.00	\$3,500.00		f the depot terials Installation \$4500/EA
							_	ns along interpretive trail,
								rior island and at the engine
	Interpretive Signs		6	ea	\$4,500.00	\$27,000.00		pretive area)
	interpretive signs		0	Cu	Ş 1 ,500.00	Ç27,000.00		· · · · · · · · · · · · · · · · · · ·
	Picnic Tables		3	ea	\$1,200.00	\$3,600.00	Universal Accessible 8' long Picnic table Inc Shipping & Inst. Tables placed within the shade shelters	
							Shade Kites 15' X 15' \$5684 + inst \$1989	
	Shade Shelters		3	ea	\$8,525.60	\$25,576.80	15% Shipping 853.60 Tot. \$8745.00	
				Site Work	Subtotal	\$131,106.30		
	Landscape Work							
	·						3-1/2 to 4"	Cal 6-8' tall @\$250.00 Plant
	Planting Trees		8	ea	\$395.00	\$3,160.00	Lbr. Equ. \$	
			30	ea		\$1,650.00		
	Planting Shrubs		30		\$55.00	\$1,050.00	5 Gai @ \$5	0 Plant, Soil, Fert. \$25 Inst.
								d Grasses, Forbs, & rs 5234 SF / 43560 SF/acre =
	Seeding		0.12	acre	\$3,000.00	\$360.00	.12 acres	
							New irrigat	tion system \$3/SF Temporar
	Temporary Irrigation for plant						Irrigation System \$1.50/SF 1.5 x 43560	
	establishment		0.12	acre	\$65,340.00	\$7,840.80	SF/Acre = \$	65340.00/Acre
	Imported Borrow		401	tons	\$10.00	\$4,010.00	Guess 5234sf x 1.5' deep - 7851/27= 291CY x 1.38= 401 tons includes haul	
						1.		
	Placement and Compaction	n	291	су	\$25.00	\$7,275.00		T
			Lanc	lscape Work	Subtotal	\$24,295.80		
	N	/lobilization	on, Site Worl		Subtotal Bare Cost	\$188,852.91		
	Miscellaneous Costs							1
	Site Remoteness/Conditions		5%			\$9,442.65		
	General Contractors Overhead		15%			\$28,327.94		
	General Contractors Profit		10%			\$18,885.29		
	State Sales taxes on Materials		7.50%			\$14,163.97		
					Subtotal	\$70,819.84		

21. OLD WESTWOOD HOSPITAL

Current Main Messages for Site (Theme) and Current Interpretive Media: None.

Existing Facilities and Status:

The old hospital is boarded up and in poor condition. The building has potential for a B&B and restaurant, but needs a lot of renovation. The new owners of the building originally planned to renovate it and open a small hotel and steakhouse. It is now for sale.

Proposed Main or New Message for Site (Theme) and Proposed Interpretive Media:

Community heritage of Westwood as part of a walking tour through town.

Tier 4 Byway Interpretive Site Themes:

Community heritage of Westwood. Answer the "why" did Westwood have its own hospital?

Potential Partnerships:

Possible State Historic Preservation funding.

Objectives - As a result of this interpretive effort, visitors will:

- Learn about Westwood during the height of the timber industry.
- Understand more about community life in a company town

List of Graphic Needs:

Historic images and photos

Notes/Design Instructions:

There are numerous possibilities for the building that would serve the community and provide business opportunities. A vision for the restoration of this building and several other historic structures in town should be community driven and supported.

Signage Recommendations:

Use of interpretive signs could be very beneficial in telling the stories of Westwood.

Current Land Manager and Responsible Party for Maintenance of Site: Privately owned.



TIER 4 Byway Interpretive Site







TIER 4 Byway Interpretive Site

22. WESTWOOD PEOPLES CHURCH

Current Main Messages for Site (Theme) and Current Interpretive Media: None.

Existing Facilities and Status:

The Historic People's Church of Westwood, built in 1917 by Red River Lumber Company. With some work this landmark building could be restored to its previous condition. There is a reinforced bell tower with original bell still functional, new steel roof in 1991, great acoustics, ceiling has pressed tin tiles. 8460 sq. feet of sanctuary, chapel, 15 classrooms, fellowship hall plus presentation/Sunday School rooms, basement. The building is currently listed for sale as a single family property, on approximately 0.34 acres.

Proposed Main Messages and Media:

- Traditions of early Methodism as practiced in the town.
- Recommend either a vertical kiosk structure or low profile signing.
- Potential for building repair from a California Historic Preservation grant.
- Include this site in a walking tour brochure of historic Westwood (if it doesn't exist already).

Tier 4 Byway Interpretive Site Themes:

Early community residents worshipped together in the church building as well as worked together, shopped together, and schooled together since this was a company town built by the Walker Family.

List of Graphic Needs:

Historic images and photos

Current Land Manager and Responsible Party for Maintenance of Site:

Privately owned and currently for sale.



23. ROBBERS (REEK MILL, WESTWOOD, OFF HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media: None currently exists.

Existing Facilities and Status:

A new effort to define reuse of the mill site was conceived by the Mountain Meadows Conservancy ("MMC") in Westwood, CA, in Lassen County. There are several hundred acres of wetlands and industrial property that held what was once the world's largest lumber mill. Run by the Red River Lumber Company, this mill offered work for thousands of workers and their families. After the trees were logged, the company moved on and eventually the mill closed in the 1950s. The community hopes to reuse this old property to provide economic opportunity while protecting existing wetland habitat. The Sierra Nevada Conservancy provided Mountain Meadows Conservancy funds to assist in the development of the Westwood site.

See www.mtmeadows.org for more information.

Proposed Main or New Message for Site (Theme) and Proposed Interpretive Media:

An interpretive plan for the site needs to be developed to capture the timber heritage of the community; the ongoing efforts to reuse the site; and the ongoing land management efforts. Consider the development of a community park with the Westwood Depot Visitor Center as its hub. Construct a pedestrian path from the Depot to Robbers Creek if it is possible to cross the existing railroad line or avoid it. Provide interpretive signs about willow flycatchers along the creek and mill operation. Include historic photos of the mill and a graphic showing the layout of the buildings on site.

Tier 4 Byway Interpretive Site Themes:

Historic mill operations, land reuse, land management issues being addressed today, concept of green remediation, willow flycatchers and their habitat requirements; why their populations are at risk.

Potential Partnerships:

Scenic Byway grants, State Park Bond funds, MMC, private landowners, Forest Service, Lassen County, numerous stakeholders at the local, state, and federal level.

List of Graphic Needs:

Defined by themes and storylines in a completed interpretive plan.

Current Land Manager and Responsible Party for Maintenance of Site:

Owned by a number of private landowners holding varying amounts of acreage. MMC is in the process of purchasing acreage as it becomes available with the intention of promoting outdoor recreation opportunities.



TIER 4 Byway Interpretive Site







24. WESTWOOD MUSEUM (on Ash Street)

Current Main Messages for Site (Theme) and Current Interpretive Media:

Westwood history, the Walker Family, Red River Lumber Company, the mill, use of the lumber that was milled, and life in a company town.

Existing Facilities and Status:

The museum is privately owned and operated. It contains photos from the company's mill, the town, and the Fernley and Lassen Branch Railroad.

Proposed Main or New Message for Site (Theme) and Proposed Interpretive Media:

- The history of Westwood is based largely upon the timber industry and the Walker family, the timber baron family of the town.
- Constructed in 1914 to carry lumber from Westwood to the Southern Pacific main line at Fernley, Nevada, the Fernley and Lassen Branch Railroad was the key transportation link that made the lumber company's mill in Westwood possible.
- The mill gradually declined and the railroad line between Susanville and Westwood was abandoned in 1956.
- After 20 years, the 26 mile railroad bed was reborn as the Bizz Johnson Trail, a nationally recognized recreation trail used by thousands of hikers, bikers, and equestrians every year.

The present artifacts, photos, and other historical materials are high quality, but are not arranged in thematic messages or chronological order. An exhibit plan and space plan for the building is recommended to organize this rich collection of community artifacts. As a company town, Westwood has a unique story to tell about community life. The museum is located at:

Westwood Museum 311 Ash Street Westwood, CA 96137-9995 United States Phone 1 (530) 256-2233

Tier 4 Byway Interpretive Tour Themes:

History of the Walker family and establishment of Westwood

Potential Partnerships:

Westwood Chamber of Commerce, Lassen County Historical Society, Lassen County, Forest Service, State Historic Preservation Office

Objectives - As a result of this interpretive effort, visitors and residents will: Gain an appreciation of Westwood's history as a mill town.

Notes/Design Instructions:

Any recommendations for the museum should be discussed with the museum owner.

Current Land Manager and Responsible Party for Maintenance of Site:

Private museum. Visitors should call for open hours.





TIER 4 Byway Interpretive Site

TIER 4 Byway Interpretive Site



25. MOUNTAIN MEADOWS RESERVOIR NEAR WESTWOOD

(off County Road A-21 and Highway 36)

Existing Facilities and Status:

None. The lake is a reservoir and can be accessed via an unmarked dirt road west of Westwood off County Road A-21, just before Highway 147. The road leads to Indian Ole Dam. Today there are no developed recreational amenities at Mountain Meadows Reservoir. However, Dyer Mountain Associates has plans to build a four-season

resort on the south side of the lake. The developer said that the shoreline will be preserved with foot trails through the meadows next to the lake. Prior to construction of the dam, Maidu Indians occupied the Westwood area during the summer months.

Proposed Messages and Media:

- Maidu culture and family life, Creation Story, The Cry, Bear Dance – interpretive exhibits could also have an audio recording of Maidu songs such as the WorldMaker's song.
- Walker Family history and use of the lake for power generation
- Importance of the area for migrating waterfowl
- Recreation opportunities that exist

Tier 4 Byway Interpretive Site Themes:

- History and culture of the Honey Lake Maidu, and how they lived.
- Welcome to Westwood, once a timber mill town.

Storylines:

- Considerable ethnogeographic research has been done on the Honey Lake Maidu. There is an interpretive auto tour where travelers can stop at the locations described in the Creation Story. Display artifacts and photos of
 - Maidu life, explain their culture, and tell the Creation Story at the Westwood Depot Visitor Center or Westwood Museum. Reprint the auto tour and make it available at local Chambers of Commerce and visitor centers.
- Although the Walker family created the reservoir in 1924 to generate power for their Red River Lumber Company, they recognized its potential for leisure activities. They soon built a clubhouse on the lake to foster recreation. The lake is now used for fishing, duck hunting, bird and wildlife watching, and canoeing. Some residents skate along the shoreline when it freezes in the winter.





- Mountain Meadows Reservoir is an important stopover for migrating waterfowl that congregate by the thousands on the reservoir. The bigger, more noticeable birds that can be seen at the lake include the bald eagle, osprey, American white pelican, white-faced ibis, and western grebe, which can be seen carrying babies on their backs in August. The greater sandhill crane, on the endangered or threatened species list, can also be seen.
- Fishermen catch brown bullhead, largemouth bass, rainbow trout, brown trout and Sacramento suckers.

Potential Partnerships:

Lassen County, Westwood Chamber of Commerce, Pacific Gas and Electric, Stewardship Council, Mountain Meadows Conservancy, Honey Lake Maidu, Mountain Maidu

Notes/Design Instructions:

Many historic photos exist for enhanced interpretive exhibits. To learn more about the lake, see the exhibit constructed by the Mountain Meadows Conservancy at the Westwood Depot Visitor Center.

Current Land Manager and Responsible Party for Maintenance of Site

Pacific Gas and Electric owns a narrow strip of land around the reservoir, but the surrounding land is privately owned. The utility company purchased the hydroelectric system along with the reservoir in 1945 when the Walkers sold the mill and most of their property.

The land currently owned by PG&E will be protected for the benefit of future generations. It is part of 140,000 acres of watershed lands the utility company placed in a conservation plan with oversight given to the Stewardship Council.



26. SWAIN MOUNTAIN WINTER STAGING AREA ON COUNTY ROAD A-21

Current Main Messages for Site (Theme) and Current Interpretive Media:

Winter recreation, safety and survival tips.

Existing Facilities and Status:

New, large parking lot with one restroom, one kiosk.

Consider gating and closing this area in the snow-free months as it is frequently used by truckers for a rest stop with subsequent damage to the asphalt parking lot.

Proposed Main Messages and Media:

- Seasonal winter and summer recreation information, regulations and safety advice.
- Issue a forest order prohibiting parking by commercial vehicles and any vehicle weighing over 24,000 pounds.
- Tread Lightly message.

Tier 4 Byway Interpretive Site Themes:

 Learn about the many winter and summer recreation opportunities near the staging area.

- Learn about important safety tips and how to Tread Lightly.
- Forest travel management information and the forest order on the vehicle weight restrictions.

Potential Partnerships:

Snowmobile and OHV groups, State OHMVR Division

Objectives - As a result of this interpretive effort, visitors will:

Understand where they can enjoy riding their snowmobiles or nonhighway legal vehicles and Tread Lightly

Signage Recommendations:

- Post the Forest Winter Recreation map
- Forest travel management information

Other Recommendations:

Snowmobile groups would like to apply for State OHMVR Division grant funds to construct a warming hut at the site. If not closed in the snow-free months, this site could be used as a summer OHV staging area if non-highway legal vehicles were permitted on Forest Service roads from the parking lot.

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Eagle Lake Ranger District



TIER 4 Byway Interpretive Site





TIER 4 Byway Interpretive Site

27. MASON STATION TRAILHEAD, BIZZ JOHNSON NATIONAL RECREATION TRAIL ON COUNTY ROAD A-21

Current Main Messages for Site (Theme) and Current Interpretive Media:

Trail orientation and information, historical context of the trail.

Existing Facilities and Status:

New restrooms, parking area, one kiosk. The Bizz Johnson Trail winds along the Susan River following the old Fernley and Lassen Branch Line of the Southern Pacific Railroad. Built in 1914 to service the Red River Lumber Company in Westwood, the railroad shut down in 1956. The trail winds 25.4 miles from Susanville to Mason Station on County Road A-21. The trail then follows existing roads an additional 4.5 miles into Westwood where a railroad station type kiosk and a 25-foot carved redwood statue of Paul Bunyan mark the Westwood trailhead. The trail consists of a relatively level grade (3% maximum) uphill from Susanville. Bikers or equestrians can ride out and back over several bridges and through two unlighted tunnels (a single track alternative exists around both tunnels).

Proposed Main Messages and Media:

- Bizz Johnson Trail history, logging history, history of Westwood. Post a map
 of the trail and how to ride to Westwood.
- Information on Westwood services, Westwood Depot Visitor Center, Westwood Museum, and special events
- Interpretive panels focusing on the history of the old Fernley and Lassen Branch Line of the Southern Pacific Railroad and the Red River Lumber Company in Westwood.

Tier 4 Byway Interpretive Site Themes:

- Bizz Johnson Trail history, history of the Red River Lumber Company and Westwood.
- Information on Westwood services and special events.

Potential Partnerships:

Westwood Chamber of Commerce

Objectives - As a result of this interpretive effort, visitors will:

- Understand the history of the trail.
- Learn about community services and special events in Westwood.

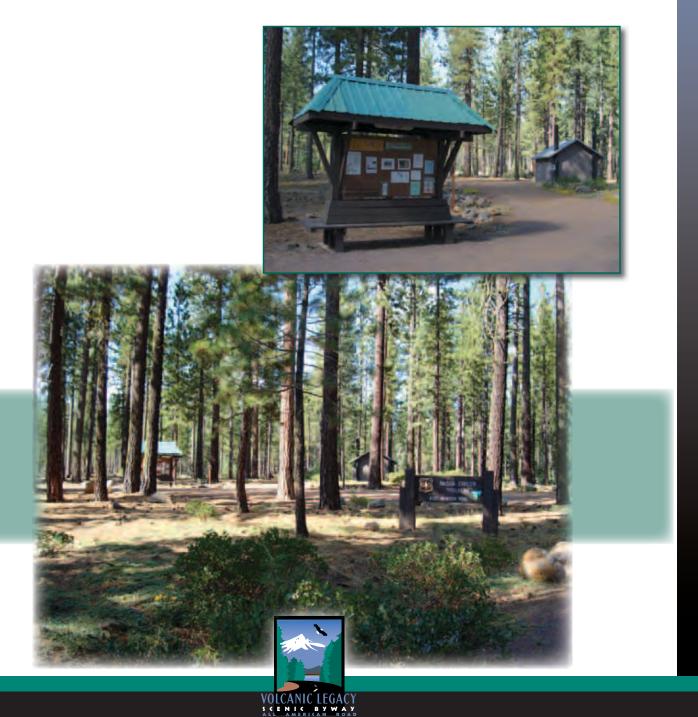
Notes/Design Instructions:

An exhibit plan should be developed for the entire Bizz Johnson trail with an inventory of existing interpretive media in use and recommendations for new media forms. This plan should be completed separately from this interpretive planning effort in coordination with local community groups and users of the trail.



Signage Recommendations:
Place 2-3 picnic tables on level pads.

Current Land Manager and Responsible Party for Maintenance of Site: Lassen National Forest, Eagle Lake Ranger District



28. THE "CHIMNEY" ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

None. The stone chimney is the last remaining relic of a building that burned.

Existing Facilities and Status:

There is an existing pull-off with ample space for 3-4 vehicles to park including RVs or vehicles pulling trailers. The site offers magnificent views of Mountain Meadows, Dyer Mountain, Keddie Ridge, and Mountain Meadows Reservoir in the distance. The mountains surrounding Goodrich and Mountain Meadows are part of the Feather River watershed. Snow melt from this area flows into Lake Almanor and the Feather River at Canyon Dam, then eventually into the Sacramento River and the ocean. This water is part of a complex hydropower system operated by Pacific Gas and Electric with dams at Mountain Meadows Reservoir, Lake Almanor and down the Feather River canyon.

Proposed Main Messages and Media:

- What is the Feather River watershed and what is its relationship to the land uses and habitat we see today?
- The many values of a healthy watershed for wildlife and people.
- Some threats to healthy watersheds.
- Watershed restoration efforts in the area and why partnership coalitions are essential for this work.

Tier 2 Byway Interpretive Site Themes:

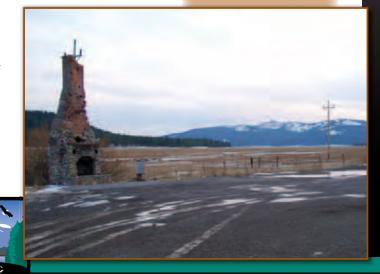
- Learn about watershed function and its relationship to all living things, including humans.
- Understand certain threats to healthy watershed and why partnerships are needed for restoration efforts in the Feather River watershed.
- Learn about how the Mountain Maidu and Honey Lake Maidu lived and used resources from the land in this area.

Potential Partnerships:

Mountain Meadows Conservancy, Maidu, resources agency grants, Sierra Pacific Industries, Walker Foundation

Objectives - As a result of this interpretive effort, visitors will:

- Human activities affect watershed function.
- Grazing has a place in maintaining healthy watersheds, but can also have an adverse impact if unmanaged.
- Dams have affected watershed conditions, habitat and native plant and animal species.
- How the Maidu lived off the land and their cultural values.



TIER 2 Byway

Interpretive Site

List of Graphic Needs:

- Map of the Feather River watershed.
- Profile of surrounding peaks and their names.
- Artistic renderings of native wildlife, birds and aquatic species commonly found in the meadows.
- Artistic renderings of early Maidu life.

Signage Recommendations:

Construct a 2-panel Cascadian style kiosk using design guidelines for the Byway.

Other Recommendations:

Consult with CALTRANS, Maidu and the Mountain Meadows Conservancy for constructing an interpretive kiosk, messages, and formalizing the parking area. Assess what funding opportunities are available.

Current Land Manager and Responsible Party for Maintenance of Site:

Sierra Pacific Industries



29. FREDONYER WINTER STAGING AREA ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

Winter recreation and a map of the trails. Winter survival tips. Forest regulations.

Existing Facilities and Status:

This site serves as a winter staging area for snowmobilers. It has a large parking lot with one restroom and a kiosk. Cross-country skiers also enjoy the groomed trails. The site is used as a summer rest area.

Proposed Main Messages and Media:

- Information on winter recreation and a trail map.
- Winter safety and survival information.
- Also have a seasonal display with information about summer activities in the area and a map.
- Provide Tier 2 (or 3) orientation to the Volcanic Legacy Scenic Byway and a map of the route.
- Forest travel management information.
- Issue a forest order prohibiting parking by commercial vehicles and any vehicle weighing over 24,000 pounds.

Tier 2 Byway Interpretive Site Themes:

- Learn about the many winter and summer recreation opportunities near the staging area.
- Trail map.
- Tread Lightly and Forest travel management information.

Potential Partnerships:

Scenic Byway grants, State OHMVR Division grant

Objectives - As a result of this interpretive effort, visitors will:

- Learn about the different winter and summer recreation opportunities in the Eagle Lake region (seasonal displays).
- General information about the Byway and know where to obtain more.
- Understand forest travel management regulations.

Signage Recommendations:

Construct a 3 panel Cascadian style kiosk using design guidelines for the Byway.

Other Recommendations:

The site could be used as a summer staging area for OHV recreation if non-highway legal vehicles were permitted on the Forest Service roads from the parking lot.

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Eagle Lake Ranger District





30. ROXIE PECONUM CAMPGROUND OFF HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

Campground kiosk with Forest Service information and regulations

Existing Facilities and Status:

Kiosk, small campground, parking area, restroom, water. This small, lightly used campground is home to the annual Maidu Bear Dance in June. The campground's rustic and quiet setting along Willard Creek affords an ideal opportunity to relax, enjoy a picnic or camp.

Proposed Main Messages and Media:

Traditional Maidu Bear Dance and significance in Maidu culture.

Tier 4 Byway Interpretive Site Themes:

Story of the Bear Dance (bear and rattlesnake)

Potential Partnerships:

Honey Lake Maidu, Forest Service

Objectives - As a result of these interpretive efforts, visitors will:

Understand Maidu tradition and the Bear Dance story

List of Graphic Needs:

- Historic Maidu photos and current photos of the Bear Dance
- Audio of Maidu Bear Dance music/song

Signage Recommendations:

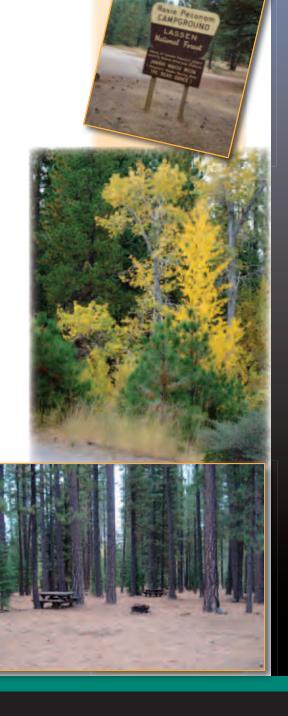
1-2 signs, low profile, in Hopewell style frames

Estimated Cost:

\$7,000

Current Land Manager and Responsible Party for Maintenance of Site

Eagle Lake Ranger District, Lassen National Forest



TIER 4 Byway Interpretive Site

31. DEVIL'S CORRAL TRAILHEAD, BIZZ JOHNSON NATIONAL RECREATION TRAIL ON HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

- Trail information and a map of the Bizz Johnson National Recreation Trail.
- Safety information regarding mountain lions.
- Trail use regulations.

Existing Facilities and Status:

Kiosk, parking lot, picnic area and one restroom

Proposed Main Messages and Media:

- Visitor orientation to the Bizz Johnson National Recreation Trail.
- A map of the trail.
- Safety information regarding mountain lions.
- Historic information about the trail, logging, and its conversion to a rail/trail.
- Trail use regulations.

Tier 4 Byway Interpretive Site Themes:

Humans have depended on the natural environment for thousands of years.

Itorylines:

- » Company towns once served thriving logging and railroad industries at the beginning of the 19th century.
- Timber yield declined significantly in the 1990s due to public concern over ecosystem health and the resource impacts from harvest practices

» As timber needs shifted across the country, local communities have worked hard to diversify their economies.

Potential Partnerships:

Bureau of Land Management, Lassen Lands and Trails Trust

Objectives - As a result of these interpretive efforts, visitors will:

- Understand the drive to log these forests.
- Learn that the trail was originally the Fernley/Lassen Branch railway, constructed to move processed lumber from the mill in Westwood to points east.
- Appreciate the uses of logged timber and wood consumption.
- Realize how forests are affected by logging practices.









List of Graphic Needs:

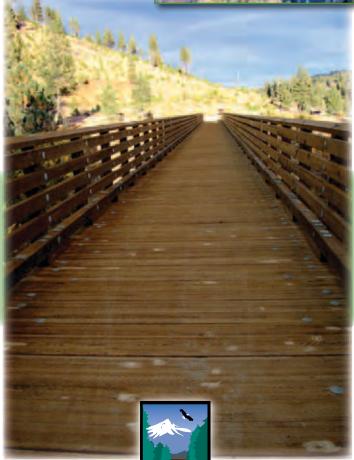
- Photos of area prior to logging and after logging has occurred
- Historic railroad/train photos of the Fernley/Lassen Branch line
- Photos of wood products
- Photos of historic logging

Signage Recommendations:
1- 3 signs, low profile, in Hopewell style frames

Current Land Manager and Responsible Party for Maintenance of Site:

Bureau of Land Management, Eagle Lake Field Office





32. SUSANVILLE RANCH PARK IN SUSANVILLE

Current Main Messages for Site (Theme) and Current Interpretive Media:

http://www.susanvilleranchpark.com, National Geographic Geotourism website, brochures, photos, maps, kiosk map

Existing Facilities and Status:

Those searching for an outdoor retreat that is still close to town should visit the Susanville Ranch Park. This park has been a favorite of local bicyclists, hikers, and horseback riders for many years. More than 25 miles of non-motorized, multi-use trails await those who visit the 1,100 acre park located at the northwest edge of Susanville. Visitors can enjoy two year-round streams, open fields and meadows, and a canyon as well as forested mountains.

Proposed Main or New Message for Site (Theme) and Proposed Interpretive Media:

- Ecology of the park plants, wildlife, aquatic systems
- How grazing complements meadow habitat and fire management objectives
- Pack in/pack out and park regulations (dogs on leash, etc.)
- How to become a park volunteer

Tier 4 Byway Interpretive Site Themes:

- Geography of the park
- Benefits of managed grazing
- How park users can protect this special area

Potential Partnerships:

Lassen Land and Trails Trust, Park Bond funds (State), SABA, Bicycle Bananas, City of Susanville

Objectives - As a result of this interpretive effort, visitors will:

See Susanville as a community that places quality of life as a top priority as Susanville Ranch Park can be accessed by bicycle in less than five minutes from Main Street. The park is in walking distance from the most densely developed subdivisions in town. Visitors will be amazed by the geographic diversity of the area and want to create their own adventure in the park's wide open spaces.

List of Graphic Needs:

The county can provide maps, photos, etc.

Notes/Design Instructions:

There is an existing kiosk map that can be used for photos and brochures.

Signage Recommendations:

To have the existing kiosk map and/or other newly created materials printed on nice long lasting material.

Estimated Cost:

\$500-\$800 for each map = \$1,500 - \$2,400.

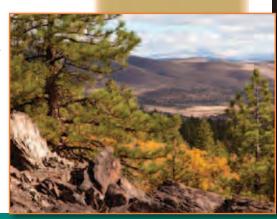
Current Land Manager and Responsible Party for Maintenance of Site: Lassen County





TIER 4 Byway





TIER 4 Byway Interpretive Site

33. SKYLINE DRIVE RECREATION TRAIL IN SUSANVILLE

Current Main Messages for Site (Theme) and Current Interpretive Media: None.

Existing Facilities and Status:

This paved hiking and biking trail is located north of Susanville. The trail and adjacent areas also receive some motorized use. It extends from a community subdivision to Lassen Community College and then along Skyline Drive to the intersection of Johnstonville Road. The trail offers views of the Great Basin ("high desert") country north and east of Susanville with its rolling hills of sagebrush and bitterbrush.

Proposed Main or New Message for Site (Theme) and Proposed Interpretive Media:

- Great Basin ecology plants and wildlife
- Plant identification and their habitat value
- Identification of wildlife that users may see along the trail

Tier 4 Byway Interpretive Tour Themes:

- Great Basin plant and wildlife ecology
- How plant succession has changed due to fire suppression and human influences

Potential Partnerships:

California Department Fish and Game, City of Susanville

Objectives - As a result of this interpretive effort, visitors will:

Learn about Great Basin ecology

Signage Recommendations:

2-3 interpretive panels

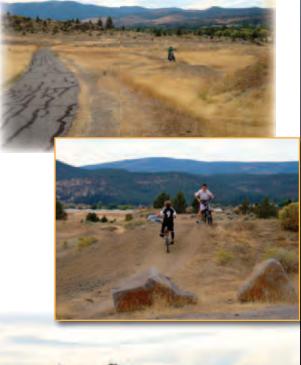
Estimated Cost:

\$11,000

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen County







34. SUSAN RIVER RECREATION TRAIL IN SUSANVILLE

(between Alexander Street and Riverside Drive)

Current Main Messages for Site (Theme) and Current Interpretive Media:

Existing Facilities and Status:

The paved Susan River Trail is located on Alexander Street and Riverside Drive. Riverside Park is located nearby with restrooms, a picnic area, children's playscape, and playing fields. This 1.5 mile hiking and biking trail provides access for fishing and nature study. The trail ends behind the Susanville shopping mall on Riverside Drive.

Proposed Main or New Message for Site (Theme) and Proposed Interpretive Media:

- Susan River ecology plants and wildlife
- Identification of wildlife and aquatic species users may find along the river.
- Effect of floods and human alteration on the river channel and riparian area.

Tier 4 Byway Interpretive Tour Themes:

- Fish of the Susan River
- River ecology

Potential Partnerships:

CA. Fish and Game, City of Susanville for the two recommended trail extensions, the State Transportation Enhancement Program

Objectives - As a result of this interpretive effort, visitors will:

Learn about the ecology and fish of the Susan River

Signage Recommendations:

2-3 interpretive panels

Estimated Cost:

\$11,000

Other Recommendations:

- The river trail should be fully extended into the shopping mall as Riverside Drive is not wide enough to safely accommodate vehicles and pedestrians/bikers.
- Another paved path should also be constructed from Riverside Park to the shopping mall along Riverside Drive as it is unsafe for pedestrians and bikers.
- An abundance of riparian vegetation along the river impedes access for anglers and those looking for a view of the river. Create a few areas for pedestrian access.

Current Land Manager and Responsible Party for Maintenance of Site

City of Susanville







35. ROOP'S FORT MUSEUM OFF HIGHWAY 36 AND WEATHERLOW STREET

Current Main Messages for Site (Theme) and Current Interpretive Media:

Roop's Fort was built as a trading post by the Roop Brothers in 1854, and was the first building in Lassen County. Roop's Fort was also the site of the Sagebrush War in 1863.

Existing Facilities and Status:

A replica of the fort is located on Weatherlow Street, just 1/2 block off Main Street, as part of the Lassen Historical Museum. The museum recently renovated a building next to Roop's Fort to display exhibits about the Honey Lake Maidu and Lassen County history.

Tier 4 Byway Interpretive Tour Themes:

Learn about Susanville's history

Potential Partnerships:

Chamber of Commerce and Transient Occupancy Tax funds

Objectives - As a result of this interpretive effort, visitors will:

Learn about the Maidu culture, and history of Susanville and Lassen County.

Other Recommendations:

Place information about the museum in each hotel room, lobby and RV Park to encourage travelers to visit it, and enjoy the other amenities and services in uptown Susanville.

Current Land Manager and Responsible Party for Maintenance of Site Lassen County



TIER 4 Byway Interpretive Site







TIER 4 Byway Interpretive Site

36. WALKING TOUR OF MURALS AND HISTORIC UPTOWN SUSANVILLE

Current Main Messages for Site (Theme) and Current Interpretive Media:

The murals tell the story of Susanville's rich history with each of the ten murals based on a theme related to the community's growth and heritage. Current themes for the individual murals include:

- Old Main Street Susanville
- Ranching
- Women of Lassen County
- Our Ancestors Our Future
- Susanville Founder Isaac Roop and his daughter, Susan
- Logging with a Big Wheel
- History of Lassen
- History of the Honey Lake Valley
- Dad Popcorn
- Mr. Eastman, the famous photographer
- History and Community Pride of Susanville

Existing Facilities and Status:

The uptown murals of Susanville beautify the city and provide an interpretive experience for visitors and local residents about this town's life and place in California history. The mural locations and thematic stories with interpretive information are easily downloaded from the website: http://visitorsguide.lassennews.com/print.edi

Proposed Main or New Message for Site (Theme) and Proposed Interpretive Media:

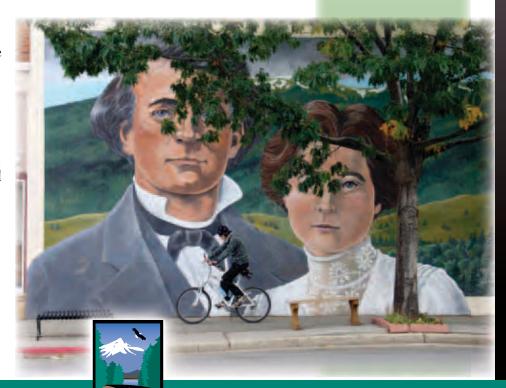
There is an existing mural brochure for visitors. Continue to use this and update as needed.

Tier 4 Byway Interpretive Tour Themes:

Enjoy a walking tour through Susanville and learn about the city's history through a series of beautiful murals.

Potential Partnerships:

Chamber of Commerce and Transient Occupancy Tax funds



Objectives - As a result of this interpretive effort, visitors will:

Learn about Susanville history

Notes/Design Instructions:

Seek additional ways to increase the visibility of the murals and the stories they tell. Travelers need more exposure to the murals during their visit to the community.

Other Recommendations:

- Ensure the walking tour of the murals is included in the Lassen County Visitor's Guide along with a map of the downtown area.
- Place a one page brochure about the murals in each hotel room, lobby and RV Park to encourage travelers to view them, and enjoy the other amenities and services in uptown Susanville.



City of Susanville







37. SUSANVILLE DEPOT VISITOR CENTER ON RICHMOND ROAD

Current Main Messages for Site (Theme) and Current Interpretive Media:

The Bizz Johnson National Recreation Trail winds along the Susan River following the old Fernley and Lassen Branch Line of the Southern Pacific Railroad. Built in 1914 to service the Red River Lumber Company in Westwood the railroad shut down in 1956. The trail winds 25.4 miles from Susanville to Mason Station on County Road A-21. The trail then follows existing roads an additional 4.5 miles into Westwood. The trail consists of a relatively level grade (3% maximum) uphill from Susanville. Bikers and equestrians can ride out and back over several bridges and through two unlighted tunnels (a single track alternative exists around both tunnels).

The Susanville Depot serves as a visitor center for the eastern terminus of the trail. The western terminus of the trail is at the Westwood Visitor Center. Exhibits inside the depot explain the history of the railroad and the depot. Historic artifacts and two baggage carts are also on display. The story of the how the railway was converted to a trail is explained. The depot includes an interpretive sales area, community information, and numerous brochures.

Existing Facilities and Status:

Historic railroad depot with restrooms, large parking area, outside self-serve kiosk, rear deck for sitting and picnicking, lawn and gardens.

Proposed Main Messages and Media:

- Interpretive panels focusing on history of the old Fernley and Lassen Branch Line of the Southern Pacific Railroad and the Red River Lumber Company in Westwood.
- Community and special events information.
- Trail safety tips.

Tier 3 Byway Information Site Themes:

- Conversion of the railway to a trail
- General visitor orientation about Susanville and Lassen County, and where to find more information

Potential Partnerships:

Bureau of Land Management, Forest Service

Objectives - As a result of this interpretive effort, visitors will:

- Learn about the Byway
- Understand the development of the Fernley and Lassen Line, railroad and logging history, and the corridor's conversion to a rail/trail







Notes/Design Instructions:

An exhibit plan should be developed for the entire Bizz Johnson Trail that is separate from this interpretive plan in coordination with local community groups and users of the trail. The plan should include an inventory of existing interpretive media in use and recommendations for new media forms completed.

Signage Recommendations:

• Replace the outside kiosk with a more appropriate structure to display more information.

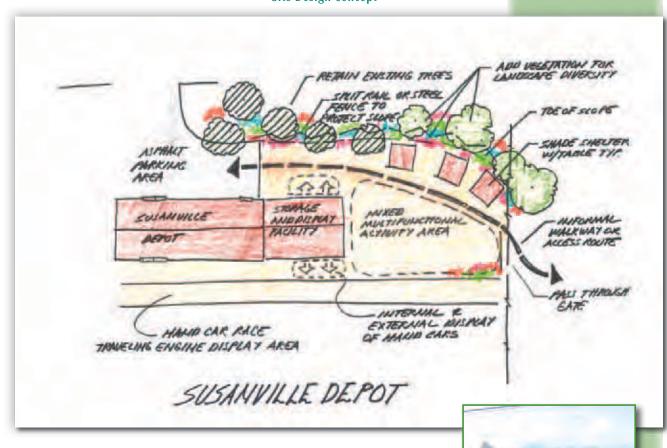
Install interpretive panels outside the depot for afterhours visitation.

Current Land Manager and Responsible Party for Maintenance of Site: Lassen Land and Trails Trust



SUSANVILLE

Site Design Concept



Site Design Concept Cost Estimate (2012)

m	Description			Qty.	Unit of Measure	Unit Price	Total	Notes		
	General Rec	uirements		~,,,	measure					
	Mobilization			1	ls	595,026.71	595,026.71	10% of Tota	al Contract	
	Quality Cont			1	ls	\$18,632.69	\$18,632.69	2% of Total		
	Construction		Stakine	1	ls	\$4,916.00	\$4,916.00			
			a steering	1	ls	\$4,800.00	\$4,800.00			
	Construction Signing Sedimentation Control			1	k	\$2,000.00	\$2,000.00			
	Sedimentation Control			1	ls .	\$1,200.00	\$1,200.00			
	As-Built Drawings				-					
-	Min - 181 I			General Ki	equirements	Suptotal	\$126,575.40			
	Site Work					** **	40.00			
	Earthwork			0	ls	\$0.00	\$0.00			
	Asphalt Paving			12448	sf	\$7.00	587,136.00	\$5-7.00/SF	3" top 6" base \$73/Ton	
	Concrete fla	twork/sidew	ralk	3370	sf	\$10.00	533,700.00		vide = 3920 SF 6" thick 4" a .00/SF S130 CY	
	Concrete Curb and Gutter				н	ć v. co	A 24 A 24		h 2" Pan 6" Thick \$25/LF M	
	Concrete Cu	rb and Gutte	A.	1	-	\$25.00	\$25.00		based on City Requiremen	
					69				00 EA Poles spaced on 40"	
									2 lights in cut + 8 lights at	
	Light Poles			30		\$5,000.00	\$150,000.00		Ave. Crossing 30	
	Power line is	trench		1486	H	\$50.00	574,300.00	\$50/LF 894	LF In Cut 592 LF At Crossin	
	Steel Fence			584	н	\$0.00	\$0.00	Custom Fence \$31/LF 584 LF Means Co 32 31 19:10 \$300 Decorative Tubular picket, steel, 6' sections 1-9/16" posts high 30.82/LF		
	Split Rail Fer	ce		2404	If	\$25.00	\$60,100.00	Worm Fend	e Wooden Logs \$25/LF	
							-			
	Interpretive	Signs		6	ea	\$4,500.00	\$27,000.00	Design Mark	terials Installation \$4500/E/	
_	interpretive	segro.		0	ca	24,300.00	\$27,000.00	_		
									t CXT Vault Toilet,	
									tion, Installation \$54932.8	
	Double Unit Vault Toilet			1	ea	\$54,932.80	554,932.80	12' x 16' Bk		
									Concrete Double Flush Tolk	
									alls and one sink on each si	
									8 SF x \$286.11/so = \$82400	
	Double Unit Flush Toilet			1	ea	\$82,400.00	582,400.00	Shipped an	d installed	
	Storage Building			1	ea	\$136,000.00	\$136,000.00	Concrete SI	850 SF x 150/SF = 127500.0 lab 6" thick 4" Gag. Base 8 = \$8500 Total = \$136000.0	
	_ ro- ogc oon			_			222,200.00	-1 H 244 SF		
								Halusered A	conceible 9' lenn Disnis inhi	
	Dinnie Val-			9	63	£1 200 00	53 600 00		ecessible 8' long Picnic tabl	
	Picnic Tables			3	ea	\$1,200.00	\$3,600.00	Inc Shippin		
									s 15' X 15' \$5684 + inst \$198	
	Shade Shelt	ors		3	ea	\$8,525.60	\$25,576.80	15% Shippi	ng 853.60 Tot. \$8745.00	
					Site Work	Subtotal	\$487,193.80			
	Landscape R	estoration								
	can carrenged in	- AND BUILDING								
				20	day	53,291.00	532,910.00	410 HP @ 5 towed, 23 t	nt Operator @542/day 1 Do 52315/Day 1 vibratory Roll ton @5434/Day = \$3291/D	
								3-1/2 to 4" Cal 6-8' tall @\$250.00 Plan		
	Planting Trees			50	ea	\$395.00	\$19,750.00	Lbr. Equ. \$3		
	Planting St	wubs		129	ea	\$55.00	\$7,095.00	5 Gal @ \$3	0 Plant, Soil, Fert. \$25 Inst.	
								Native See	d Grasses, Forbs, & Wildflow	
	Seeding			5.44	acre	\$3,000.00	\$16,320.00		/ 43560 SF/acre = 5.44 acre	
	areasting.								ion system \$3/SF Temporar	
		Temporary Irrigation for plant establishment		5.44	acre	\$65,340.00	\$355,449.60	Irrigation System \$1.50/SF 1.5 x 43560 SF/Acre = \$65340.00/Acre		
					Restoration		\$431,524.60			
				Landscape	nesionation					
			Mobilizati	Landscape on, Site Work			\$1,045,293.80			
	establishm	ent	Mobilizati		, Landscape		\$1,045,293.80			
		ent	Mobilizati		, Landscape		\$1,045,293.80			
	establishm Miscellane	ent			, Landscape		\$1,045,293.80 \$52,264.69			
	establishm Miscellane Site Remo	ent rous Costs	itions	on, Site Work	Landscape Restoration					
	Miscelland Site Remoi	ent eous Costs teness/Cond	itions verhead	on, Site Work	Landscape Restoration		\$52,264.69 \$156,794.07			
	Miscellane Site Remoi General Co	eous Costs teness/Cond ontractors O	itions verhead ofit	on, Site Work 5% 15% 10%	, Landscape Restoration		\$52,264.69 \$156,794.07 \$104,529.38		,	
	Miscellane Site Remoi General Co	eous Costs teness/Cond	itions verhead ofit	on, Site Work	, Landscape Restoration	Bare Cost	\$52,264.69 \$156,794.07 \$104,529.38 \$78,397.04			
	Miscellane Site Remoi General Co	eous Costs teness/Cond ontractors O	itions verhead ofit	on, Site Work 5% 15% 10%	, Landscape Restoration		\$52,264.69 \$156,794.07 \$104,529.38			

38. LASSEN NATIONAL FOREST HEADQUARTERS OFF HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

General visitor information and seasonal displays.

Existing Facilities and Status:

Administrative site for the Lassen National Forest; visitor information and a reception desk inside building. Exterior signing out front related to recreation information, orientation, and resource management on the Lassen National Forest. The interior has posters and displays in the foyer at strategic times during the year (wildflower week, for example). The inside vestibule displays and brochures are available during work hours.

Proposed Messages and Media:

Add a third panel to the two panel display to provide information about the Byway and Susanville area. Provide general visitor information about the recreation opportunities on the forest, news and announcements, and Tier 1 orientation to the Volcanic Legacy Scenic Byway through interior displays, brochures, and with the outside display.

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross country skiing and snowmobiling. At the end of a busy day, visitors can stroll through local art galleries and stores, and then sample the area's finest cuisine in the evening.
 - » There are a variety of recreation activities for everyone along the Byway.
 - » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.

Potential Partnerships:

Scenic Byway grants

Objectives - As a result of this interpretive effort, visitors will:

Learn about the Scenic Byway and recreation opportunities in the Susanville and Westwood region.







Estimated Cost:

Interpretive panel design, fabrication and installation: \$12,000

Other Recommendations:

Lighted, exterior byway portal kiosk with interpretive panels. Review and implement the interpretive plan for the Forest Headquarters completed in 2002.

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest





39. RAILS TO TRAILS PROGRAM FOR ABANDONED RAILROAD LINES

(Trail opportunities exist for the abandoned rail lines between Chester and Clear Creek, between Susanville and Wendel, from Wendel to Flanigan, NV, and from Burney to McCloud.)

Current Main Messages for Site (Theme) and Current Interpretive Media: None

Existing Facilities and Status:

Abandoned rail lines could be recast to provide recreation corridors for hiking, biking, equestrian and/or off-highway vehicle trails that link various communities in the region.

Proposed Main Message for Site and Interpretive Media:

Orientation and information about these proposed rail/trails and the communities they connect, trail maps, and significant interpretive stories at specific sites.

Tier 4 Byway Interpretive Site Themes:

Interpretive stories of each rail line (history, flora and fauna likely to be seen along the corridor, geology, stories of Native Americans and emigrant settlement, grazing, effects of fire suppression and plant succession, human influences on the landscape, etc.)

Potential Partnerships:

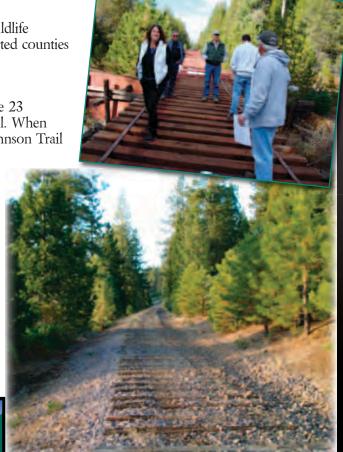
California Recreation Trails Program, Scenic Byway grants, Wildlife Conservation Board, Transportation Enhancement grants, affected counties and communities

Other Recommendations:

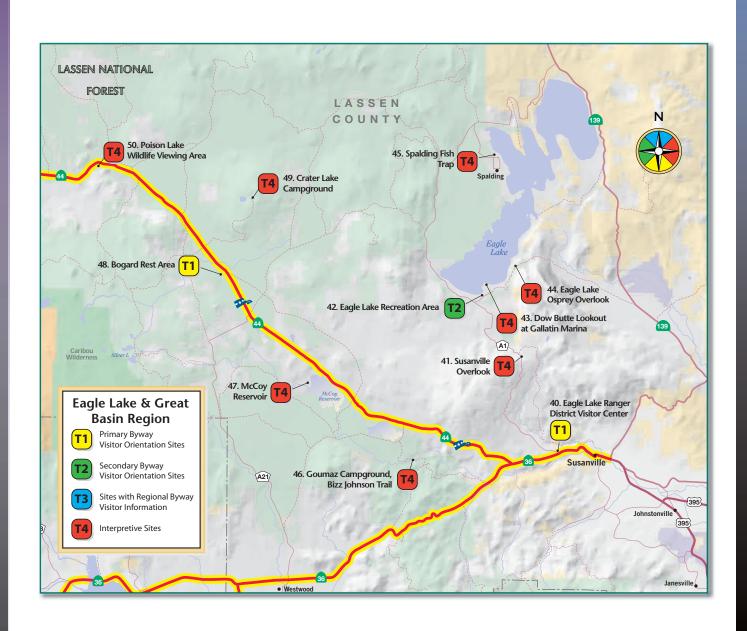
The Lassen and Trails Trust is currently working to convert the 23 mile Wendel line from Susanville to Wendel to a recreation trail. When completed, this line will link with the existing 26 mile Bizz Johnson Trail and 80 mile Modoc line to form the longest rail/trail in California (and one of the longest in the U.S.). Opportunities to construct a trail from Mason Station into Westwood should be pursued as well as a trail linking Westwood to Clear Creek and the Collins Pine Almanor Rail Trail into Chester. The Volcanic Legacy Community Partnership is also working with a coalition of organizations to convert the 80 mile McCloud River Railway between Burney and McCloud to a trail, known as the Great Shasta Rail Trail.

Current Land Manager and Responsible Party for Maintenance of Site:

Various railroad companies hold title to these lines until sold or donated to a trail management entity



TIER 4 Byway Interpretive Site



40. EAGLE LAKE RANGER DISTRICT VISITOR CENTER ON COUNTY ROAD A-1 AND HIGHWAY 36

Current Main Messages for Site (Theme) and Current Interpretive Media:

Wildlife, plant, watershed, recreation and historic information are provided.

Existing Facilities and Status:

Forest Service reception area with displays and hands-on exhibits. Sales area for interpretive materials. Two beautiful murals on the walls. Large chainsaw craving of Smoky the Bear on the front porch. Lighted, exterior kiosk in a patio along the walkway with general visitor information on recreation sites, opportunities and public announcements. Small picnic table area out front.

Proposed Main Messages and Media:

- Tier 1 orientation to the Volcanic Legacy Scenic Byway along with a map and tips on how to explore the Byway.
- Information on upcoming community events.
- Information on forest health issues and examples of the research and restoration practices the Forest Service has implemented.
- How wildlife and fish (and people) benefit from habitat restoration.

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross country skiing and snowmobiling. At the end of a busy day, visitors can stroll through local art galleries and stores, and then sample the area's finest cuisine in the evening.
 - » There is a variety of recreation activities for everyone in the Eagle Lake/Great Basin region.
 - » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.

Storylines:

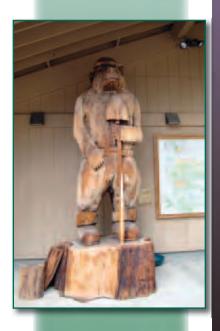
- » Recreational fish planting has changed the aquatic ecosystems of many lakes and streams at a cost to native species while benefiting anglers.
- » Human influence and timber extraction have contributed to the landscapes we know today.

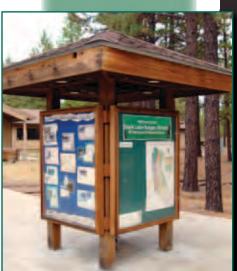
Potential Partnerships:

Local timber industries











Objectives - As a result of this interpretive effort visitors will:

- Recognize the many uses of timber harvested from this area over the years.
- Understand how forests are managed for multiple use.
- Understand forest management practices to maintain healthy forests and wildlife habitat.

List of Graphic Needs:

- Timber harvesting and logging photos, both positive and negative examples.
- Photos of other resource management activities, i.e. wildlife habitat improvement, restoration work along Pine Creek, aspen regeneration, etc.
- Illustrations or photos of "forest health" indicators, monitoring and research such as wildfire behavior at Blacks Mountain.

Notes/Design Instructions:

Aside from the design standards for the Byway portal, any additional exhibits developed for the Eagle Lake District Office should be part of an interpretive/exhibit plan addressing all the exhibits in the building and in the outside plaza area, both current and future. The themes stated above can become the overall themes used to guide exhibit planning. More specific topics can be developed regarding the stories for each theme.

Signage Recommendations:

To be determined by planning for the district office

Estimated Cost:

Byway Portal site design and construction: TBD Interpretive panel design, fabrication and installation: \$12,000

Current Land Manager and Responsible Party for Maintenance of Site:

Eagle Lake Ranger District, Lassen National Forest



41. SUSANVILLE OVERLOOK OFF EAGLE LAKE COUNTY ROAD A-1

Current Main Messages for Site (Theme) and Current Interpretive Media: None.

Existing Facilities and Status:

None. This proposed overlook offers spectacular views of the city of Susanville, the Great Basin, and the north end of the Sierra Nevada Mountains.

Proposed Main Messages and Media:

- Regional geomorphology
- 2-3 signs, low profile signs, 24 x 36 inches

Tier 4 Byway Interpretive Site Themes:

- Geology
- Fire history
- Forest recovery

Storylines:

- » Contrast and compare the terrain, climate, and vegetation of three bio-geo regions (Sierra Nevada, Cascade Range, and Great Basin) that can be seen from this vista.
- » Fire on the landscape: date of the fires that can be seen and how they started. Importance of fire safety.
- » How burned areas are restored.
- » Forest recovery and sustainable forest management.

Objectives - As a result of this interpretive effort visitors will:

• Recognize some of the differences between the various bio-geo regions.

 Understand the role of fire in the forest and the importance of fire safety.

Potential Partners:

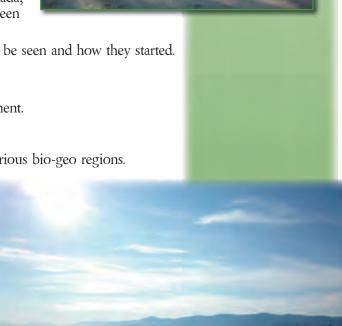
Lassen County, Sierra Pacific Industries

List of Graphic Needs:

- Satellite map of the region with an overlay of three bio-geo regions that can be seen from this site.
- Profile of the prominent features in the viewshed and what they are called.
- Display showing the perimeter of the fires and year they burned. Before/after photos.



TIER 4 Byway Interpretive Site

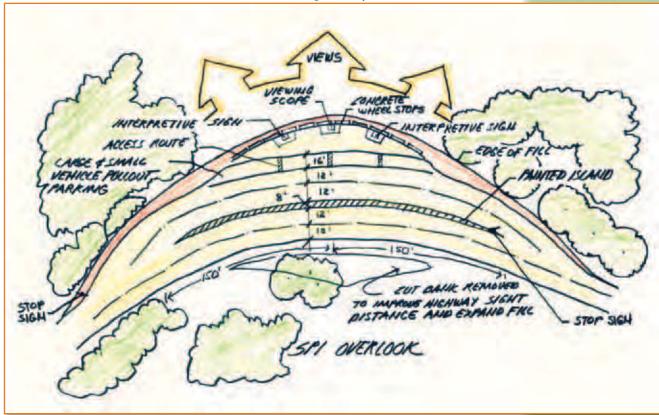


Notes/Design Instructions:

Need to develop a paved or gravel parking or pull-off area. A small pedestrian retaining wall may be needed in the Cascadian rock style for visitor safety and to mount displays. Consider installing a spotting scope at this site.

Current Land Manager and Responsible Party for Maintenance of Site Sierra Pacific Industries

Site Design Concept



Site Design Concept Cost Estimate (2012)

	rerlook Cost				Unit of				12/19/2
em	Description		Qty.	Measure	Unit Price	Total	Notes		
	General Requirements								
	Mobilization			1	ls	\$30,087.14	\$30,087.14	10% of Total Contract	
	Quality Control			1	ls	\$5,899.44	\$5,899.44	2% of Tota	Contract
	Construction Surveying & Staking			1	ls	\$4,916.00	\$4,916.00		
	Construction Signing			1	ls	\$4,800.00	\$4,800.00		
	Sedimentation Control			1	ls	\$2,000.00	\$2,000.00		
	As-Built Drawings			1	Is	\$1,200.00	\$1,200.00		
			General Requirements		Subtotal	\$48,902.58			
	Site Work								
								4" removed from top of fill - Assur that existing granite fill can serve a base for the new asphalt surface -	
	Excavation Placement &								incorporated into the
	Compaction			179	су	\$35.00	\$6,265.00	expansion	•
	Compaction				Cy	Ç33.00	50,203.00		
	5								moved from road side cut
	Excavation Placement &			2742		¢25.00	¢430,030,00		ghway sight distance and
	Compaction			3712	sf	\$35.00	\$129,920.00	expand existing fill. " Guess 3712 C	
	Asphalt Paving			17449	SI	\$7.00	\$122,143.00	\$5-7.00/SF	3" top 6" base \$73/Ton
	Pavement Marking Type acrylic Water borne, White or Yellow 4"							Island Inte	rior Road Centerline, (3)
	wide			800	If	\$0.36	\$288.00		tes "Guess 800 LF"
	Wide.					φσ.5σ	\$200.00	, , , , , , , , , , , , , , , , , , , ,	tes Guess 600 E.
	Traffic Sign,	post & insta	llation	2	ea	\$200.00	\$400.00	2 Signs	
	Concrete flatwork/sidewalk			432	sf	\$10.00	\$4,320.00	(3) 12' x 12	concrete pads = 432 SF
	,								
	Interpretive	Signs		2	ea	\$4,500.00	\$9,000.00	Design Ma	terials Installation \$4500/E
								Design Ma	terials Installation "Guess
	Viewing Scope			1	ea	\$2,000.00	\$2,000.00	\$2000/EA"	
	The thing group of					. ,	. ,		ccessible 8' long Picnic tab
									g & Inst. (Add if desired by
	Picnic Tables			2	ea	\$1,200.00	\$2,400.00	Forest)	g & mst. (Add if desired by
	FICHIC Tables			2		-		rorestj	
					Site Work	Subtotai	\$272,336.00		
	Landscape Work								
	Landscape work							Clearing an	d Grubbing, Individual tree
								_	- 24", Stump Removal and
	Tree Removal			20	ea	\$450.00	\$9,000.00		sh Removal \$450 Ea
	Tree Kemovai					7	+=,=====		s 11066 SF / 43560 SF/acre
	Seeding			0.24	acre	\$3,000.00	\$720.00	.24 acres	3 11300 31 / 43300 31 / acit
	Jecaning				scape Work	. ,	\$9,720.00		
						Jantotai	Ç3,7 20.00		
			Mohilizat	tion, Site Work	. Landscane	Subtotal			
			woomzat	, Site WUII		Bare Cost	\$330,958.58		
		ous Costs							
	Site Remoteness/Conditions			5%			\$16,547.93		
	General Contractors Overhead			15%			\$49,643.79		
	General Contractors Profit			10%			\$33,095.86		
	State Sales taxes on Materials			7.50%			\$24,821.89		
	State Sales	taxes on ivi	ateriais	7.3070					
	State Sales	taxes on ivi	lateriais	7.30%		Subtotal	\$124,109.47		

42. EAGLE LAKE RECREATION AREA OFF COUNTY ROAD A-1

Current Main Messages for Site (Theme) and Current Interpretive Media:

Fishing, recreation, natural and cultural resources.

Existing Facilities and Status:

The Recreation Area has five large campgrounds (one group), one picnic area, one beach/picnic area, two boat launches and parking area including a store, marina, showers and laundry, an interpretive fire lookout, an amphitheater, and a six mile paved, accessible trail linking them all together.

Proposed Main Messages and Media:

- Tier 2 orientation about the nearby Volcanic Legacy Scenic Byway.
- Recreation information for summer visitors.
- Information on community services and special events.
- Information about Eagle Lake's history (Native Americans, Bly Tunnel, unique fish species, fire history, what wildlife and waterfowl visitors can expect to see).

Tier 2 Byway Orientation Site Themes:

- Welcome to the Volcanic Legacy Scenic Byway with local information about the route and nearby communities.
- Post a Byway map of the region with an inset of the entire 500 mile route.

Additional Storylines:

Eagle Lake history, recreation, Eagle Lake trout, Native American history, Papoose Meadows massacre, etc.

Potential Partnerships:

Lassen College Foundation, Lassen Park Foundation

Objectives - As a result of this interpretive effort, visitors will:

- Learn about the different summer recreation opportunities in the Eagle Lake region.
- Have some basic information about the Byway and know where to obtain more.

Signage Recommendations:

Develop an interpretive/exhibit plan and site plan for the Eagle Lake Recreation Area. Create an interpretive plaza at the marina store to provide information for the entire recreation area. Include a small picnic area (2-3 tables) to invite visitors to linger while enjoying a soda or ice cream. Install 1-2 spotting scopes here. Provide interpretation on other themes along the 6 mile bike trail with signs or other media.



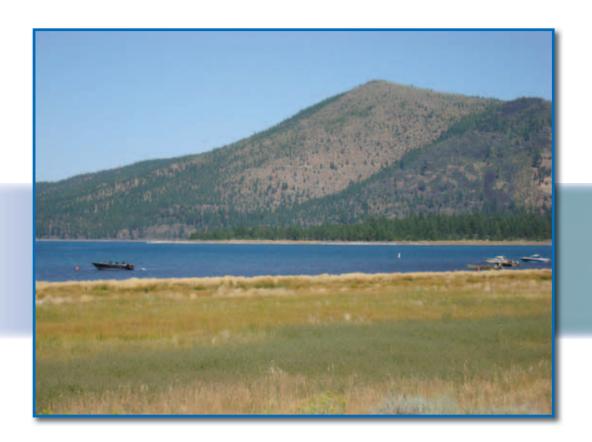
TIER 2 Byway Interpretive Site



Estimated Cost:

Based on the completion of the interpretive plan and site plan for the area.

Current Land Manager and Responsible Party for Maintenance of Site:



43. DOW BUTTE LOOKOUT AT THE EAGLE LAKE RECREATION AREA OFF COUNTY ROAD A-1 AT GALLATIN MARINA

Current Main Messages for Site (Theme) and Current Interpretive Media:

Some lookout history, wildfire story. The messages are haphazard with cultural, natural, geologic, and recreation information available.

Existing Facilities and Status:

This is a restored, historic lookout with an outside accessible deck at Gallatin Marina and is open during the summer. The lookout was moved from Dow Butte, located on the northwest side of the lake. The cab has been reroofed and repainted, but these are not consistent with time period furnishings, etc. The cab is an empty room with bulletin boards and a scattering of miscellaneous brochures, etc. There is a fire finder and some old photo displays.

Proposed Main Messages and Media:

Focus only on lookout history with professional displays (flat panels), made for easy changeability throughout the summer season.

Tier 4 Byway Interpretive Site Themes:

- Consider furnishing as an early/mid-1900s lookout would have been.
- Describe how lookouts lived and what their average day was like
- How the fire finder works (hands-on experience).
- Use old photos of Dow Butte and former lookouts.
- Perhaps have an audio of a lookout's story.
- Describe what visitors see in the viewshed and the old fire scars.

Potential Partnerships:

Resource Advisory Committee, National Forest Foundation, Lassen Park Foundation, Lahontan Regional Water Quality Control Board, Lassen College Foundation

Objectives - As a result of this interpretive effort, visitors will:

Learn about the life and conditions for people employed as fire lookouts.

Notes/Design Instructions:

The marina setting is not ideal (from an aesthetic standpoint) if it remains as a interpretive lookout, but it's in a well-traveled area. Replace the deck railing with one that complements the age and architectural style of the lookout.

Estimated Cost:

See attached cost estimates with site design concepts.



TIER 4 Byway Interpretive Site





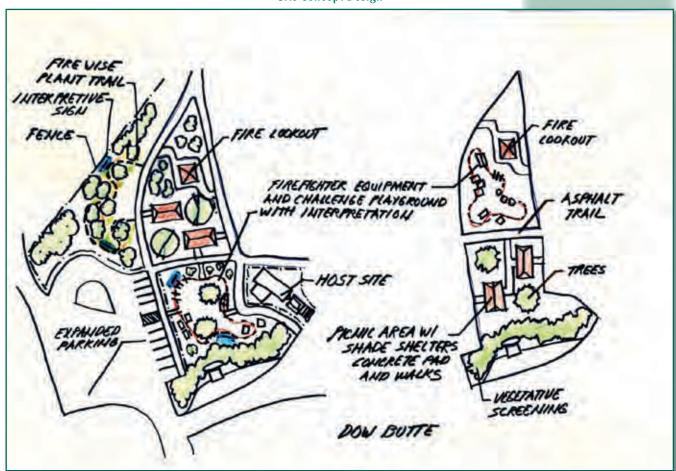
Signage Recommendations:

Panels along the walkway to Dow Butte to entice visitors inside; refurbish the interior as suggested above.

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Eagle Lake Ranger District

Site Concept Design



Site Concept Design Cost Estimate (2012)

	Butte Lookout Cost Estimate			Unit of				12/19/201		
tem	Description		Qty.	Measure	Unit Price	Total	Notes			
	General Requirements									
	Mobilization			1	ls	\$15,352.22	\$15,352.22	10% of Total Contract		
	Quality Control			1	ls	\$3,010.24	\$3,010.24	2% of Total	Contract	
	Construction Surveying & Staking			1	ls	\$4,916.00	\$4,916.00			
	Construction Signing		1	ls	\$4,800.00	\$4,800.00				
	Sedimentation Control		1	Is	\$2,000.00	\$2,000.00				
	As-Built Drawings			1	ls	\$1,200.00	\$1,200.00			
				General R	equirements	Subtotal	\$31,278.46			
	Site Work									
	Excavation Placement & Compaction		191	су	\$35.00	\$6,685.00				
	Asphalt Paving			6147	sf	\$7.00	\$43,029.00	\$5-7.00/SF 3" top 6" base \$73/Ton 61 SF Area (4 additional parking stalls, expanded parking lot, walks and trails		
	Concrete fla	Concrete flatwork/sidewalk			sf	\$10.00	\$13,450.00	1345 SF 6" thick 4" agg base \$7-10.00/ \$130 CY Concrete Pads, Sidewalk etc.		
	Split Rail Fence			569	If	\$25.00	\$14,225.00	Worm Fence Wooden Logs \$25/LF		
	Interpretive Signs			4	ea	\$4,500.00	\$18,000.00	Design Mat \$4500/EA	erials Installation 2' x 3'	
	Picnic Tables		2	ea	\$1,200.00	\$2,400.00	Universal Accessible 8' long Picnic table Inc Shipping & Inst.			
	Shade Shelters			2	ea	\$5,394.00	\$10,788.00	Rectangle 15' X 20' \$3596 + inst 35% \$1258.6 + 15% Shipping 539.40 Tot. \$5394.00		
					Site Work	Subtotal	\$108,577.00			
	Landscape V	Vork								
	Planting Trees			10	ea	\$395.00	\$3,950.00	3-1/2 to 4" Cal 6-8' tall @\$250.00 Plant Lbr. Equ. \$145.00		
	Planting Shrubs			40	ea	\$55.00	\$2,200.00	5 Gal @ \$3	0 Plant, Soil, Fert. \$25 Inst.	
								Wildflower	s 236977 SF / 43560 SF/acre	
	Seeding			0	acre	\$3,000.00	\$0.00	XX acres		
	Temporary Irrigation for plant establishment		0.35	acre	\$65,340.00	\$22,869.00	New irrigation system \$3/SF Temporary Irrigation System \$1.50/SF 1.5 x 43560 SF/Acre = \$65340.00/Acre 14881SF /43560= .35 acre Consider using Fire Crew to irrigate plants			
				Lanc	Iscape Work	Subtotal	\$29,019.00			
				a.	L					
			Mobilizatio	on, Site Worl	k, Landscape Work	Subtotal Bare Cost	\$168,874.46			
	Miscellane									
	Site Remoteness/Conditions			5%			\$8,443.72			
		ontractors O		15%			\$25,331.17			
		ontractors Pr		10%			\$16,887.45			
	State Sales taxes on Materials		aterials	7.50%			\$12,665.58			
						Subtotal	\$63,327.92			

44. EAGLE LAKE OSPREY OVERLOOK OFF COUNTY ROAD A-1

Current Main Messages for Site (Theme) and Current Interpretive Media: Wildlife viewing and mural of Eagle Lake on a water tank.

Triente viewing and marar of Bagie Bake on a water t

Existing Facilities and Status:

There is a small accessible parking area, if full, visitors have to walk along a trail near Camp Ronald McDonald. The site has outstanding views of the lake and nearby osprey nest. Seeing osprey and eagles is common. Two interpretive panels are currently located here with outdated graphics and two spotting scopes. A mural of Eagle Lake is painted on the water tank and one picnic table is available.

Proposed Main Messages and Media:

- Interpretive panels have faded due to weathering and need to be replaced.
- Advertise this site and the bicycle trail at all the local campgrounds.
- Display a map of the overlook's location.

Tier 4 Byway Interpretive Site Themes:

Osprey, eagles and waterfowl at Eagle Lake

Potential Partnerships:

California Department of Fish and Game, Resource Advisory Committee, Lassen College Foundation

Objectives - As a result of this interpretive effort, visitors will:

Understand how osprey, eagles, and other waterfowl use Eagle Lake as their home.

List of Graphic Needs:

Updated artwork related to new signage

Signage Recommendations:

Development of new sign panels that focus on osprey, eagles, waterfowl of Eagle Lake, and tie into management issues, like the impacts of climate change or water quality.

Current Land Manager and Responsible Party for Maintenance of Site

Lassen National Forest, Eagle Lake Ranger District



TIER 4 Byway Interpretive Site



45. SPALDING FISH TRAP AT EAGLE LAKE OFF COUNTY ROAD A-1

Current Main Messages for Site (Theme) and Current Interpretive Media:

- Lifecycle of rainbow trout in Eagle Lake.
- Hydrology of Eagle Lake.
- Waterfowl that can be found at the lake.

Existing Facilities and Status:

New CXT restroom, unpaved parking area, one interpretive kiosk. Eagle Lake is the second largest natural lake entirely within California. Pine Creek is the major tributary to Eagle Lake. The Spalding Fish Trap site on Pine Creek was recently renovated to accommodate the public and larger groups who enjoy watching the rainbow trout swim upstream to spawn each spring. The site is on Lassen National Forest land and is operated by the California Department of Fish and Game. A dam and trapping station allow DFG staff to trap the trout where they are milked for their eggs and milt. The fertilized eggs are raised at two hatcheries and the young fish are then planted back in Eagle Lake and in other lakes in the West. DFG staff and volunteers explain the trapping operation to visitors during the spawning season, which is usually March or April.

Proposed Main Messages and Media:

- Lifecycle of Eagle Lake rainbow trout.
- Eagle Lake sits in its own closed hydrologic basin with no outflow.
- Eagle Lake rainbow trout is uniquely suited to the lake's more alkaline water.
- Past management activities altered Pine Creek habitat so much that small trout could no longer survive in the creek in their attempt to swim back to the lake.
- Many species of waterfowl live at the lake including bald eagles, osprey, pelicans, herons and many other aquatic birds.
- Wildlife viewing is abundant.
- Native Americans lived seasonally and fished Eagle Lake trout for centuries.

Tier 4 Byway Interpretive Site Themes:

- Eagle Lake rainbow trout and other fish species that reside in the lake.
- The abundance of waterfowl at the lake.
- Hydrology of Eagle Lake.
- Restoration of Pine Creek so one day natural spawning can occur.

Potential Partnerships:

CA Department of Fish and Game





TIER 4 Byway Interpretive Site

Objectives - As a result of this interpretive effort, visitors will:

- Understand the hydrology of Eagle Lake.
- Learn about the lifecycle of Eagle Lake rainbow trout.
- Learn about the many species of waterfowl that inhabit the lake and feed on the fish.
- Learn about the restoration of Pine Creek.

Notes/Design Instructions:

The current interpretive kiosk is fairly new with good information.

Signage Recommendations:

- Provide better accessibility to the kiosk and fish trap overlook and clearly sign where this access is.
- Place 1 picnic table on a level pad that overlooks the lake.
- Gravel the parking area.
- Remove cable around site and replace with a nicer, yet durable barrier.

Current Land Manager and Responsible Party for Maintenance of Site



TIER 4 Byway Interpretive Site

46. GOUMAZ CAMPGROUND AND ACCESS TO THE BIZZ JOHNSON NATIONAL RECREATION TRAIL OFF HIGHWAY 44

Current Main Messages for Site (Theme) and Current Interpretive Media:

Forest Service information and regulations for camping, map of the Bizz Johnson Trail.

Existing Facilities and Status:

One kiosk, small developed campground, water, restroom, and parking.

Proposed Main Messages and Media:

Information about the Bizz Johnson Trail and forest travel management.

Tier 4 Byway Interpretive Site Themes:

- Map and information about the Bizz Johnson Trail and other nearby trails in Lassen and Plumas County.
- Information about Westwood and Susanville (events, services etc.)

Objectives - As a result of this interpretive effort, visitors will:

Learn about the history of the Red River Lumber Company in Westwood, the construction of the Fernley/Lassen Branch rail line, and the transformation of the rail line to the Bizz Johnson Trail.

List of Graphic Needs:

Historic photos of the railroad and early logging in the area.

Signage Recommendations:

Install interpretive information on the existing kiosk that can easily be updated and replaced as needed.

Estimated Cost:

Minimal for the development of kiosk information, printed on durable material.

Current Land Manager and Responsible Party for Maintenance of Site:





TIER 4 Byway Interpretive Site

47. McCOY RESERVOIR ON HIGHWAY 44

Current Main Messages for Site (Theme) and Current Interpretive Media:

None.

Existing Facilities and Status:

Visitors enjoy primitive camping, boating/canoeing, fishing, and day use activities. There are no developed facilities.

Proposed Main Messages and Media:

- Waterfowl/wildlife viewing
- Important information regarding campfires, pack in/pack out, proper disposal of human and other waste, and minimum impact camping
- Travel management information
- Tread Lightly message

Tier 4 Byway Interpretive Site Themes:

- What wildlife/waterfowl visitors can expect to see here
- Minimum impact camping information
- Travel management information
- Tread Lightly and Pack In/Pack Out messages

Potential Partnerships:

Scenic Byway grants, Resource Advisory Committee

Objectives - As a result of this interpretive effort, visitors will:

- Understand where they can drive their vehicles.
- How to camp with minimum impacts on the land, and how to Tread Lightly.
- Learn about waterfowl.

Signage Recommendations:

Roadside kiosk/panels (need roadside turnout at this site)

Current Land Manager and Responsible Party for Maintenance of Site:



48. BOGARD REST AREA ON HIGHWAY 44

Current Main Messages and Current Interpretive Media:

- Early history of Europeans arriving in this region
- Natural resources that caused many to stay or return
- The Emigrant Trails
- Pine Creek Valley
- History in the Trees pine stump prepared by the Forest Service
- Early Forest Service history

Existing Facilities and Status:

This CALTRANS rest area was constructed in 2007 with two 8-panel interpretive kiosks. New interpretive panels were installed in 2008 focusing on the Lassen and Nobles Trails. A 500 year old tree slab with rings identified will also be placed on site. This tree was removed from the Nobles Trail during the widening of Highway 44. A blaze mark on the tree is dated to the 1850s.

Early Forest Service history includes the original Bogard Ranger Station across Highway 44 and a small barn that now sits behind the rest area, abandoned and in need of a new term of service

Proposed Main Messages and Media:

Tier 1 - Orientation to the Volcanic Legacy Scenic Byway.

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross country skiing and snowmobiling.
 - » There is a variety of recreation activities for everyone in the Eagle Lake/Great Basin region.
 - » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.
- The Nobles and Lassen Emigrant Trails and the Humboldt Road reveal the history of the mid-1800s in this landscape as emigrants came here for the gold and discovered the bountiful riches of the forests (trees, water, and grasslands)
- Striking a balance between human uses and maintaining natural ecosystems is a difficult challenge.









Storylines:

- » Early history of the Lassen National Forest and Bogard Ranger Station.
- » The creation of the national forest and the Forest Service Ranger Station at Bogard.

Potential Partnerships:

National Park Service, Trails West, Lassen County Historical Society, Lassen Lands and Trails Trust, Oregon and California Trails Association, Lassen Park Foundation

Objectives - As a result of this interpretive effort, visitors will:

- Learn about the life and hardships of early pioneers traveling the emigrant trails.
- Learn about Forest Service history and life at the Bogard Ranger Station.

List of Graphic Needs:

Historic photos of buildings, trees, Forest Service employees, pages/quotes from General Land Office notes, pages/quotes from emigrant diaries, graphic of a typical wagon and pioneer provisions.

Signage Recommendations:

Use CALTRANS kiosks where possible. Need an interpretive sign at the barn. The Forest Service Ranger Station is still operating and is not open to the public.

Estimated Cost:

Byway Portal site design and construction: TBD Interpretive panel design, fabrication and installation: \$12,000

Current Land Manager and Responsible Party for Maintenance of Site

CALTRANS at the rest area; Lassen National Forest, Eagle Lake Ranger District for the adjacent area.



49. (RATER LAKE CAMPGROUND AND DAY USE AREA OFF HIGHWAY 44

Current Main Messages for Site (Theme) and Current Interpretive Media: None

Existing Facilities and Status:

Small campground, one kiosk, a small picnic area, boat launch (no gas motors), and restrooms.

Proposed Main Messages and Media:

 Crater Lake is similar to the much larger Crater Lake in Oregon, but they are different types of volcanoes and the lakes were formed by very different processes.

• How the crater was formed and when.

Tier 4 Byway Interpretive Site Themes:

Geology

Objectives - As a result of this interpretive effort, visitors will:

Understand the local geology and formation of crater type lakes.

List of Graphic Needs:

Graphic on how craters are formed. Photo of the larger Crater Lake compared to the small Crater Lake.

Signage Recommendations:

- 3 panel kiosk with a welcome to the campground, safety information and necessary regulations.
- One panel interpretive sign with information on the geology of the area and formation of the crater (perhaps install near the boat launch).

Other Recommendations:

The small picnic area needs to be defined with 1-2 tables on level pads and an accessible pathway to them.

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Eagle Lake Ranger District



TIER 4 Byway Interpretive Site



TIER 4 Byway Interpretive Site

50. POISON LAKE WILDLIFE VIEWING AREA ON HIGHWAY 44

Current Main Messages for Site (Theme) and Current Interpretive Media: None.

Existing Facilities and Status:

None.

Proposed Main Messages and Media:

- Waterfowl viewing and identification.
- Wildlife habitat requirements for waterfowl in the area.
- Habitat improvements enhance wildlife diversity.

Tier 4 Byway Interpretive Site Themes:

Waterfowl viewing.

Storylines:

Purpose of the man-made islands and what waterfowl and other wildlife visitors can expect to see at the lake.

Potential Partnerships:

Scenic Byway grants, wildlife organizations, CA Department of Fish and Game

Objectives - As a result of this interpretive effort, visitors will:

Be able to identify the birds that nest at Poison Lake and learn about their nesting cycle.

Notes/Design Instructions:

Include photos or color graphics of the wildlife/waterfowl visitor can expect to see at Poison Lake

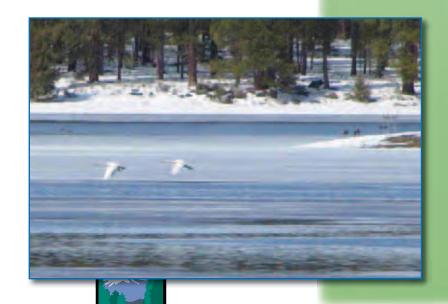
Signage Recommendations:

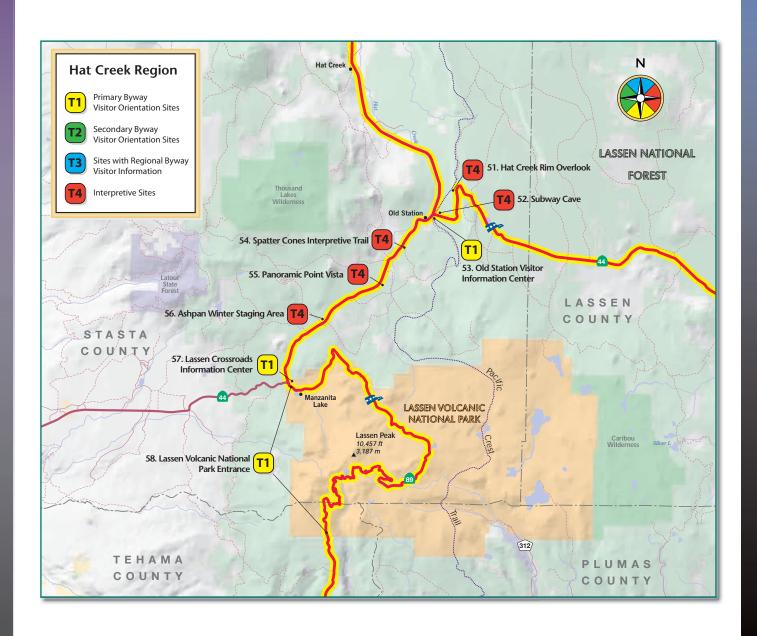
Kiosk with panels similar to those at Spatter Cones Trail.

Other Recommendations:

A pull-off parking area and small kiosk or low profile interpretive signs are needed, but no restroom.

Current Land Manager and Responsible Party for Maintenance of Site:





51. HAT CREEK RIM OVERLOOK OFF HIGHWAY 44

Current Main Messages for Site (Theme) and Current Interpretive Media:

The Lassen Scenic Byway traverses diverse landscapes.

Storylines:

- » Landscapes of the Cascade mountains (terrain, hydrology, and vegetation).
- » Natural forces (volcanic) that shaped the Cascades.
- » Humans have depended on the natural environment for thousands of years.
- » Lifestyle of the Atsugewi and human use of the areas' resources through logging, livestock grazing, recreation (wilderness, camping, hiking, fishing).
- » Audio messages of the eruption of Lassen Peak and Hat Creek history. Community and special event information is also provided.

Existing Facilities and Status:

A stone wall (CCC style) overlooks the Hat Creek Valley providing views to Lassen Peak and Mount Shasta. The concrete plaza (approximately 1,000 SF) at the overlook contains a two spotting scopes and two audio messages played by push button technology. Three low profile interpretive panels (size 36 x 34 inches) are mounted on the stone wall. The panels provide orientation maps and information on activities and things to do in the local area. The panels are mounted in standard frame systems. The site also includes a large parking area, restrooms, and small picnic area.

This site burned over in 2009 without significant damage to the facilities, but the trees were killed. Vegetation is starting to re-sprout and grow.

Proposed Main Messages and Media:

Historical, cultural, geology, community information. Also issue a forest order prohibiting parking by commercial vehicles and any vehicle weighing over 24,000 pounds.

Tier 4 Byway Interpretive Site Themes:

- Focus on the themes of geology, cultural, historical and community information at this site, not general recreation information
- Pit River Tribe
- Geology of Lassen Peak Flows,
- 2009 wildland fire and the effects on the surrounding landscape

Potential Partnerships:

Scenic Byway grants, Lassen Park Foundation, Resource Advisory Committee



TIER 4 Byway Interpretive Site





Hat Creek Region

Objectives - As a result of this interpretive effort, visitors will:

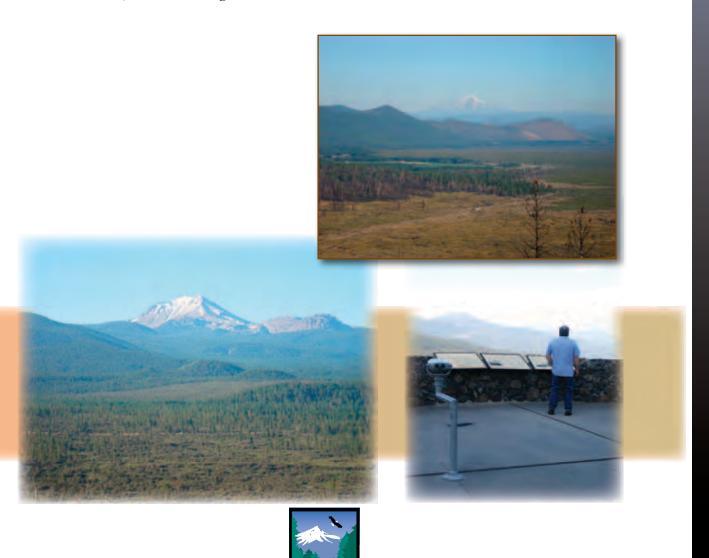
- Recognize how natural processes combined to create the landscape;
- Understand that natural processes are interdependent and interactive;
- Realize that along with geology, water, weather and plant life, all living things affect the environment.
- Understand the recent wildland fire and how fire influences forest ecosystems.

List of Graphic Needs:

- Map of geologic terrain of the Cascades
- Map of the valley and identification of key mountains and features
- Illustrations of the Atsugewi activities

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Hat Creek Ranger District



Hat Creek Region

52. SUBWAY CAVE ON HIGHWAY 89

Current Main Messages for Site (Theme) and Current Interpretive Media: Geologic

Existing Facilities and Status:

Subway Cave is an underground lava tube, and a very popular site for visitors and school groups. Existing facilities include a parking area, small picnic area, restrooms, water and an interpretive plaza with two interpretive panels. The trail through the lava tube is 1/3 mile and is not accessible.

Proposed Messages and Media:

- Volcanic geology.
- The two interpretive panels in parking area are still in good condition.
- Install a larger map panel at the cave entrance and replace the existing bulletin board kiosk and map of the Hat Creek Recreation Area.
- Provide an downloadable interpretive talk about cave geology, life forms, and new research on lava tubes.

Tier 4 Byway Interpretive Site Themes:

- Subway Cave is an open lava tube, created by rivers of red-hot lava around 20,000 years ago. As the lava drained away, these tube-like caves remained.
- Lava tubes are essentially rivulets that freeze on the outside. The rock
 on the outside freezes and forms a good insulator that then allows the
 interior to remain molten and to continue to flow through.

Other Storylines:

Lassen Volcanic National Park, Lava Beds National Monument, and Crater Lake are all volcanic centers with ongoing volcanic activity. In May 1915, Lassen Peak, the southernmost active volcano in the Cascade Range, erupted explosively.

- » Avalanches, mudflows, and flows of hot ash and gas devastated nearby areas, and volcanic ash fell as far away as 200 miles to the east.
- » The Lassen area remains volcanically active.
- » The volcano hazards demonstrated in 1915 still can threaten not only nearby areas, but also more distant communities.
- » Recent work by scientists with the U.S. Geological Survey (USGS) in cooperation with the National Park Service is shedding new light on these hazards.
- » Lava tube environments are believed to be similar to environments elsewhere in the solar system and occur as natural outgrowths of flood-basalt type, quiet, flowing lava eruptions.







Hat Creek Region

- » Temperate and moist year round, caves are often very different from the outside world, forming "micro-climates" full of fascinating life such as bats, ferns, and sparkling bacteria.
- » Lava Beds National Monument has the most lava tubes and cave environments in the United States.

Potential Partnerships:

US Geological Survey, Lassen Park Foundation, Scenic Byway grants, McConnell Foundation, Resource Advisory Committee, Recreation Trails Program, Forest Service Capital Improvement funds

Objectives - As a result of this interpretive effort, visitors will:

- Understand the basic volcanic processes that created lava tubes.
- Recognize the volcanic activity that is ongoing in this region of northern California.
- Travel to see Lava Beds National Monument.

Notes/Design Instructions:

Regularly spaced panels, clearer trail directions, redesign of the parking lot and trails. A conceptual site plan has been completed. The Lassen Park Foundation is very interested in helping the Forest Service with the renovations.

Signage Recommendations:

Additional orientation at cave entrance, and audio narrative.

Estimated Cost:

Design, fabrication and installation for 3 panels: \$15,000 Audio tour: \$9,500 Site Reconstruction Est. \$2,000,000

Current Land Manager and Responsible Party for Maintenance

Lassen National Forest, Hat Creek Ranger District





53. OLD STATION VISITOR INFORMATION CENTER AT HIGHWAYS 44 AND 89

Current Main Messages for Site (Theme) and Current Interpretive Media:

Natural, cultural, geologic and recreation messages.

Existing Facilities and Status:

This is a small visitor center that operates during the summer months serving visitors from May to October. Interior exhibits consist of fish ecology, watershed conservation, and Leave No Trace information. The site has a medium size parking area, interpretive garden and walkway, small picnic area, restrooms, water, interpretive panels, and an information kiosk. The visitor center has an inviting deck and picnic table for relaxing. An old amphitheater (no longer in use) is nearby.

Proposed Main Messages and Media:

Natural, cultural, geologic, recreation Tier 1 Volcanic Legacy Scenic Byway Orientation

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross-country skiing and snowmobiling.
 - » There are a variety of recreation activities in the Hat Creek region.
 - » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.
 - » Fishing in Hat Creek.

Potential Partnerships:

Lassen Park Foundation, Scenic Byway grants, Resource Advisory Committee

Estimated Costs:

Byway Portal site design and construction: TBD Interpretive panel design, fabrication and installation: See attached cost estimates for site construction work based on site concepts for redesign of parking area.

Other Recommendations:

This site would benefit from a site plan to relocate the parking area further back from the visitor center. This would "buffer the visitor center from the expanse of pavement around it and allow the Forest Service to provide a longer, more scenic walkway to the deck to help frame the visitors' experiences. The parking lot also needs to be enlarged for RVs.

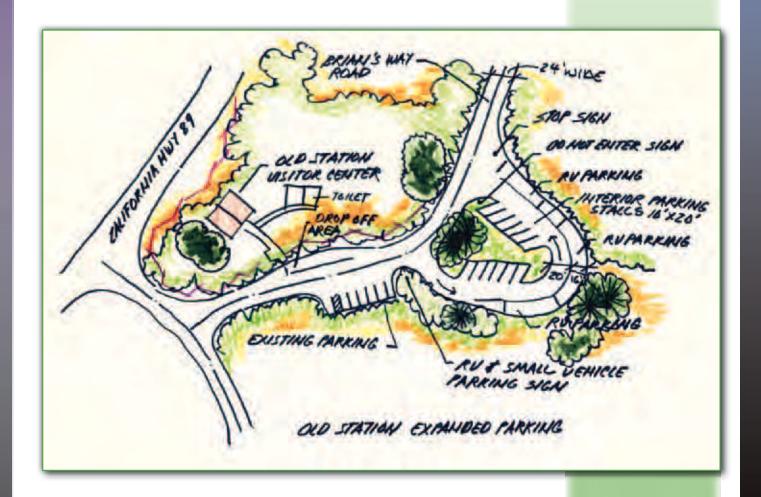
Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Hat Creek Ranger District





Site Design Concept



Site Design Concept Cost Estimate (2012)

ld St	ation Cost Estimate				ı		T	12/19/20
em	Description		Qty.	Unit of Measure	Unit Price	Total	Notes	
	General Requiremen	its						
	Mobilization		1	Is	\$13,329.65	\$13,329.65	10% of Tot	tal Contract
	Quality Control Construction Surveying & Staking Construction Signing Sedimentation Control		1	Is	\$0.00	\$0.00	2% of Total Contract	
			1	Is	\$0.00	\$0.00		
			1	Is	\$0.00	\$0.00		
			1	Is	\$0.00	\$0.00		
	As-Built Drawings		1	Is	\$0.00	\$0.00		
			General Requirements		Subtotal	\$13,329.65		
	Site Work							
					•			
	Excavation Placemer	t & Compactio	n 474	су	\$35.00	\$16,590.00		
	Asphalt Paving	Asphalt Paving		sf	\$7.00	\$106,694.00	\$5-7.00/SF	3" top 6" base \$73/Ton
				Site Work	Subtotal	\$123,284.00		
	Landscape Restoration	on						
							3-1/2 to 4" Cal 6-8' tall @\$250.00 Plantin	
	Planting Trees	Planting Trees		ea \$395.00 \$1,975		\$1,975.00	Lbr. Equ. \$145.00	
							5 Gal @ \$30 Plant, Soil, Fert. \$25 Inst.	
	Planting Shrubs		20	ea	\$55.00	\$1,100.00	(Inside of	parking island)
		Seeding		0.11 acre			Wildflowers 4405 SF / 43560 SF/acre = .11 acres	
	Seeding					\$330.00		
	Temporary Irrigation for plant establishment		4405	sf Restoration	\$1.50	\$6,607.50 \$10,012.50	New irrigation system \$3./SF Temporary Irrigation System \$1.50/SF 1.5 x 4405 SF \$6608 (Consider using fire crew to wate plants)	
			Lanuscape	Restoration	Subtotal	\$10,012.50		
		Mobilizat	ion, Site Worl	c, Landscape Restoration		\$146,626.15		
	Miscellaneous Costs							
	Site Remoteness/Conditions General Contractors Overhead General Contractors Profit State Sales taxes on Materials		5%			\$7,331.31		
			15%			\$21,993.92		
			10%			\$14,662.62		
			7.50%			\$10,996.96		
					Subtotal	\$54,984.81		
				1	Total	\$201,610.96	1	

54. SPATTER CONES INTERPRETIVE TRAIL ON HIGHWAY 44/89

Current Main Messages for Site (Theme) and Current Interpretive Media: Geology, natural history.

Existing Facilities and Status:

This new interpretive site was completed in 2007. The site includes an unpaved parking area, small picnic area, restrooms, water, and an interpretive plaza with a 3-panel Cascadian-style kiosk and mounted panels.

Tier 4 Byway Interpretive Site Themes:

How spatter cones and lava tubes were formed.

Potential Partnerships:

Lassen Park Foundation, US Geological Survey, University of California (for some geologic interpretation as well)

Objectives - As a result of this interpretive effort, visitors will:

Understand how spatter cones and lava tubes were formed.

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Hat Creek Ranger District



TIER 4 Byway Interpretive Site

Hat Creek Region

55. PANORAMIC POINT VISTA ON HIGHWAY 44

Current Main Messages for Site (Theme) and Current Interpretive Media:

- Use of timber
- Humans have depended on the natural environment for thousands of years interpretive trail signs
- Forest management for wood products
- The region's landscape was shaped by humans.
- Eruption of Lassen Peak
- Geology and volcanic formations.

Existing Facilities and Status:

Large parking area, restrooms, interpretive plaza, framed by a CCC-style rock wall with pedestals for three interpretive panels, small picnic area and interpretive trail, photo trail for taking pictures of Lassen Peak and Chaos Crags. The three 48 x 48 inch interpretive panels on the rock wall were removed due to weathering and need to be replaced.

Proposed Main Messages and Media:

- Forest management
- Geology and volcanic eruptions

Tier 4 Byway Interpretive Site Themes:

- Forest management for wood products
- Use of timber
- Eruption of Lassen Peak

Potential Partnerships:

Scenic Byway grants, Lassen Park Foundation, Resource Advisory Committee

Estimated Costs:

\$6,000 for sign design and fabrication

Objectives - As a result of these interpretive efforts, visitors will:

- Associate the wood products they use with the timber cut in a forest
- Understand that logging occurs on Forest Service lands
- Recognize a plantation and its purpose
- Learn about the eruption of Lassen Peak

List of Graphic Needs:

Photos or illustrations of various wood products, Logging photos

Signage Recommendations:

3 panels, low profile, 48 x 48 inch in Hopewell style frame

Current Land Manager and Responsible Party for Maintenance of Site

Hat Creek Ranger District, Lassen National Forest, and CALTRANS







56. ASHPAN WINTER STAGING AREA ON HIGHWAY 44/89

Current Main Messages for Site (Theme) and Current Interpretive Media:

- Winter recreation and a map of the trails
- Winter survival tips
- Forest regulations

Existing Facilities and Status:

This site serves as a winter staging area for snowmobilers. It has a large parking lot with two vault restrooms, and a kiosk. Cross-country skiers also enjoy the groomed trails. The site is used as a summer rest area.

Proposed Main Messages and Media:

- Information on winter recreation and a trail map.
- Winter safety and survival information.
- Seasonal display with information about summer activities in the area with map.
- Provide Tier 3 orientation to the Volcanic Legacy Scenic Byway with a map of the route on the exiting kiosk.
- Forest travel management information.
- Issue a forest order prohibiting parking by commercial vehicles and any vehicle weighing over 24,000 pounds.

Tier 3 Byway Interpretive Site Themes:

- Learn about the many winter and summer recreation opportunities near the staging area.
- Trail map
- Tread lightly and Forest travel management information

Potential Partnerships:

Scenic Byway grants, State OHMVR Division grant

Objectives - As a result of this interpretive effort, visitors will:

- Learn about the different winter and summer recreation opportunities in the Hat Creek region (seasonal displays).
- General information about the Byway and know where to obtain more.
- Understand forest travel management regulations.

Other Recommendations:

Use the existing kiosk to post summer information.

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest, Hat Creek Ranger District





57. LASSEN CROSSROADS INFORMATION CENTER **OFF HIGHWAY 44** (in Lassen Volcanic National Park)

Current Main Messages for Site (Theme) and Current Interpretive Media: Historical, natural, cultural, geologic, and community information

Existing Facilities and Status:

A set of four shelters with interior exhibits makes up the Information Center. Each shelter provides a low profile map orientation panel (porcelain enamel signs) and information about travel within specific travel zones. Vertical interpretive panels with messages on wildlife, water, geology, heritage and recreation activities specific to each travel zone are provided. The final shelter focuses more in depth on the Native American cultures that existed in the region prior to Euro-American arrival and settlement. A rock garden sits in between two of the pavilions with interpretive panels that explain the different types of volcanic rock and how to identify them. These exhibits were installed

in 2000.



Add one more sign displaying a map of the Volcanic Legacy Scenic Byway and the recreation opportunities along the route.

Tier 1 Byway Orientation Portal Themes:

Only a Byway map is needed. All other interpretive themes are currently provided in the existing exhibits.

Potential Partnerships:

A current partnership between the Lassen National Forest and Lassen Volcanic National Park exists. Additional partners: Scenic Byway grants

Notes/Design Instructions:

A single panel kiosk is needed that complements the site's existing architectural style.

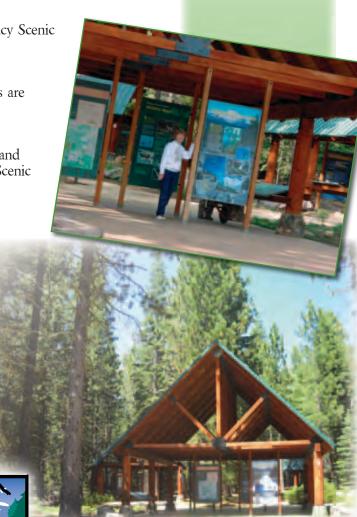
Estimated Cost:

Byway Portal site design and construction: TBD Interpretive panel design, fabrication and installation: \$3,300

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen National Forest and Lassen Volcanic National Park

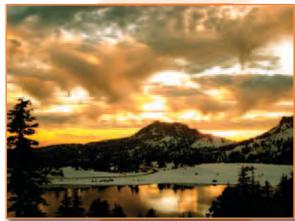




58. LASSEN VOLCANIC NATIONAL PARK ENTRANCES ON HIGHWAYS 44/89 AND 36/89

Current Main Messages for Site (Theme) and Current Interpretive Media:

Most famously known for eruption of Lassen Peak in 1915, the park's most obvious significant resources are the volcanic and geothermal activities. The cultural and heritage stories that tie to the native tribes and the story of Ishi are also part of this park's message. The park provides recreation for camping, hiking, and other outdoor activities. The park is about 150 square miles with over 400,000 visitors annually. Visitor centers, wayside exhibits, a park newspaper, numerous specialty brochures, and the park website all provide diverse interpretive information targeting various audiences. The park has an interpretive division and identified themes and goals as part of a park general management plan that serves to structure ongoing programming, facility and exhibit design beyond the byway.



Existing Facilities and Status:

The byway traverses through the western side of the park. Main facilities in the Park include 3 visitor centers (see http://www.nps.gov/lavo/planyourvisit/hours.htm for more specific information), a gift shop and campers store. Campgrounds and hiking trails and all exhibits are maintained by the park. The Lassen Crossroads Pavilion provides self-serve information and is further outlined in the previous inventory item.

Proposed Main Messages and Media:

- Add Volcanic Legacy Scenic Byway information along the corridor in the Lassen region at all visitor center facilities and the Lassen Crossroads site (Tier 1 Byway orientation).
- Add Volcanic Legacy Scenic Byway orientation and information on the Park website (none is currently available).
- Identify scenic byway on park maps, literature and brochures as appropriate.

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross country-skiing and snowmobiling. At the end of a busy day, visitors can stroll through local art galleries and boutiques, and then sample the area's finest cuisine in the evening.
 - » Finding your way around the Lake Almanor region, and Lassen Volcanic National Park is easy with a variety of recreation activities for everyone.



Hat Creek Region

Other Storylines:

All other interpretive themes are currently provided in the existing exhibits.

Potential Partnerships:

Current partnership between Lassen National Forest and Lassen Volcanic National Park exists. Additional partners: Scenic Byway grants

Notes/Design Instructions:

Site design for byway portal information will need to be addressed in a form that is consistent with the current structures already at the site. New sign panels at sites (and structures), should blend with the design guidelines for the park, rather than a separate structure recommended for other byway sites without development.

Estimated Cost:

Byway Portal site design and construction: TBD Interpretive panel design, fabrication and installation: \$12,000

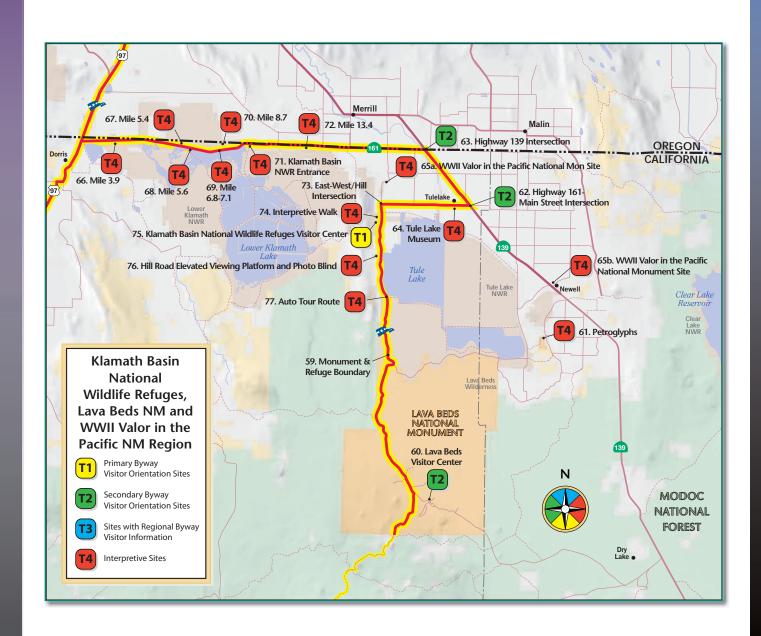
Additional sites on the Highway 89 section of the Byway through the national park include:

Site	Primary Interpretive Themes	Existing Interpretive Facilities or Information
Wayside/Pullout #72 on Lassen Volcanic National Park Highway	Lassen Volcanic National Park Highway Cultural Landscape, CCC, VLSB	Yes
Kohm Yah-mah-nee Visitor Center	Main Park Visitor Center - Geology, Natural History, Cultural History, Fire Ecology, Recreation, Stewardship, Orientation. VLSB is noted as part of Cultural History. Potential Tier 1 Byway Orientation Portal	Yes

Current Land Manager and Responsible Party for Maintenance of Site:

Lassen Volcanic National Park





59. MONUMENT AND REFUGE BOUNDARY ON HILL ROAD

Current Main Messages for Site (Theme) and Current Interpretive Media:

Identification marker for Lava Beds National Monument

Existing Facilities and Status:

None.

Notes/Design Instructions:

Add the Volcanic Legacy Scenic Byway All-American Road logo onto the identification marker.

Current Land Manager and Responsible Party for Maintenance of Site:

Lava Beds National Monument and Klamath Basin National Wildlife Refuge



60. LAVA BEDS VISITOR CENTER PARKING AREA ON HILL ROAD

Current Main Messages for Site (Theme) and Current Interpretive Media:

Scenic Byway orientation, directions, maps and temporary interpretive exhibits related to park resources, wildlife and geologic features.

Existing Facilities and Status:

On the edge of the parking lot is a six paneled kiosk with an architectural style similar to the Lava Beds visitor center. This kiosk remains under the jurisdiction of Lava Beds National Monument. An additional panel specific to Byway resources and recreation will be added to the kiosk when funding is available.

New exhibits were installed in the visitor center in 2007. An updated interpretive plan for the Lava Beds National Monument Visitor Center has been completed. There are a variety of wayside exhibit stops and messages along the park road. For more information, contact the Chief of Interpretation.

Proposed Main Messages and Media:

- Recreation orientation to the Monument area via a map/ brochure, photos, and specific recreation opportunity guides.
- Tier 2 orientation to the Volcanic Legacy Scenic Byway via a map of the Byway and brochures.

Tier 2 Byway Orientation Site Themes:

- Visitor information and a map of the park.
- Things to see and do in the park.
- Visitor orientation to this section of the Byway.

Notes/Design Instructions:

The additional panel should blend graphic elements related to the Byway with graphic standards required by the National Park Service

Signage Recommendations:

One additional sign panel

Current Land Manager and Responsible Party for Maintenance of Site: Lava Beds National Monument



TIER 2 Byway

Interpretive Site



61. PETROGLYPHS OUTSIDE OF THE TOWN OF NEWELL

Current Main Messages for Site (Theme) and Current Interpretive Media: None.

Existing Facilities and Status:

None. The petroglyphs are difficult to see at certain times and are dependent on various lighting throughout the day.

Proposed Main Messages and Media:

This site remains under the jurisdiction of Lava Beds National Monument. Any interpretive efforts at this site will be in coordination with the Lava Beds National Monument Master Interpretive Plan, and done to National Park Service standards of design.

Tier 4 Byway Interpretive Site Themes:

- Information on who painted the petroglyphs and when.
- Native American history and culture.

Current Land Manager and Responsible Party for Maintenance of Site:

Lava Beds National Monument



TIER 4 Byway

Interpretive Site



62. HIGHWAY 161 - MAIN STREET INTERSECTION

Current Main Messages for Site (Theme) and Current Interpretive Media:

Tule Lake visitor contact information booth

Existing Facilities and Status:

A fruit stand style booth with eight sign panels on various attractions in the area provides some visitor information. There are site limitations and property ownership issues with the site, which affects CALTRANS' ability to develop it into a rest stop with restrooms and a Byway kiosk. The site's entrance into town is a good location, but some adjacent building fronts are off-putting to out of town visitors. The town is happy with their current images and designs at this site, but open to changes (particularly if Tule Lake becomes the interim location for the new visitor center for the WWII Valor in the Pacific National Monument).

Proposed Main Messages and Media:

- The existing panels provide good coverage of local attractions and recreation opportunities in the area, but need to provide information on where visitors can go to obtain more information.
- Direct visitors to the local museum to experience the history and culture of Tule Lake, and take home a locally made souvenir.
- Provide a place for the local Chamber of Commerce to participate with information on guided Refuge trips, shuttles to Newell and Lava Beds, local businesses (hotels, restaurants, and places to access wireless, etc...)

Wild Thirty are here! Hearful Hearful

ational Wildlife Refuges

TIER 2 Byway

Interpretive Site

Tier 2 Byway Orientation Site Themes:

• Information about the community of Tule Lake and local attractions.

Orientation to this section of the Byway.

Potential Partnerships:

Tule Lake Chamber of Commerce

Current Land Manager and Responsible Party for Maintenance of Site: Town of Tule Lake



63. HIGHWAY 161 - HIGHWAY 139 INTERSECTION

Current Main Messages for Site (Theme) and Current Interpretive Media: None.

Existing Facilities and Status:

There are no facilities at this junction. It is simply where the roads intersect with a stop light. A large parking lot about one mile down on the southwest side of the intersection is a possible location for traveler information, but there are right-of-way issues.

The location of a Byway kiosk ties into the larger issue of appropriateness of place and where to locate a site where visitors can stop and get the information about where to go, what to do, and local amenities.

Existing Facilities and Status:

No good location exists right at the intersection for a Byway portal, but just a mile south from the intersection is a very large pull-off on the west side of the road. This pull-off could be developed as a highway rest stop.

Proposed Main Messages and Media:

- Recreation orientation to the Tule Lake area via maps, photos, and recreation opportunity guides.
- Tier 2 orientation to the Volcanic Legacy Scenic Byway via a map of the Byway and brochures.

Tier 2 Byway Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse, scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross country skiing and snowmobiling. At the end of a busy day, visitors can stroll through local art galleries and stores, and then sample the area's finest cuisine in the evening.
 - » There are a variety of recreation activities in the Tule Lake region.
 - » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.

Potential Partnerships:

Tule Lake Chamber of Commerce





Objectives - As a result of this interpretive effort, visitors will:

- Learn how to find visitor centers, museums, campgrounds, hiking trails, bike trails, and opportunities for bird watching, etc.
- Become familiar with the route of the Volcanic Legacy Scenic Byway and know where to obtain additional information.

List of Graphic Needs:

- Map of Tule Lake, the Klamath Basin National Wildlife Refuges, Modoc National Forest and Lava Beds National Monument, recreation sites, trails, and the Modoc Scenic Byway along with select photos.
- A map and brochure providing general information about the Volcanic Legacy Scenic Byway.

Signage Recommendations:

If electricity is available at the site, construct a lighted, Tier 2 Byway kiosk with signs containing seasonal information panels and orientation maps about the Tule Lake region and the Byway.

Estimated Cost:

Byway Portal site design and construction: TBD Interpretive panel design, fabrication and installation: \$12,000

Current Land Manager and Responsible Party for Maintenance of Site:

Tule Lake





64. TULE LAKE MUSEUM

Current Main Messages for Site (Theme) and Current Interpretive Media:

Culture and history of community life in Tule Lake and the surrounding area.

Existing Facilities and Status:

The museum is located at the Tule Lake fairgrounds. A reception counter greets visitors or those there on County Fair business. A small fee is charged to tour the museum and a complimentary audio tour is available onsite. The exhibits were designed by the community and locally constructed 12-14 years ago. The exhibits reflect a mix in design styles, artifacts, and various mediums. After touring the interior exhibits, visitors can go outside and see a reconstructed home from the segregation camp, and remodeled 1950s family home, along with a guard tower. The museum is an outstanding community resource displayed in a realistic fashion representative of the people who developed and constructed it. Some exhibits that feature the war years of WW II, Vietnam and Iraq may be disturbing to view. These war exhibits are appropriately signed in terms of warning for young children.

Tier 4 Byway Interpretive Site Themes:

- Native American history and culture.
- Settlement of the Tule Lake area and development of its agricultural base.
- History of World War II segregation camps and life in the camps.
- Establishment of the World War II Valor in the Pacific National Monument.

Notes/Design Instructions:

This site may become part of a visitor center in association with new WW II Valor in the Pacific National Monument that was established in December 2008. The Monument is currently under the management direction of Lava Beds National Monument. If a visitor center for the Monument is developed at this site, there should be some Byway Tier 2 Portal information with a kiosk and duplication of the same information at the town entry site. Future decisions for interpretive messages will be determined by the community and Lava Beds National Monument.

Current Land Manager and Responsible Party for Maintenance of Site:

Siskiyou County



65. A&B WWII VALOR IN THE PACIFIC NATIONAL MONUMENT SITES AT NEWELL AND THE TULE LAKE AREA

TIER 4 Byway

Interpretive Site

This new national monument designation includes nine sites in three states. Within the Tule Lake Basin, the Peninsula and Camp Tulelake on Hill road are now units of the WWII Valor in the Pacific National Monument. These areas are managed by the National Park Service and U.S. Fish and Wildlife Service if within a national wildlife refuge. Additional interpretive efforts at this site will be in coordination with the National Park Service and U.S. Fish and Wildlife Service. Lava Beds National Monument is currently the lead land manager and responsible for maintenance of the site in coordination with the U.S. Fish and Wildlife Service for fragmented lands.

Tier 4 Byway Interpretive Site Themes:

- America's role in World War II
- History of the segregation camps and why they became established.





66. HIGHWAY 161- MILE MARKER 3.9

(Measured from 161/97 intersection) -- Wildlife pull-off on south side of highway)

Current Main Messages for Site (Theme) and Current Interpretive Media:

This is a high elevation marsh, providing habitat to a variety of wildlife.

Existing Facilities and Status:

None. Vehicles currently pull off the highway into the emergency lane to stop and view waterfowl. There is a safety hazard for vehicles exiting on and off the roadway with a 65 mph speed limit.

Proposed Main Messages and Media:

Species identification messages for pelicans, bald eagles, nesting grebes, ducks and geese on low profile signage (reader rail style). Use of thematic tile casts to differentiate the Refuge as a unique place for waterfowl and wildlife from other portions of the Byway.

Tier 4 Byway Interpretive Site Themes:

The Klamath Basin National Wildlife Refuges manage the permanent marshes as habitat for waterfowl and mammals including: osprey, western and Clark's Grebes, Tundra swans, snow and Ross's geese, white-fronted geese, pintail, cinnamon teal, sandhill cranes, black-necked stilt and American avocet (nesting in White Lake), yellow-headed blackbird, white pelicans, herons, egrets, ibis, and river otter.

Storylines:

- » Look for bald eagles, western and Clark's nesting grebes, ducks and Ross's and white fronted geese (specific identifying characteristics, habitats, or behaviors).
- » These sensitive wildlife species require protection from human and predator disturbance during the nesting periods.
- » Water levels are managed to insure the protection of islands within the marshes and for food supplies (mainly fish).

Potential Partnerships:

CALTRANS, Scenic Byway grants

Objectives - As a result of this interpretive effort, visitors will:

- Understand the critical need for marsh habitat and wetlands.
- Identify three species found within this habitat.
- Recognize what the Pacific flyway includes and its significance for migrating waterfowl.

List of Graphic Needs:

The intent of these stops is to view waterfowl and to provide a scenic overlook. Interpretive signs should be simplistic in graphics and very limited in text to be effective. Use a graphic style that simulates some aspect of the marsh with aerial or underwater views through insect or duck perspectives.

Notes/Design Instructions:

Focus one interpretive sign at each of these stops related to one species and management issues. Site design and construction will need to be considered prior to any interpretive installations. Site design concepts for Highway 161 should be prepared in coordination with CALTRANS to determine the level of development and vehicle spaces. The potential exists for a series of roadside pulloffs and a networked system of elevated boardwalk trails running through the wetland tied to MP 5.6 (south side pull-off). The Refuge is discussing proposed pulloffs with CALTRANS to address concerns about traffic speed and safety.

Signage Recommendations:

One low profile style sign, sized 18 x 48 inches horizontal in a long reader rail fashion. (The sign could vary dependent upon number of species to include on the panel.)

Other Recommendations:

Use thematic icons at each overlook to tie the Refuge messages together and give the viewer the theme at a glance. Examples include: cast tile of pelicans, inlay bronze replica of a nest with eggs, duck or bird tracks on signage or inlaid into concrete pads/walls or incorporated as part of sign layout

Estimated Cost:

Sign design, fabrication and installation: \$5,000 Tile design, fabrication and installation throughout refuge corridor: \$20,000

Current Land Manager and Responsible Party for Maintenance of Site:





67. HIGHWAY 161 - MILE 5.4 WILDLIFE PULL-OFF

Current Main Messages for Site (Theme) and Current Interpretive Media:

This is a high elevation marsh, providing habitat to a variety of wildlife.

Existing Facilities and Status:

None. Nesting birds, herons, egrets and dense willow growth can be viewed from this site. There is no parking or viewing area available.

Proposed Main Messages and Media:

Species identification of white pelicans and diving ducks.

Tier 4 Byway Interpretive Site Themes:

The Klamath Basin National Wildlife Refuges manage the permanent marshes as habitat for waterfowl and mammals including: osprey, western and Clark's grebes, Tundra swans, snow and Ross's geese, white-fronted geese, pintail, cinnamon teal, sandhill cranes, black-necked stilt and American avocet (nesting in White Lake), yellow-headed blackbird, white pelicans, herons, egrets, ibis, and river otter.

Storylines:

- » The Refuge is one of only two white pelican nesting sites in the entire state of California.
- » These sensitive wildlife species require protection from human and predator disturbance during the nesting periods.
- » Water levels are managed to insure the protection of islands within the marshes and for food supplies (mainly fish).

Potential Partnerships:

CALTRANS, Scenic Byway grants

Objectives - As a result of this interpretive effort, visitors will:

- Understand the critical need for marsh habitat and wetlands.
- Identify three species found within this habitat.
- Recognize what the Pacific flyway includes and its significance for migrating waterfowl.

List of Graphic Needs:

The intent of these stops is to view waterfowl. Any interpretive signs should be simplistic in graphics and very limited in text to be effective.

Notes/Design Instructions:

Develop a small pull-off overlooking the marsh with a reader rail identifying various bird species and habitats.

Signage Recommendations:

One low profile sign, 18 x 36 inches vertical in a long reader rail fashion. (The sign could vary dependent upon number of species to include on the panel.)



Other Recommendations:

Use thematic icons at each overlook to tie the Refuge messages together and give the viewer the theme at a glance. Examples include: cast tile of pelicans, inlay bronze replica of a nest with eggs, duck or bird tracks on signage, or inlaid into concrete pads/walls or incorporated as part of sign layout

Estimated Cost:

Sign design, fabrication and installation: \$5,000

Current Land Manager and Responsible Party for Maintenance of Site:





68. HIGHWAY 139 - MILE 5.6 WILDLIFE PLATFORM

Current Main Messages for Site (Theme) and Current Interpretive Media:

Permanent marsh habitat.

Existing Facilities and Status:

None.

Proposed Main Messages and Media:

The Klamath Basin National Wildlife Refuges manage the permanent marshes for species that depend on this type of environment such as white pelicans, grebes, diving ducks, herons, egrets, ibis, etc.

Storylines:

- » To watch wildlife, especially waterfowl, there are some key behaviors you want to practice...being quiet, calm and viewing them at a distance.
- » Marshes are critical nurseries for nesting waterfowl, and are managed to maintain these nurseries.

Featured Species:

Grebes and egrets

Tier 4 Byway Interpretive Site Themes:

- How to view waterfowl and other birds.
- Why marshes are so important for wildlife habitat.
- How marshes are managed.

Signage Recommendations:

Two interpretive panels, low profile reader rails, 18 x 40 inches.

Potential Partnerships:

CALTRANS, Scenic Byway grants

Objectives - As a result of this interpretive effort, visitors will:

- Practice viewing ethics and behaviors for wildlife watching.
- Relate the significance of wetland marshes for waterfowl nurseries.
- View grebes, egrets or other active waterfowl.

List of Graphic Needs:

The intent of these stops is to view waterfowl. Any interpretive signs should be simplistic in graphics and very limited in text to be effective. Use grebes and egrets for illustrations or images.

Estimated Cost:

Sign design, fabrication and installation: \$7,000 Frame stations dependent upon final design

Current Land Manager and Responsible Party for Maintenance of Site:





69. HIGHWAY 161 - MILE 6.8 TO 7.1 WILDLIFE PULL-OFF

(south side)

Current Main Messages for Site (Theme) and Current Interpretive Media:

High elevation marsh wildlife.

Existing Facilities and Status:

An existing pull-off lane allows visitors to view large concentrations of waterfowl in the spring and fall. Bald eagles can be viewed in winter, and breeding birds and young in spring and summer.

Proposed Main Messages for Site and Interpretive Media:

There are no signs or other developments located here.

Tier 4 Byway Interpretive Site Themes:

- How to view waterfowl, eagles and other birds.
- Why marshes are so important for wildlife habitat.
- How marshes are managed.

Potential Partnerships:

CALTRANS

Signage Recommendations:

No signs at this site; it is for viewing only.

Current Land Manager and Responsible Party for Maintenance of Site:





TIER 4 Byway Interpretive Site

70. HIGHWAY 161 - MILE 8.7 WILDLIFE PULL-OFF

Current Main Messages for Site (Theme) and Current Interpretive Media:

Birds, geologic history, waterfowl and endangered species with seasonal change out messages.

Existing Facilities and Status:

Six small signs were installed along a raised, concrete form wall in the 1980s at the overlook. The illustrations are well done, but the signs are weathered and need updating. There is parking to accommodate 5-6 vehicles, and the overlook accommodates 10-12 people. The site is concrete, hard surfaced and somewhat sterile.

Proposed Main Message and Media:

New interpretive signs (two low profile reader rails, 18 x 40 inches)

Tier 4 Byway Interpretive Site Themes:

- The Refuge manages the permanent marshes for species that depend on this type of environment.
- The marsh's productivity is important for waterfowl food and shelter, and for maintaining water quality.
- Sheepy Ridge's rocky topography provides habitat for Bighorn sheep and mountain lion with access to the lower marshes for food and shelter when needed.
- Wildlife refuges are managed to maintain ecological systems most beneficial to wildlife.
- Hunting season occurs on the Refuge from October January each year.
- Ecological conditions that makes this a marshland.
- Look for unique characteristics to help you identify the species.

Featured species:

Osprey, western and Clark's Grebes, Tundra swans, snow and Ross's geese, white-fronted geese, pintail, cinnamon teal, sandhill cranes, black-necked stilt and American avocet (nesting in White Lake), yellow-headed blackbird, white pelicans, herons, egrets, ibis, and river otter.

Potential Partnerships:

CALTRANS, Scenic Byway grants

Objectives - As a result of this interpretive effort, visitors will:

- Identify three species found within this habitat.
- Identify marsh conditions important for some of these species.



List of Graphic Needs:

New illustrations (or original artwork if it can be located).

Notes/Design Instructions:

Tear out concrete wall and replace with native materials that provide a more naturalized setting with simulated wood decking (same style as used at the recently installed overlook in 2007). Install a 2-tier deck over the water for closer viewing. Keep the sign panels on the upper deck. www.fws.gov/blackwater/Marshedgepg.htm. Consider a small blind or shelter as part of a deck.

Estimated Cost:

Design, fabrication and installation for two low profile reader rails, 18×40 inches - \$10,000

Design and construction of board walk and viewing deck: TBD

Current Land Manager and Responsible Party for Maintenance of Site:



71. KLAMATH BASIN NATIONAL WILDLIFE REFUGES ENTRANCE ON HIGHWAY 161

Current Main Messages for Site (Theme) and Current Interpretive Media:

Map of the Refuge, and orientation to the Refuge.

Existing Facilities and Status:

This site was reconstructed and updated in 2006/07. Visitors entering the Refuge turn south off the Byway onto a graveled road and parking lot. The parking lot accesses vault toilets and a trail leading out to a boardwalk overlook. At the edge of the parking lot, and the beginning of the walking trail, a Byway design kiosk was constructed in 2007 and new sign panels were installed in 2008. The panels contain a new map displaying a portion of the Byway, a map and orientation information about the Refuge, and an interpretive panel that addresses multiple topics related to water use and practices.

The boardwalk leads a short 1/4 mile walk to a wooden deck providing an excellent overlook spot of the marsh and wetland area. A spotting scope is available for use, and the viewer has the sense they are out on the water. Three interpretive panels with messages about marsh habitat are located on the front deck railing (also installed in 2008)

Proposed Main Messages and Media:

Bird watching and species identification.

Tier 4 Byway Information Site Themes:

- Visitor orientation and information to the Byway, the Refuge, and the surrounding area including access to Lava Beds National Monument and other nearby facilities.
- The Lower Klamath Tule Lake National Wildlife Refuges are along the Pacific flyway for many bird and waterfowl species during their annual migrations, and provide recreation opportunities for bird watching, hunting, and outdoor exploration.

Marsh Overlook Themes:

The Refuge manages these different types of marshes to benefit a diversity of wildlife.

Other Recommendations:

Since this sign and kiosk were recently installed, conduct an evaluation how visitors interact with the kiosk and count how many travel the trail distance to the wetlands overlook.

Current Land Manager and Responsible Party for Maintenance of Site:

Klamath Basin National Wildlife Refuges



TIER 4 Byway

Interpretive Site



72. HIGHWAY 161 - MILE 13.4 EXISTING PULL-OFF

Current Main Messages for Site (Theme) and Current Interpretive Media:

None.

Existing Facilities and Status:

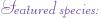
Existing pullout, no signage.

Tier 4 Byway Interpretive Site Themes:

• Geologic history, birds, waterfowl and endangered species with seasonal change out messages.



With over 353 bird species documented in the Klamath Basin, the entire Byway route would undoubtedly exceed 400 documented bird species.



Sandhill cranes, black-necked stilt and American avocet (nesting in White Lake), yellow-headed blackbird, river otter.

- Wildlife refuges are managed to maintain ecological systems most beneficial to wildlife.
 - » Sandhill cranes stop to recover during their migration along this flyway.
 - » Black-necked stilts and American avocets rely on aquatic plants and insects for food and nesting.
 - » The yellow-headed blackbird can be seen in the cattails staking out his territory.
 - » River otter behavior in the Refuge.
 - » Sheepy Ridge's rocky topography provides habitat for Bighorn sheep and mountain lion with access to the lower marshes for food, shelter when needed.

Signage recommendations:

1 - 2 low profile reader rails, 18 x 40 inches

Potential Partnerships:

CALTRANS

Objectives - As a result of this interpretive effort, visitors will:

- Be able to identify sandhill cranes, black neck stilts, American avocets and the yellow-headed blackbird.
- Realize the significance of the wetlands in Klamath Basin for birds and waterfowl.
- View river otters on occasion.

List of Graphic Needs:

Illustrations of selected species for signs.

Estimated Cost:

Design, fabrication and installation for two low profile reader rails, 18 x 40 inches: \$9,000

Current Land Manager and Responsible Party or Maintenance of Site:





73. EAST-WEST/HILL ROAD INTERSECTION

Current Main Messages for Site (Theme) and Current Interpretive Media:

Directional information

Existing Facilities and Status:

A sign directs travelers to Lava Beds National Monument and Klamath Basin National Wildlife Refuges.

Proposed Main Messages and Media:

No interpretive signs are proposed. Only a road sign with destinations and mileages. It would be beneficial to identify routes to Civilian Conservation Corps Camps and agricultural sites.



74. INTERPRETIVE WALK IN FRONT OF THE REFUGES VISITOR CENTER

Current Main Messages for Site (Theme) and Current Interpretive Media:

The many ways marshes serve wildlife.

Existing Facilities and Status:

An asphalt paved trail in front of the Refuge Visitor Center circles out in a walking trail to an overlook of the wetlands.

Tier 4 Byway Interpretive Site Themes:

- Excellent birding opportunities exist along the birding trail on the Lower Klamath and Tule Lake National Wildlife Refuges and at the Klamath Basin National Wildlife Refuges Visitor Center.
 - » Geology of area that creates the high water table for these wetlands in relationship to the volcanic environment surrounding it.
 - » Species that are potentially seen during different times of the year in these wetlands.
 - » Habitat needs for waterfowl and the need for wetland conservation.
- The Lower Klamath and Tule Lake National Wildlife Refuges provide vistas
 of distant mountains and views of Mt. Shasta over shallow marshes in the
 White Lake Unit of Lower Klamath National Wildlife Refuge.

Potential Partnerships:

Scenic Byway grants

Objectives - As a result of this interpretive effort, visitors will:

- Experience the wetlands environment away from their vehicle.
- Understand the combination of geology, climate and soils to create the wetlands.
- Identify three species they might see along the trail and the type of habitat to find them.

List of Graphic Needs:

Illustrations of specific species that may be seen from the trail.

Signage Recommendations:

3-5 small low profile signs. Use of smartphone applications with bird calls or wildlife ecology provide great opportunities.

Estimated Cost:

Design, fabrication and installation for five low profile reader rails, 18 x 40 inches, \$10,000. Digital applications will range dependent upon length, sounds used and recording needs.

Current Land Manager and Responsible Party for Maintenance of Site:

Klamath Basin National Wildlife Refuges





TIER 4 Byway

Interpretive Site

75. KLAMATH BASIN NATIONAL WILDLIFE REFUGES VISITOR CENTER

Current Main Messages for Site (Theme) and Current Interpretive Media:

- Waterfowl and bird life in and around the Refuges.
- Purpose and significance of the Klamath Basin National Wildlife Refuges as part of the Pacific Flyway.

Existing Facilities and Status:

Interior: The visitor center was constructed in 1983 with extensive renovation of the exhibits completed in 2005. A large exterior kiosk greets travelers as they pull into the parking lot with information and a map of the Refuges. Restrooms are exterior to main building entrance. Upon entering the building, visitors are greeted by a receptionist who answers questions, and provides sales service. A large window with a mature landscaped naturalized area provides a wonderful viewing place for bird watching. Near the reception counter is a computer touch screen with various information about the five Refuges, birding, and ecology. Farther to the right, an exhibit room depicts a number of exhibits related to the Pacific Flyway and species found at the Klamath Basin National Wildlife Refuges. A video about the Refuges, recreation opportunities, and wildlife adds a nice complement to the exhibit hall.

Exterior: Visitors can walk the ½ mile nature trail to get a close-up view of the wetlands and view the kiosk in the parking lot for information when the building is not open.

Proposed Main Messages and Media:

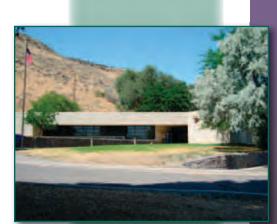
- Recreation orientation to the Refuge and the Tule Lake area via maps, photos, and recreation opportunity guides.
- Tier 1 orientation to the Volcanic Legacy Scenic Byway via a map of the Byway and brochures.

Tier 1 Byway Orientation Portal Themes:

- Discover this country where stories of human resilience and tenacity interweave with diverse, scenic landscapes.
- There is an abundance of recreation opportunities along the Volcanic Legacy Scenic Byway including:
 - » Bird watching, camping, boating, hiking, biking, nature study and photography, hunting, fishing, cross country skiing and snowmobiling.
 - » There are a variety of recreation activities in the Klamath Basin.
 - » Come and explore the many sites and experiences along the Volcanic Legacy Scenic Byway.

Potential Partnerships:

Tule Lake Chamber of Commerce







Objectives - As a result of this interpretive effort, visitors will:

- Learn about the recreation opportunities, facilities, and birding trails in the Lower Klamath and Tule Lake National Wildlife Refuges and Lava Beds National Monument.
- Become familiar with the route of the Volcanic Legacy Scenic Byway and know where to obtain additional information.

List of Graphic Needs:

- Map of the Klamath Basin area, recreation sites and trails, along with select photos.
- A map and brochures providing basic information about the Volcanic Legacy Scenic Byway.

Signage Recommendations:

Lighted, exterior kiosk with signage containing seasonal information panels and orientation maps about the Klamath Basin region and the Byway.

Notes/Design Instructions:

Consider updating of exterior kiosk or redesigning for Byway consistency.

Cost Estimates:

Byway portal site design and construction: \$26,000 Interpretive panel design, fabrication and installation: \$12,000

Current Land Manager and Responsible Party for Maintenance of Site:



TIER 4 Byway Interpretive Site

76. HILL ROAD ELEVATED VIEWING PLATFORM AND PHOTO BLIND (3.2 miles south of the Hill Road/east-west intersection)

Current Main Messages for Site (Theme) and Current Interpretive Media:

Diverse habitats provide for the abundant and varied wildlife that can be seen here.

Existing Facilities and Status:

Hill Road is a scenic drive along marshes and wetlands with views of the Medicine Lake Highlands, Sheepy Ridge and other geologic features. There are several wildlife stops and overlooks including a photo blind. Any signage or spotting scopes are susceptible to vandalism. Some signs have been shot or burned. This is one of the lookout sites along Hill Road.

Proposed Main Messages and Media:

- Audio or brochure topics:
 - » Marsh productivity as it contributes to waterfowl and water quality.
 - » Geologic history, volcanics, and creation of the original wetlands.
 - » Historic human uses in this landscape.
- Interpretive signage:
 - » Specific species ecology and Refuge management efforts.
 - » Significance of Pacific Flyway in global terms.
 - » Bird viewing and viewing ethics.
 - » Why the large flat valley and shallow waters?

Tier 4 Byway Interpretive Site Themes:

- March productivity is important for waterfowl food and shelter, and for maintaining water quality.
 - » Specific species ecology, and Refuge management efforts
 - » Significance of Pacific Flyway in global terms
 - » Historic human uses in this landscape
- During the summer drought of 2001, a simmering conflict between agricultural and environmental interests in southern Oregon's Upper Klamath Basin turned into protests and vandalism when the federal Bureau of Reclamation shut down the head gates of the Klamath Project to conserve water needed by endangered species.
- A wide diversity of volcanic rock types can be found throughout the region.
- Large flat valleys amidst volcanic summits allowed for early settlement and agricultural development still relied on today for fruit and vegetable crops.







Objectives - As a result of this interpretive effort, visitors will:

- Realize the importance of water and soil for climate conditions in this valley.
- Gain an appreciation for the fine balance between agriculture and Refuge management.
- Identify specific species seen from this area.

Signage Recommendations:

Two low profile interpretive signs. If vandalism is a major concern, remove signage, and replace with several benches and a smartphone application.

Estimated Cost:

Interpretive panel design, fabrication and installation: \$10,000 Digital technology: Cost varies

Current Land Manager and Responsible Party for Maintenance of Site:

Lava Beds National Monument and the Klamath Basin National Wildlife Refuges share joint management of the area, but this site sits within the Refuge's land boundary.

Notes/Design Instructions:

The drive from the Refuge Visitor Center to Lava Beds National Monument is a great opportunity for a downloadable audio or audio/video podcast tour.

Current Land Manager and Responsible Party for Maintenance of Site





TIER 4 Byway Interpretive Site

77. AUTO TOUR ROUTE INTERSECTION OF EAST-WEST ROAD

Current Main Messages for Site (Theme) and Current Interpretive Media:

A poster and brochure leaflet is available at the Refuges and Lava Beds visitor centers with messages focused on Refuge management practices.

Proposed Main Messages for Site and Interpretive Media:

Enlarge the brochure. This is a combined effort between the Refuge, Lava Beds National Monument and the Modoc National Forest to prepare a larger regional map displaying different public lands with messages about the different mandates for each land area; how these lands are managed for public good; and how they serve to prevent wildlife habitat fragmentation and protect watersheds.

Tier 4 Byway Interpretive Tour Themes:

The benefits of public land management for recreation, wildlife, water, and resource production.

Current Land Manager and Responsible Party for Maintenance of Site:

Lava Beds National Monument and Klamath Basin National Wildlife Refuges

