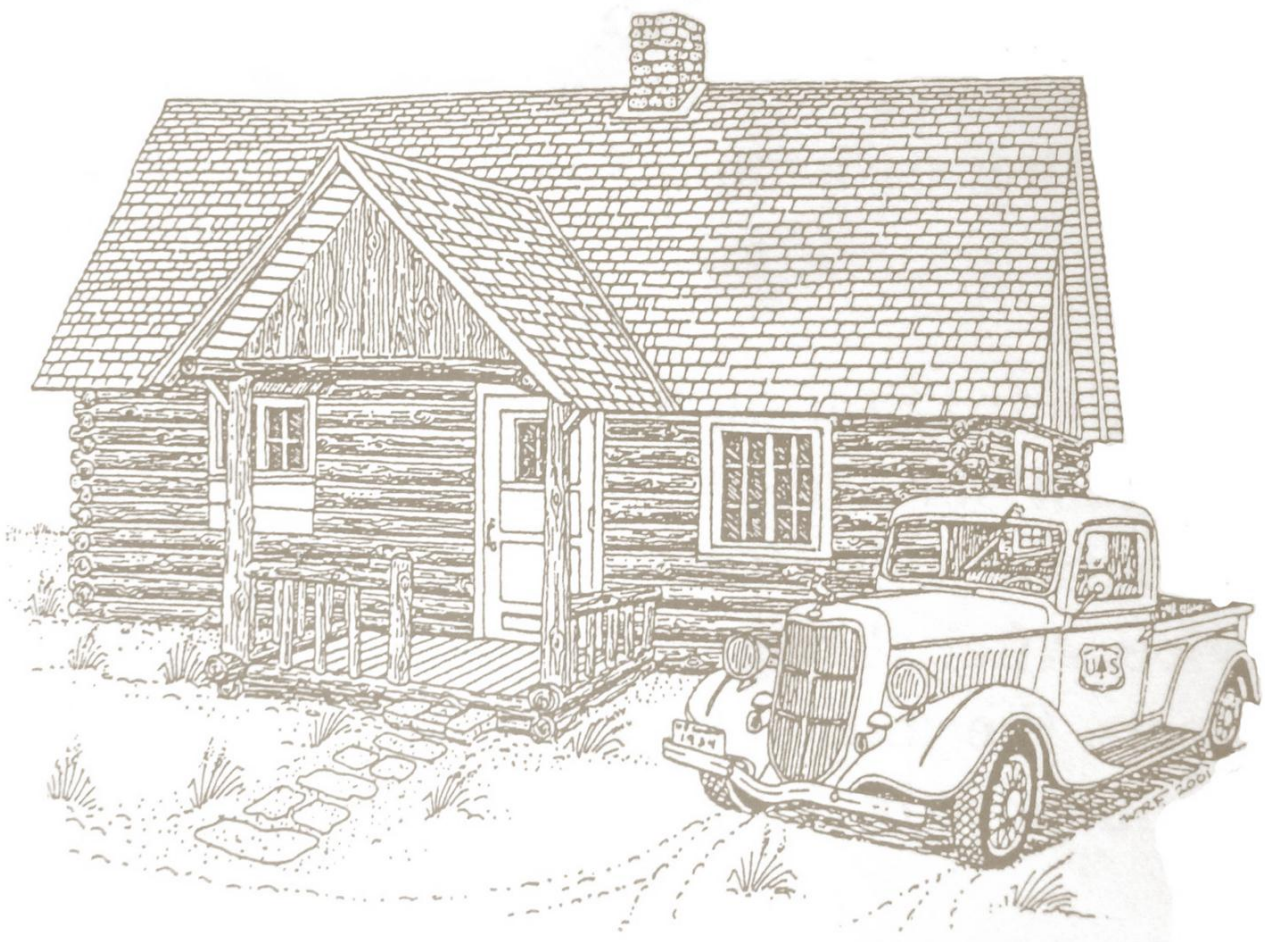
University of Oregon
School of Architecture and Allied Arts
Department of Historic Preservation

Eugene, Oregon

Historic Structure Report

Elk Lake Guard Station



Historic Structure Report

Elk Lake Guard Station

Deschutes National Forest

Bend/Fort Rock Ranger District

Prepared by Jennifer Self in fulfillment of partial requirements for
Historic Structure Report graduate course, AAAP 610.

University of Oregon
School of Architecture and Allied Arts
Department of Historic Preservation
Instructor: Dr. Lauren Allsopp

Date Submitted: 12/4/2012

Special thanks to Kathleen Martin, Archaeologist for Bend/Fort Rock Ranger District, for providing archival material and assistance with the project and to Dr. Lauren Allsopp for instructional guidance and editing.

Cover Photo: Courtesy of Deschutes National Forest, "Historic Elk Lake Guard Station" Brochure, drawing 2001.

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Building Information

Building	Elk Lake Guard Station
General Location	Cascade Lake Scenic Byway, Elk Lake, Bend/Fort Rock Ranger District, Deschutes National Forest, Oregon
Legal Location	T18S R8E, Section 29, NW ¼ SW ¼ SW ¼
Construction Contractor/Builder	unknown
Construction Date	1929 (moved sometime between 1935-1942)
Period of Significance	1929 -1935[1]
Total Square Feet	408
Historic Use	Guard Station
Current Use	Visitor's Center
Forest Service Structure Number	01-1004
Building ID Number	TB32EL01
National Register Status	Listed on the National Register

[1] The Elk Lake Guard Station National Register Nomination states the period of significance for the building is 1935-1956; however, the nomination does not justify the chosen end date. (Presumably, the 1956 date corresponds to the paving of Cascades Lakes Highway to Elk Lake.) The period of significance given in this report, 1929-1935, corresponds to the construction of the guard station and its relocation. Since the building has had continuous use as a guard station and visitor contact outpost for the US Forest Service, this period of significance is association with the physical development of the building.

Executive Summary

"Historic Structure Reports (HSRs) were first developed by the National Park Service in the 1930s as a methodical approach in planning for the preservation, restoration, rehabilitation, or adaptive reuse of a historic property. The primary intent of a HSR is to create a single document which combines the historical, written and graphic information related to a historic property. A HSR provides detailed information on the property's history, architecture, construction, condition, and maintenance requirements so the cultural resource managers and owners can make informed decisions as they plan the project."[2]

The purpose of the Elk Lake Guard Station HSR was to fulfill partial requirements for graduate course. Time and effort was volunteered by graduate student, Jennifer Self. Ms. Self holds a BA degree in Historic Preservation and Community Planning with a Minor in Archaeology and has worked as an Architectural Historian and Preservation Projects Coordinator for Yosemite National Park. She is now obtaining concurrent Master's degrees in Historic Preservation and Community and Regional Planning from the University of Oregon.

[2] Brown, Sueann, Grant Crosby. *Yosemite Museum.* Historic Structure Report, Division of Publications, National Park Service, U.S. Department of the Interior, 2007.

The Elk Lake Guard Station was selected to serve as a subject site due to its high level of integrity and significance for Deschutes National Forest. Project constraints included distance to the property from the student's home in Springfield, an eight week start-to-finish project deadline, limited volunteer time availability, and climatic conditions at the property.

This Historic Structure Report is intended to provide a general assessment of the building and recommendations for its preservation and perpetuated use as an interpretive center by the US Forest Service. In 2002, a National Register Nomination was completed for the property. The nomination contained a commendable level of detail and documentation, gathered from a breadth of sources, on the physical description of the building, its history, and its statement of significance. Therefore, this report will not focus on expanding the historical context. The components of this report are: (1) proposed treatment and use of the building, (2) background information and level of significance, (3) physical description of the guard station, including character defining features, condition assessment, and recommendations, and (4) priority maintenance.

Information gathered from the National Register Nomination and used within this report will be called out with the following symbol: NR


INFORMATION

Ultimate Treatment & Use

The Elk Lake Guard Station is considered to be the cultural and interpretive center for the Cascades Lake Scenic Byway. The building was constructed by the US Forest Service to serve as an administrative outpost staffed by federal personnel. Along with their administrative duties, forest rangers throughout the history of the US Forest Service were expected to interact with the public, ensure resources were being properly respected, and educate visitors on the importance of our natural resources. Today, the guard station is Deschutes National Forest's only visitor contact and service facility located along the Byway. It is staffed seasonally by uniformed Passport in Time volunteer interpretive specialists. The building maintains a high level of integrity and is in good condition, largely because of recent preservation efforts and its continued use.

The Elk Lake Guard Station derives much of its historic significance from its functions as a US Forest Service outpost for administrative and visitor contact services. The Secretary of the Interior has four prescriptive treatments for the perpetuation of historic resources: preservation, rehabilitation, restoration, and reconstruction. It is recommended that the Elk Lake Guard Station be **preserved** both in its physical condition and current use.

Background Information

Location

Image2: This map is for reference purposes only and is not to scale. Basemap: Google maps 2012.

The Elk Lake Guard Station is located in Deschutes County, approximately 25 miles west-southwest of Bend in central Oregon. The building is situated between the Cascade Lakes Scenic Byway and the northwestern shore of Elk Lake, a popular outdoor destination. This location affords scenic vistas of the surrounding forested mountains and Mt. Bachelor, as well as access to nearby recreational amenities.

Statement of Significance

Image 3: Elk Lake Guard Station, 1937

The Elk Lake Guard Station is listed on the National Register of Historic Places as being regionally significant under criteria A: "a property associated with events that have made a significant contribution to the broad patterns of our history".

NR The Elk Lake Guard Station is historically significant for its association with regional US Forest Service history and growth of recreation in Central Oregon. The natural resources of lands included within the National Forest System have helped define the economic development and recreational nature of Central Oregon. The original impetus for outdoor recreation in Deschutes National Forest was Elk Lake, which promoted the need for a physical US Forest Service outpost. Elk Lake became a popular destination beginning in 1920 due to population boom and economic prosperity of Bend, close proximity (100 miles round trip from the urban center of Bend), and the completion of a wagon road linking Bend to Elk Lake. The guard station was specifically built to embody and carry out the mission of the US Forest Service to protect natural resources in response to a booming recreation population. Outposts, like Elk Lake Guard Station and its counterparts, were the only way these remote areas could receive any regular attention and protection, and the

only way district rangers and forest supervisors could administer the resources and remain informed on the status of the national forests in their charge. The historic function of Elk Lake Guard Station provides an early example of what has now become typical of the US Forest Service: more intensive management of the full range of resources identified in the Multiple Use-Sustained Yield Act of 1960 that "directs the Forest Service to give equal consideration to outdoor recreation, range, timber, water, and wildlife" resources.

The duties of the forest guard at Elk Lake remained relatively unchanged throughout the 20th century. The most significant of those duties being regulation enforcement, fire prevention and suppression, facilities maintenance, and visitor contact and education regarding natural resources and recreation in wilderness areas.

The perpetuated use of the guard station over its history as a visitor contact and administrative outpost by the US Forest Service is due to the growing popularity of the region for its outdoor recreational opportunities. The once dusty wagon road evolved into what is now a paved scenic byway with a steady stream of recreation visitors. The guard station is currently the Deschutes National Forest's only visitor contact and service facility located along the byway. The building maintains all seven aspects of historic integrity as defined by the National Register – location, design, setting, materials, workmanship, feeling, and association.

The period of significance for the Elk Lake Guard Station is 1929-1935. The Elk Lake Guard Station National Register Nomination states the period of significance for the building is 1935-1956; however, the nomination does not justify the chosen end date. (Presumably, the 1956

date corresponds to the paving of Cascades Lakes Highway to Elk Lake.) The period of significance given in this report, 1929-1935, corresponds to the construction of the guard station and its relocation. Since the building has had continuous use as a guard station and visitor contact outpost for the US Forest Service, this period of significance is association with the physical development of the building.

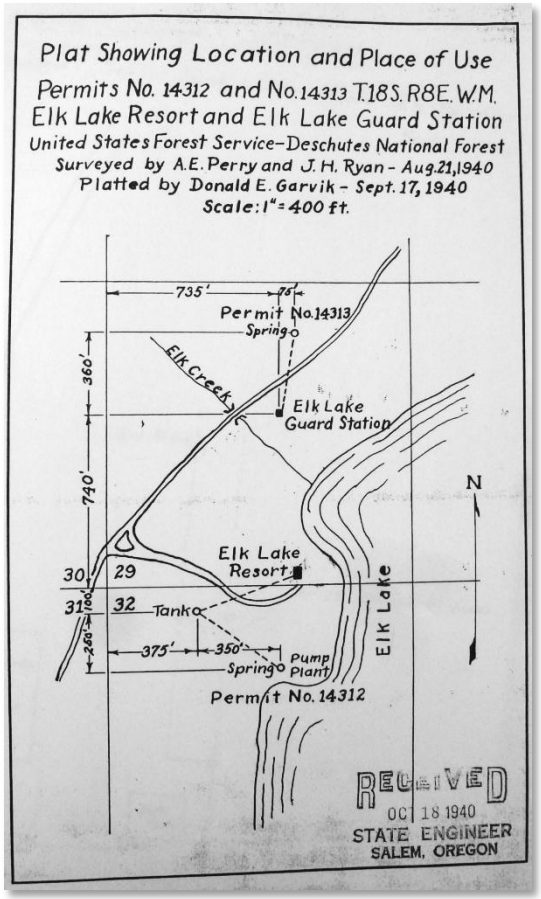


Image 4: 1940 Plat map showing the relocated guard station away from Elk Lake's northwestern shore.

Historical Context

NR

The population boom and economic prosperity that resulted from Bend's 201h Century timber boom combined with improving access to and spreading appreciation of Central Oregon's scenic beauty led to increased demand for outdoor recreation opportunities, many of which were to be found and developed on the Deschutes National Forest. These soon focused on the Elk Lake area.

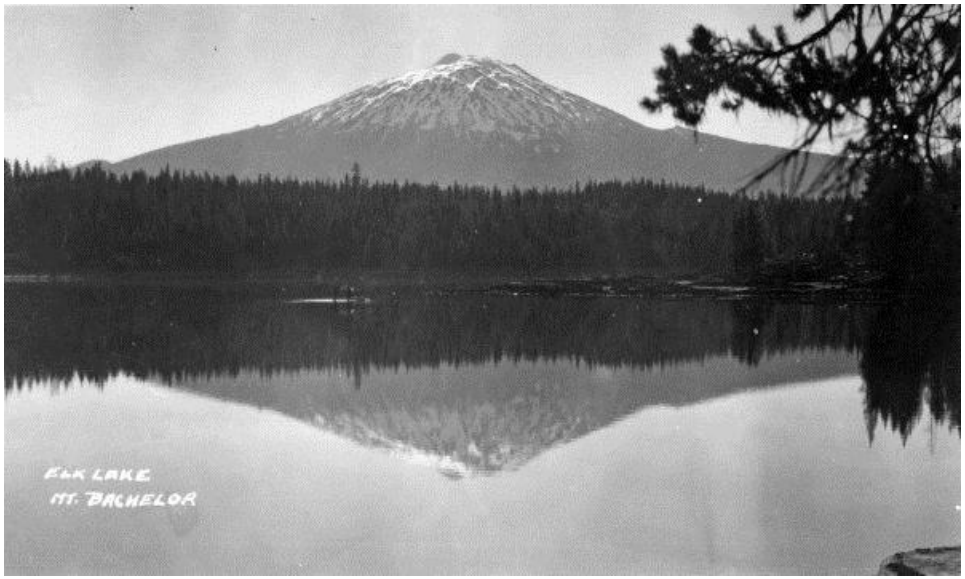


Image 5: View of Mt. Bachelor from Elk Lake, 1930.

In 1920, a wagon road was built that reduced travel time between Bend and Elk Lake, thereby making the lake a more desirable destination for visitors. With this new access, outdoor recreation boomed around Elk Lake and other nearby lakes. Elk Lake soon became the heart of what was variously known as the "Cascade Lakes" or "High Lakes" area. To accommodate this use, national forest campgrounds were built and summer home sites were surveyed and leased. In 1922, to accommodate burgeoning recreation demand, Elk Lake Lodge, a combination log hotel-restaurant-store, supplemented by tent cabins, was opened on the northwest shore of Elk Lake. This soon became a popular sailing and fishing destination. By 1924, there was an Elk Lake post office at the lodge. Summer homes were built on summer house tracts on National Forest lands around the lake. Before the end of the decade, recreation in the Cascade Lakes area increased to a point where the district forest ranger in Bend needed a forest guard to serve visitors, maintain facilities, and protect resources. With the influx of forest visitors, the risk of human-caused wildfires increased and posed an increased hazard to life (forest visitors) and

property (forest structures, summer homes, and campgrounds), and prevention and suppression of such wildfires were a second principle component of the forest guard's job. In the early days of the National Forest System, the forest guards were the forest rangers' right-hand men in the field.

In 1929 the Forest Service built Elk Lake Guard Station on a flat near the northwestern shore of Elk Lake. In 1935, in an attempt to restore the area's natural aesthetic beauty, Deschutes National Forest Supervisor Carl Neal determined that structures should be less visible from the lake. The Elk Lake Guard Station and several summer cabins were moved away from the lakeshore to their current locations. A pack station, which had occupied the current site of the Guard Station, was moved to the Elk Lake Trailhead to accommodate travelers. This made the pack station's former location available for the Guard Station.

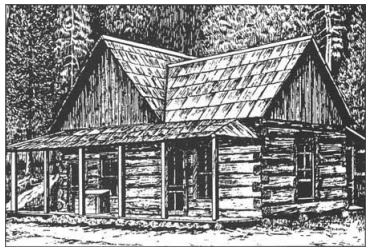
Throughout its history, the guard station was typically only staffed as funds permitted; however incidental use of the building was made by Forest Service employees and their families. In particular, staffing of the guard station during the Great Depression and World War II was limited. However, through periods of feast or famine, the duties of the forest guard at Elk Lake remained relatively unchanged throughout the 20th century. The primary duties were recreation, facilities maintenance, and fire prevention and suppression throughout the High Lakes area; incidental duties included visitor information and education, regulation enforcement, and anything else the district ranger wanted. A forest guard based at Elk Lake continued to serve the Deschutes National Forest's expanding recreation population from the 1920s into the 1990s. Reconstruction and paving of the Cascade Lakes Highway (also called "Century Drive" and destined to be designated both a national scenic byway and a state scenic byway in the 1990s) made this scenic corner of Central Oregon even more available to a

growing and increasingly mobile population of recreation visitors. Over the years the guard station has served as both seasonal office and residence for the forest guard and his or her family.

Between 1998 and 2002, the Elk Lake Guard Station received extensive preservation and restoration work. Following these efforts, the guard station began being staffed primarily by Passport in Time volunteers who specialize in visitor contact, education, and interpretation for the US Forest Service.

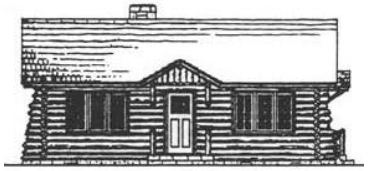
Elk Lake Guard Station's historical integrity has been preserved. It survives as an example of early recreation management in a region that continues to be dependent upon tourist revenue. Also, it remains in service as a tangible and functioning symbol of more than seven decades of Forest Service administration. The restored historic station continues the public land stewardship tradition of preventing "exploitation, destruction, and neglect", of the National Forests.

US Forest Service Guard Station Architecture: from function to style



1911

1924



1930s-1940s

Image 6

The architectural style of the Elk Lake Guard Station marks a pivotal transition in US Forest Service building form and style. In the early beginnings of the US Forest Service, buildings were primitive, rustic outposts constructed of logs or other local materials. "Much of the rural architecture before 1900 was constructed with no formal architectural style. Utility, time, and the availability of materials were the principal forces behind their method of construction and appearance."[3] In 1905, the US Forest Service issued the *Use Book* which outlined the role and functions of the federal agency in its infancy. While the book did not mention a particular style of architecture, it did provide general guidelines for the appearance of administrative buildings:

"It is the intention of the Forest Service to erect the necessary buildings as rapidly as funds will permit. Usually they should be built with logs with shingle or shake roofs. Dwellings should be of sufficient size to afford comfortable living accommodations to the family of the officer. Rangers' cabins should be located where there is enough agriculture land for a small field and suitable pasture for a few head of horses and a cow or two..."[4]

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[3] Grosvenor, John R. *A History of the Architecture of the USDA Forest Service.* United States Department of Agriculture, Forest Service, Engineering Staff, 1999.

[4] Ibid.

The 1920s saw a great expanse of the infrastructure and role of the US Forest Service. The agency evolved from "custodial superintendence" to "active management".[5] It was during this time period that an emergence of an architectural style came to be. A unifying architectural style would come to symbolize the non-intrusive mission of the agency and also serve as recognizable government operations within outlying areas. The primitive administrative buildings of the early 1900s gave way to a more refined building style. In 1938, the US Forest Service developed examples of acceptable architectural styles for each of the administrative regions dependent on their type of ecosystem. For example, in grassland country, building plans exhibited characteristics of the low-profile ranch house, while in woodland areas, timber and heavy massing became the predominant form. These designs were meant to harmonize with the surrounding environment both in mass and by using local materials. Specific design blueprints were then produced by regional architects to adhere to local materials, climate, and needs of the local field office. "Mostly devoid of superfluous ornamentation, it was the richness of texture, sense of craftsmanship, and juxtaposition of shapes and materials that made these buildings aesthetically pleasing. These structures reflect both national and local

[5] Joslin, Les. *Uncle Sam's Cabin: A Visitors Guide to Historic U.S. Forest Service Ranger Stations of the West.* Bend, Oregon: Wilderness Associates, 1995.

architectural trends and building philosophies of the Forest Service that include utility, respect for nature, and harmony with the environment."[6]

NR

The Elk Lake Guard Station displays qualities of the rustic style of architecture typical in the early 1900s US Forest Service building vernacular. It embodies a utilitarian method of construction that both preceded and inspired the standardized regional US Forest Service architectural styles developed in the Depression Era.

Elk Lake Guard Station is one of the last examples of a one-of-a-kind US Forest Service building. Soon after its completion, standardized structures built by the Civilian Conservation Corps became the predominant US Forest Service buildings of the 1930s. This historic guard station exemplifies an early attempt "at standardizing ranger station architecture to reflect a consistent Forest Service image."

Eminently practical for its time and place, this simple and economical building reflects, in part, the romantic perceptions of nature and America's western frontier. Its philosophy was founded on an ethic of non-intrusiveness that related to the landscape in the way it used forms and materials found in the environment.

Like others of its era, Elk Lake Guard Station was erected by US Forest Service personnel themselves. It was then "situated in a strategic location for maximum public, or user, contact and backcountry access to the soon-to-be designated Three Sisters Primitive Area". It is the only

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[6] Grosvenor, John R. *A History of the Architecture of the USDA Forest Service.* United States Department of Agriculture, Forest Service, Engineering Staff, 1999.

log cabin left in the Bend/Fort Rock Ranger district associated with the early history of the US Forest Service and still serving the agency's [motto] of "caring for the land and serving people".

Partnerships

Partnerships with the US Forest Service have played a substantial role in the perpetuation of use and preservation of the Elk Lake Guard Station. In addition to their time, commitment and labor, these partnerships have helped foster a deeper understanding and appreciation for this historic resource and should, therefore, be recognized.

Friends of the Elk Lake Guard Station

An informal group organized in 1977 to promote the restoration, preservation, and utilization of the historic Elk Lake Guard Station.

Passport in Time (PIT)

An archaeology and historic preservation volunteer program of the US Forest Service. PIT volunteers have assisted in the restoration of the Elk Lake Guard Station and serve as interpretive docents during the summer season.

Chronology of Development

The following section documents the physical development of the Elk Lake Guard Station. For additional dates related to the significance and use of the building and surrounding area refer to Appendix B – Timeline.

1929	Elk Lake Guard Station constructed on the northwest shore of Elk Lake.
1935-1942	Guard Station was moved to current location, ¼ mile northwest of the shore, sometime between 1935 and 1942.
1950s	Wagon road from Bend to Elk Lake was realigned and paved. At this time the buildings back porch began its new front entrance.
Late 1950s	Cinder block chimney in random rubble stone pavers was constructed in the main living room.
Early 1960s ?	Metal vault toilet installed to replace wooden outhouse.
1960s	Interior ceiling installed. Comprised of 4" tongue and groove, clear grained Douglas fir. Later altered and removed.
1970-1976	Ceiling altered to accommodate a sleeping loft.
Post-1972	Metal flue, which protruded through the roofline, for the original chimney in the kitchen removed.
1979	Maintenance utility shed (FS building #1600) constructed by US Forest Service personnel.
1979	Water pump house built of materials from an older outhouse by US Forest

	Service personnel.
1997-1998	Extensive restoration project completed for the guard station. Partnership between the Deschutes National Forest, Passport in Time volunteers, and Friends of Elk Lake. Four sill logs around the perimeter of the building were replaced in-kind and reset atop new stabilizing internal concrete piers. Additionally, repair of windows, removal of non-historic interior ceiling, sealing log wall, and repairing loose foundation rocks was completed.
1999	Windows and doors are repaired and the interior and exterior log walls were cleaned and sealed.
1999-2000	Extensive restoration of east and west porches. Sill logs, railings, and floor boards were repaired and replaced in-kind where necessary. Additionally, the cinder block chimney (not contemporary to the original construction), was rebuilt with 16" x16" blocks since the original style 14" x 14" blocks were no longer available. A basalt stone facade was placed over the cinder block chimney in order to compliment the character of the building.[7]
2000	Metal radio/electrical tower to the immediate north of the guard station is

[7] It should be noted that although a US Forest Service Cultural Resource Manager oversaw the 1997-1998 restoration project, the extent of the restoration work should have warranted a Historic Structure Report to be completed prior to the project. Historic Structure Reports should be completed prior to any work or maintenance on a historic resource that *may* result in adverse effects. Section 106 regulations (36 CFR § 800) define an adverse effect as one that occurs when an undertaking *may* alter, *directly or indirectly*, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

	removed because it detracted from the historic character of the property.
2001	Asbestos linoleum on interior of the guard station removed. Original hardwood floors are refinished and restored.
2002	Roof restoration project completed. Cedar shingle roof of the guard station replaced in-kind. For preservation purposes, felt paper was installed under the new shingles. Roof purlins and rafters were repaired and replaced in-kind where necessary.
2002	$2300 worth of masonry work completed using black diamond rock (similar material used also at Paulina Lake and Cascades Highway). Presumably this is the paver patio and entry to the guard station.
2003	Pump house is enlarged to pass OSHA standards.
2005-2006	Site improvements completed immediately surrounding the guard station. Improvements include a vault toilet, parking area with low-profile vertical timber barriers (52 total), picnic table, and plantings of native strawberry.

Image 7 & 8:
Elk Lake Guard Station 1948

Physical Description

This section documents the physical condition of the Elk Lake Guard Station and provides recommended maintenance for the building. The section contains (1) a general description of the guard station, (2) a list of its character defining features, and (3) a condition assessment including deficiency findings and recommendations. Physical conditions and recommendations for non-contributing resources are not included within this report.

General Description

The Elk Lake Guard Station is a single-story, three-room, log building located approximately ¼ mile northwest of Elk Lake in Deschutes County, Oregon. It can be accessed by Spur Road 100, which runs southwest from Forest Service road 4625 due southeast of the Cascade Lake Scenic Byway, or State Highway 46. The property boundary is approximately two acres (as determined by the National Register Nomination) and is predominantly lodgepole pine forest. Minimal views of the lake through the forest understory can be seen from the southeast elevation of the guard station. The property encompasses the guard station and four smaller, non-contributing resources – a pump house, utility shed, outhouse, and vault toilet. Additional objects within the property boundary include a picnic table, US Forest Service signage, and low-profile, vertical timber posts set in the ground which serve as a barrier along the spur road and parking areas. *(See Appendix C for site diagrams.)*

Image 9 :

Elk Lake Guard Station 2012

The guard station is rectangular in plan, measuring 24' by 17', and is capped by a gable roof. The roof ridgeline is situated roughly 45° off of magnetic north running northeast to southwest. The southeast and northwest elevations have projecting porch entryways. The southeast porch is centrally located along its respective elevation, while the northwest porch is located on the northern half of the building. During the period of significance, the southeast elevation served as the front entrance; however, when the highway was realigned in 1954, the northwest elevation served as the entry. Walls of the guard station are primarily constructed of horizontal peeled logs joined with inverted saddle notches and chinked with mortar. Oakum, secured with wire mesh and nails, serves as insulation behind the mortar. The exception of horizontal log construction is found at the west corner of the building and within the gable ends. At the west corner, a portion of the northwest and southwest walls are constructed of horizontal logs on the lower half and vertical half logs within the upper section. The gable ends of the main portion of the building and the porches contain vertical board and batten siding. All exterior features maintain a natural appearance and have been treated with a dark stain preservative.

The gable roof has wide projecting eaves and serves to visually anchor the building to the surrounding environment. Rafters of peeled logs and dimensional lumber purlins are visible in the eave returns. The roof is clad in single-course, cedar shingles. Metal troughs, to divert rain water, have been installed in the roof valleys and the ridgelines are capped with metal

flashing. A single, square chimney slightly off-center to the north protrudes approximately 2 feet from the ridgeline. The chimney is constructed of cinder blocks, but has been clad in random rubble masonry pavers. During the period of significance the building had a chimney located near the south gable end. The chimney had a metal flue pipe, which protruded through the east face of the roof. This chimney was abandoned and the flue removed sometime after 1972.

The interior of the guard station contains three rooms divided by horizontal log partition walls. After the period of significance, a ceiling was installed; however, this feature was removed during later restoration work. During this time, the original clear grained Douglas fir tongue and groove flooring was also restored. The original flooring had been covered at an unknown date with asbestos linoleum tiles. However, the tiles have been since removed and the original hardwood floors restored. The kitchen and bedroom contain built-in cabinet furniture contemporary to the construction of the cabin. The cabinets are constructed of knotty-pine and contain what appears to be the original hardware. The kitchen contains an unfinished brick chimney flue, which has been abandoned and is no longer in use. The living room contains the cinder block chimney flue, clad in masonry pavers, which is visible from the exterior of the building. This flue services a cast iron wood stove installed within the last few decades.

Image 10:

Elk Lake Guard Station, Interior 2012

Character Defining Features

Within the built environment, there exists an intrinsic and interdependent relationship between the significance of place and its material features. Character defining features encompass distinguishable forms, materials, and craftsmanship which relate to the significance of a historic resource. Even if a building, or any other historic resource, has not been deemed particularly significant for its architecture, character defining features help portray the story of the past and the history of place. For example, the construction or even the tool marks of a log building will serve as interpretive artifacts as to who built the structure and their skill level. Character defining features and other design elements that are part of a resource's *historic* past, or those which are significant, should be preserved and retained if possible. If an authentic material is found to be incompatible, new materials and technologies are acceptable so long as the significance of the resource is not hindered and the story of place is perpetuated within the new context.

Exterior

Building form

- Rectangular plan with projecting porches
- Low horizontal emphasis
- Steep (12/12) pitched gable roof with single-course cedar shingles

- Wide, overhanging eaves supported by peeled log rafters and diagonal braces at the buildings corners
- Wooden sash windows (hung vertically and horizontally) with divided lights
- Open-walled porches constructed of peeled logs with low-profile railings
- Stone chimney slightly north of center protruding from the ridgeline
- Inverted saddle notched log walls

Materials

- "Native materials with rustic detailing enhancing the 'quality of nativeness'"[8]
- Horizontal and vertical peeled logs
- Board and batten siding within the gable ends
- Cedar shingles laid in a single-course
- Random rubble fieldstones used for foundation wall
- Smooth tooled mortar chinking
- Wide dimensional lumber window trim

Interior

- Three-room layout and configuration

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[8] Brown, Sueann, Grant Crosby. *Yosemite Museum.* Historic Structure Report, Division of Publications, National Park Service, U.S. Department of the Interior, 2007.

- Exposed log walls
- Exposed rafters and ceiling members
- Built-in cabinet furniture notched to log walls
- Exposed chimney flues
- Original door, window, and cabinet hardware
- Clear grain Douglas fir tongue and groove floors
- Wedge chinking
- Paneled doors
- Custom sized door for the west entry
- Varnished surfaces (not painted)

Condition Assessment & Recommendations

Site

The Elk Lake Guard Station is located on a two acre parcel ¼ mile from the northwest shore of Elk Lake. The guard station rests on a level piece of ground on the west side of the parcel. Cascade Lakes Scenic Byway, also known as State Highway 46, is approximately 175 feet north of the building. Elk Creek is approximately 100 feet west of the building.

Image 11:
Elk Lake Guard Station, Photo-collage of Site

Image 12:
Site, Lodgepole pine forest and red cindercone pavement

NR The guard station can be accessed by Spur Road 100 which runs southwest from US Forest Service road 4625 due south of highway 46. This spur road intersects the Guard Station's property and makes a loop. There are graveled turnouts located on the loop and two graveled parking areas. This current access to the station was provided in 1954 when "The grading of the Cascade Lakes Highway was completed to Elk Lake and cinders were spread from the end of the oil near Dutchman Flat to Elk Lake." This new highway, subsequently paved, replaced the old Cascade Lakes Wagon Road that passed on the southeast side of the station. A driveway off the new highway led to the northwest side of the station. The back, or northwest side, of the cabin became the front as a result of this change.

Lodgepole Pine is the predominant species of tree on the property. The guard station is the only contributing structure located on the property. However, there are four other non-contributing structures located in the immediate vicinity of the station: pump house, utility shed, outhouse, and vault toilet. The pump house is located in the center of the loop about 20 yards north of the guard station. The outhouse is located about 34 yards east of the guard station. The utility shed is located 24 feet south of the guard station. While the station rests on level earth, immediately to the south, the property begins a gradual slope which descends about 100 yards to the northwest shore of Elk Lake. The property to the east-southeast contains seasonal rental cabins. The property to the south-southwest is Elk Lake Resort Special Use Permit. The area surrounding Elk Lake Guard Station remains a popular tourist destination serving thousands of visitors every year. The scenic mountain setting to the east and the lake to the south continue to provide many recreation and vacation opportunities.

Findings

- Overall the site and immediate setting is in good condition and maintains a high level of integrity given its remote location and lack of surrounding development.
- Wild strawberries were planted by the US Forest Service Archaeology crew on the northwest side of the guard station.
- The present location of the guard station historically was a pack station, pre-1935.
- The Elk Lake area hosted a Civilian Conservation Corps (CCC) spike camp in 1939. Specific location is unknown to the author; however, it would have been likely that the forest guard worked closely with crew members.
- Interpretive signage is located in close proximity to the guard station to help portray the history of the area to visitors. Individual signs include: "The #9-Wire Telephone System", "The Forest Guard", "Cascade Lakes Wagon Road", and "A step back in time... Elk Lake Guard Station and the Forest Guard".
- The red pavement is historic to the property.
- A young lodgepole pine tree is growing in close proximity to the building at the west corner.
- Mature lodgepole pine trees are growing in close proximity to the building at the south and east corners. The tree at the south corner has branches that overhang the building on the southeast elevation.

- Some grading around the perimeter of the building was corrected during recent restoration efforts.
- The guard station is somewhat disconnected from the shoreline of Elk Lake and trails are not clearly marked.

Recommendations

- Trim any vegetation that is touching or is in close proximity to the roof and exterior walls.
- Maintain proper clearance and fuels reduction around the building to mitigate losses from wildfire.
- Monitor tree and tree root growth to ensure it is not causing damage to the building's foundation.
- Remove trees which are too close to the building and potentially damaging the structure due to root system undermining the foundation or branches growing too close to the building.[9]
- Improve trail and overall connection from the guard station to the lake shoreline.
- Maintain and retain the appearance of a red cinder paved roadway to the guard station.

[9] Museum hsr.

Foundation

NR Eight rock piers were found beneath the guard station. These were located at the load points under the gable ends, along the northeast and southwest elevations, and under the interior partition wall. The rock piers were replaced with eight concrete piers. Random rubble fieldstones have been stacked around the perimeter of the building to serve as a non-structural perimeter wall. These rocks no longer serve as the foundation but are used to prevent pests from entering the void between the ground and the structure.

There are 2" x 6" x 8' joists nailed into the sill logs and a central 6" log beam. The joists run parallel to the gable ends, and the floor boards, naturally, run perpendicular to the joists. The flooring is composed of 4" tongue-and-groove clear grained No. 1 Douglas fir.

Findings

- Due to time constraints and narrow access points beneath the building, the structural foundation was not assessed for purposes of this report. It was known, from research, that the building had undergone restoration work in recent years and therefore, it is assumed the foundation is in good condition.
- The non-structural perimeter foundation wall of random rubble fieldstones is in fair condition. In a few locations on the northwest elevation, the stones have fallen out or been removed by pests.
- Logs at the east corner of the building are not supported by a foundation wall and are in contact with the ground.

- The perimeter of the guard station has been lined with crushed gravel to serve as an informal French drain.
- Extensive restoration efforts in the late 1990s included the replacement of all sill logs, due to the either minimal or no foundation beneath the sill logs. Even in places where a foundation wall is present, the building is in close proximity to the grade level.
- Rain water is pooling under the south valley between the main roof and porch roof on the northwest elevation of the building.
- Floor within the kitchen is sloping to the south.

Recommendations

- Secure loose stones of the foundation wall to deter pests.
- For long term restoration efforts, consider raising the building from off of grade level and place on a slightly higher foundation that would be sensitive to the buildings historic context.
- Monitor water and snow collection under the south valley between the main roof and porch roof on the west elevation of the building.
- Monitor the slope of the kitchen floor. If the problem worsens, further investigation is needed.

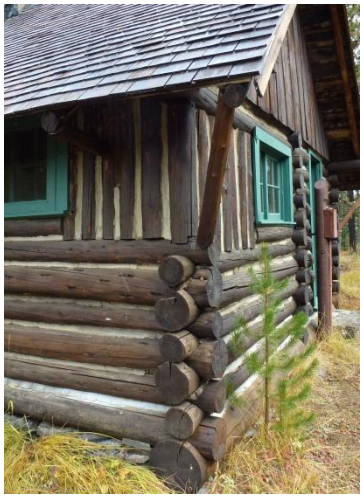


Image 13, 14, 15

Exterior Walls

NR The building is constructed of horizontal round peeled logs 6" to 8" in diameter. The eave height is 6' 11" from the ground and the gable height is 7' 10". Mortared chinking is between each log. Wire mesh and oakum is used for insulation behind the mortar. Rows of small nails have been hammered into the logs along the gaps to secure the chinking. The logs are stacked horizontally and are anchored at the corners with saddle notches. While professionally built log buildings usually have the saddle notches carved on the underside of each log to mate with the log directly below, this building's logs have been notched on the top.

This type of construction was probably completed by people who were unaware of the proper methods of log construction. This backwards form of notching is more vulnerable to water damage. However, due to the dry Central Oregon climate, most of the logs have retained their integrity, and the building has not suffered as a result of this feature. (Note: Although all of the logs, except the sill logs, have retained their structural integrity throughout the life of the cabin, as a precaution against possible future damage, all logs have been treated with X1 000 preservative.) The rafter tails protruding from the eaves tell us that the rafters are peeled logs of 4" in diameter.

The southwest corner of the building exhibits a unique log detailing feature surrounding the windows. *(See top photo)* Portions of the northwest and southwest elevations are constructed of horizontal peeled logs within the lower half, while the upper half is constructed of vertical half logs. Additional details of the exterior walls include symmetrically cut flush log ends, peeled log diagonal braces at each of the buildings corner to support the roof structure, and

structural transparency. It is assumed that the diagonal braces are not contemporary to the construction of the guard station, but rather were added later to help support the roof from snow loads. This feature helps portray the evolution of the building. The building exhibits structural transparency where the interior partition wall comes in contact with the exterior walls. Log ends of the interior partition wall protrude through the exterior wall and are visible on the outside of the building.

Findings

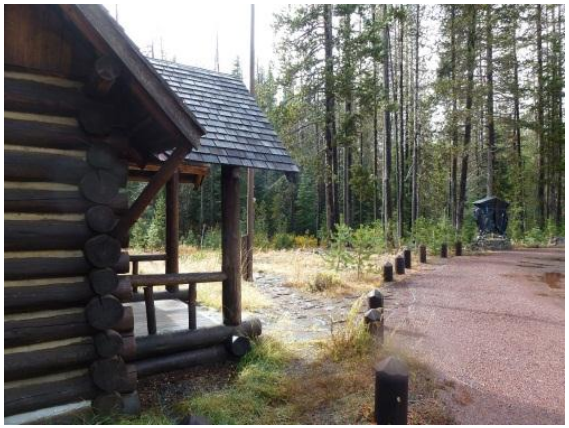
- Overall, the exterior walls are in good to fair condition. While the majority of logs are structurally sound, there are numerous places where the chinking is deteriorated or has completely failed.
- Chinking located near the north corner of the building on the northwest elevation has inscribed markings: "RHB 1962 GAM" and "9-24-67".
- A significant amount of chinking has failed along the northwest elevation.
- The log second up from grade to the north of the southeast facing door is rotten.
- The log end second up from grade level at the east corner of the building is rotten.
- Although the building is constructed using inverted saddle notches, log ends appear to be structurally sound.
- There appears to be no significant exterior damage from pests or wildlife.
- Large checks in the log open upwards; this allows for moisture penetration.

Recommendations

- Properly document the inscribed markings in the chinking with scaled photographs for the US Forest Service building files.
- Repair and replace failed or deteriorated chinking where necessary. If needed, replace wire mesh and oakum insulation in-kind. Repairs and replacement of mortar should be done with lime mortar. Cement mortar is not recommended. Cement mortar on log structures can lead to detrimental moisture problems.
- Repair or replace sections of rotten logs. This can be done by splicing the rotten section and doing selective replacement rather than replacing the entire log.
- Consider using the product CheckMate for filling in checks which open upwards. This product has been used by the Yosemite Historic Preservation Crew in a similar climatic environment. Research this product and alternatives for the best suited for the context and building type.

Porches

NR



The guard station has two porches; one southeast facing and one northwest facing. The northwest facing porch extends 4' 6" from the building and is 6' 8" wide. It has two log side rails each 5" diameter and each with two 3" diameter log balusters. The deck is made of tongue-and-groove Douglas fir. Two log posts, each 7" diameter, support the porch roof. The porch roof is at a 12/12 pitch with a 3' 6" gable end. The gable end is covered with board-and-batten. The east facing porch (which was historically the main entry) extends 6' 2" out from the cabin and is 8' 2" wide. It has two 5" log side rails and one 5" log partial front rail. Each side rail has five 3" diameter log balusters, and the front rail has three 3" diameter log balusters. The southeast deck is also made of tongue-and-groove Douglas fir. Two 7" log posts support the porch roof. The roof is at a 12/12 pitch with a 4' 2" gable end. The gable is covered with board-and batten.

Findings

- Porches are structurally sound and maintain a high level of integrity due to recent preservation efforts.

Recommendations

- N/A

Image 16, 17, 18: Porch details

Roof

NR The guard station has a gable roof at a 12/12 pitch. The gable ends are constructed of vertical 1″ by 12″ milled pine board-and-batten. The rafters are a series of 4″ round pealed logs which meet at a 1″ by 6″ ridge board. 10″ wide purlins are nailed to the tops of the rafters and run perpendicular to them. Cedar shingles are nailed to the purlins and cover the main building and the porch roofs. Galvanized metal flashing was installed in the valleys where the porch roofs intersect the main roof.

On the interior of the building, two roof trusses are exposed. The horizontal members are 24' logs 6" in diameter. They are each supported by three 5" diameter log posts. On each truss, two of these posts are supported by the exterior walls and one is supported by the central load-bearing partition wall. Each truss leans slightly off of vertical toward the exterior. Also, each post is reinforced with 3" diameter logs extending from the horizontal members to the posts at 45 degree angles. Each center post is equipped with two of these angle supports and each end post is equipped with one.

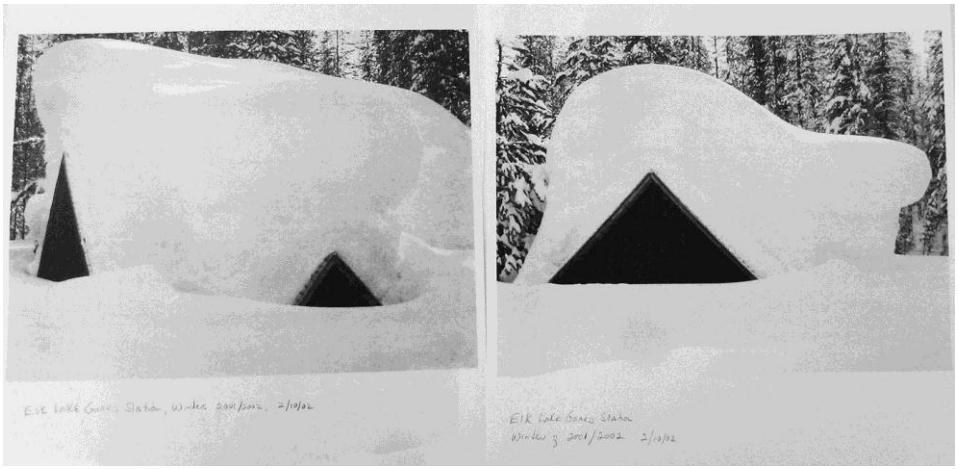


Image 19: Guard Station in heavy snow, February 2002

Findings

- Overall, the roof is in sound condition and maintains a high level of integrity due to recent preservation efforts.
- A sag is present at the west corner of the roofline.
- Rafters contain metal strapping near the juncture of the rafter and exterior log wall. It is unknown if these features are contemporary to the construction of the building.

Recommendations

- Consult with a structural engineer to determine if the structural integrity of the roof is being threatened by heavy snow loads at the southwest corner.

Image 20, 21:
Roofing details

Interior

The interior space of the guard station is divided into three rooms separated by horizontal log partition walls. The height of the walls are 6'11" and do not extend to the roof. Wedges have been used as the chinking on the interior walls and partition walls. One partition wall spans the north-south width of the building, dividing the interior in half. The northern half of the building is the main living room or gathering space. The second partition wall is located within the southern half and runs west to east. This partition wall divides the southern portion of the interior into quarters. The southwest quarter of the interior is the kitchen. The northwest quarter of the interior contains a bedroom.

While the structural truss supports are exposed, the roofing members (purlins and backside of the shingles) have been finished with 4" tongue and groove clear grained Douglas fir. In the 1960s, a ceiling was installed above the partition walls. Later in the 1970s, the ceiling was modified to accommodate a sleeping loft. The ceiling was removed in recent decades during restoration efforts. The roof support is composed of two large 24' trusses. Each truss is anchored to the perimeter wall as well as the central partition wall just north of the buildings center. A 1/2" diameter steel cable runs across the top of the east-west partition wall. This cable is designed to keep the northwest and southeast walls from creeping outward while heavy snow is pressing on the roof.

Image 22, 23: Interior details

NR The kitchen has built-in knotty pine cupboards with a wooden kitchen cabinet, which includes a built-in drain board and sink. Cupboards are located above the cabinet. They have been finished with "spar" varnish. The cupboards have metal handles on the doors. The bedroom has a built-in knotty pine dresser with shelves on the top and drawers below. Also, the bedroom has one built-in clothes closet with a door, also made of knotty pine. These are L-shape and wrap the north corner of the room. The north wall contains a built-in closet. Both of these features have been finished with "spar" varnish.

The [living room] furniture consists of a wooden Adirondack-style chair, a couch, and a desk. The couch is made of wood and has a rope mesh seat which holds the green cushions in place. The desk is rectangular and is also made of wood. Further, there is a new woodstove in the front room used purely for decoration. The furniture and the woodstove are non-contributing.

The kitchen is equipped with a brick chimney, which has a hole for the stove pipe; however, it currently does not extend through the roof. Old photographs show that a metal flue pipe extended above the roof in 1972.The living room had a cinder block chimney constructed of 14" x 14" cinder blocks. These were custom-made to this size, which in the late 1950s was probably produced in Madras where they were making such blocks at that time. A terracotta pipe fits down into the cinder blocks. Other cinder block chimneys in US Forest Service facilities in the area were made of the same material. The chimney blocks were cracking and were replaced during recent preservation efforts with 16" x 16" blocks since 14" x 14" blocks were no longer produced. The chimney exterior is covered with basalt decorative facing stone. (Note: The location and composition of the structure's original woodstove and chimney is unknown. Also, it is not known when the chimney in the kitchen was constructed. However, it is believed that its intended use was as a vent for an old stove. It is also possible that there was no heat source

Image 24, 25:

Interior details

in the cabin during its first two decades of existence. This may be due to the fact that the cabin was only occupied in the summer and there was rarely a need for heat.)

Findings

- Overall, the interior is in good condition and maintains a high level of integrity due to recent preservation efforts.
- Pests have chewed through the corners of historic cabinet doors.
- Hand pump fixture is located on the right-hand side of the sink and is inoperable. It is unknown if this fixture is original to the building.
- Original layout and configuration of space is in-tact.

Recommendations

- Maintain original layout of the guard station.
- Install hardware cloth and copper wool at potential pest entry points to deter them.
- Place traffic mats in areas of the building that visitors frequent to preserve the original hardwood floor.

Windows & Doors

NR The guard station has three points of entry: southeast facing, northwest facing, and east facing. The southeast facing door is 6' 6" x 2' 8" with a fixed 9-pane light and a single panel. The northwest facing door is 6' 4" x 2' 8" with a fixed 9-pane light, a single panel, and a screen door. The east door is 6'4" x 2' 8" with three panels and a single light. These three doors are painted US Forest Service green on the exterior. There are two interior doorways from the main front room to each smaller room. Each interior door has two panels; each panel is made of fir plywood. Both doors are 6' 4" x 2' 6". All interior and exterior doors are constructed of clear-grain pine.

In the main living area, there are two casement windows each with two sashes and six panes per sash. The east casement window is covered with a removable storm screen. The bedroom has two horizontal sliding sash windows each with eight panes. The kitchen also has two horizontal sliding sash windows each with eight panes. All windows and moldings are painted US Forest Service green on the exterior.

Image 26: Door hardware

Findings

- Organic growth is present on the west facing window of the bedroom.
- Bubbling/warped paint is present on the northwest facing window of the bedroom.
- Doors and windows appear to have the original hardware.

Recommendations

- Treat organic growth growing on building surfaces.
- Further investigate moisture problems at the west corner of the building.

- Ensure windows and doors remain operable for adequate circulation and safety concerns.

Image 27:

Modern light fixtures

Building Systems

The guard station has been upgraded at an unknown time to accommodate modern electrical wiring. Electrial outlets and conduits are fastened directly to the interior log walls. Four pendent lighting fixtures hang above the four quarters of the interior space. While these fixtures are compatible to the historic character of the building, they are not historic. An additional light fixture is located above the kitchen sink. Plumbing to the building is supplied by pump from the lake to the kitchen sink. The sink retains a hand pump, however this fixture is not operable.

Image 28:

Outdoor interpretive panels

Findings

- Wood stove provides the only source of heat to the building.
- Smoke alarm is located on the south side of living room chimney.
- Water and power to the building was shut off during the winter season.
- All access points to the building have at least one step up, making the building not accessible to wheelchairs. However, interpretation of the surroundings and cabin does not necessarily need access into the interior.

- Interpretive panels are arranged outside to the southeast of the guard station. Here there is a firm and stable surface to serve as an interpretive space or gathering space.

Recommendations

- Ensure the guard station is listed on emergency management GIS maps and layers. Doing so will aid in relaying the importance of the historic resource during hazard events and inform personnel of its existence.
- Ensure PIT volunteers are trained to accommodate disabled visitors in the outdoor interpretive space.
- Ensure electrical outlets and fixtures are cleaned during the opening of the building for seasonal use.

Image 29:
The Elk Lake Guard Station's outdoor sign takes refuge from the winter inside.

Bibliography

Atwood, Kay, Sally Donovan, Dennis Gray, Ward Tonsfeldt. *Utility and Service Combined with Beauty: A Contextual and Architectural History of USDA Forest Service Region 6 (1905-1960).* Bend, Oregon: US Department of Agriculture, Forest Service, Pacific Northwest Region, 2005.

Brown, Sueann, Grant Crosby. *Yosemite Museum.* Historic Structure Report, Division of Publications, National Park Service, U.S. Department of the Interior, 2007.

Ferguson, John, Les Joslin, *Elk Lake Guard Station,* National Register Nomination, USDA Forest Service, Deschutes National Forest, January 2009.

Grosvenor, John R. *A History of the Architecture of the USDA Forest Service.* United States Department of Agriculture, Forest Service, Engineering Staff, 1999.

Joslin, Les. *Uncle Sam's Cabin: A Visitors Guide to Historic U.S. Forest Service Ranger Stations of the West.* Bend, Oregon: Wilderness Associates, 1995.

Otis, Alison T., William D. Honey, Thomas C. Hogg, and Kimberly K. Lakin. "The Forest Service and the Civilian Conservation Corps: 1933-1942." *NPS.Gov Online Books.* United States Department of Agriculture, Forest Service. 1986. http://www.nps.gov/history/history/online_books/ccc/ccc/index.htm (accessed Fall 2012).

Photo Credits

Disclaimer: The photographs used within this report were gathered for academic research purposes only. For additional use or potential publication of this report, contact and retrieve permission from the source.

Image 1: Diffused Glow – The Elk Lake Guard Station

Photographer: Jennifer Self
Date: Oct. 2012
Facing southwest.
Notes: Elk Lake Guard Station at the first snow of the season.

Image2: Reference Map

Basemap: Google Maps 2012

Image 3: "Elk Lake Admin Cabin", 1937

Photocopy of original.
Title: "Elk Lake Admin Cabin, 7-8-37 12 noon, J.O. Lammi"
Photographer: J.O. Lammi
Source: US Forest Service, Bend/Fort Rock Ranger District Building Files
Location of Original Photograph: unknown

Image 4: 1940 Plat Map

Source: US Forest Service, Bend/Fort Rock Ranger District Building Files

Image 5: Historic View of Elk Lake, 1930

Image Title: Elk Lake and Mt. Bachelor
Date of Original: 1930
Original Form: Postcards
Original Collection: Gerald W. Williams Collection
Related Digital Collections: Deschutes Basin Explorer
Collection Series: Central Oregon Album
Item Number: WilliamsG_CO_Elk Lake 1
Contributing Institution: Oregon State University Libraries
Web link: http://oregondigital.org/cdm4/item_viewer.php?CISOROOT=/gwilliams&CISOPTR=561&CISOBOX=1&REC=1

Image 6: US Forest Service Architectural Examples

Grosvenor, John R. *A History of the Architecture of the USDA Forest Service.* United States Department of Agriculture, Forest Service, Engineering Staff, 1999.

Image 7&8: Elk Lake Guard Station, 1948

Source: Joslin, Les, "Guard Station Kids", *Old Smokey Newsletter,* Pacific Northwest Forest Service Association, Fall 2010.

Image 9: Elk Lake Guard Station, 2012.

Photographer: Jennifer Self
Date: Oct. 2012
Facing south-southwest.

Image 10: Elk Lake Guard Station, Interior 2012.

Photographer: Jennifer Self

Date: Oct. 2012

Facing west

Image 11: Elk Lake Guard Station, Photo-collage of Site

Photographer: Jennifer Self

Date: Oct. 2012

Facing south-southeast

Image 12: Site, Lodgepole pine forest and red cindercone pavement

Photographer: Jennifer Self

Date: Oct. 2012

Facing east.

Image 13, 14, 15: Exterior walls

Photographer: Jennifer Self

Date: Oct. 2012

(13) West corner. Facing east. (14) Northwest façade. Facing southeast. (15) East corner. Facing west.

Image 16, 17, 18: Porch details

Photographer: Jennifer Self

Date: Oct. 2012

(16) Northwest porch. Facing west. (17) Northwest porch. (15) Southeast porch.

Image 19: Guard Station in heavy snow, February 2002

Photocopy.
"Elk Lake Guard Station, Winter 2001/2002, 2/10/02"
Photographer unknown.
Source: US Forest Service, Bend/Fort Rock Ranger District Building Files

Image 20, 21:Roofing details

Photographer: Jennifer Self
Date: Oct. 2012
(20) Roof valley between Northwest porch and roof. Facing south. (21) Sag in west corner. Facing southwest.

Image 22, 23: Interior details

Photographer: Jennifer Self
Date: Oct. 2012
(22) Bedroom. Facing west. (23) Kitchen. Facing south.

Image 24, 25: Interior details

Photographer: Jennifer Self
Date: Oct. 2012
(24) Built-in cabinets with trash/storage compartment. Facing south. (25) Interior wall and chinking detail. Facing southwest.

Image 26: Door hardware

Photographer: Jennifer Self
Date: Oct. 2012
Door leading to southeast porch.

Image 27: modern light fixture

Photographer: Jennifer Self

Date: Oct. 2012

Image 28: Outdoor Interpretive Panels

Source: USDA, Corridor Management & Interpretive Plan, p. 54, accessed Fall 2012:
www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5347314.pdf

Image 29: Elk Lake Guard Station sign

Photographer: Jennifer Self

Date: Oct. 2012

Appendices

Appendix A – Secretary of the Interior Standards

The Secretary of the Interior's Standards for the Treatment of Historic Properties, 1995

http://www.cr.nps.gov/local-law/arch_stnds_8_2.htm

Standards for Preservation

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.

2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

Standards for Rehabilitation

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.

3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

Standards for Restoration

1. A property will be used as it was historically or be given a new use which reflects the property's restoration period.

2. Materials and features from the restoration period will be retained and preserved. The removal of materials or alteration of features, spaces, and spatial relationships that characterize the period will not be undertaken.

3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate and conserve materials and features from the restoration period will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.

4. Materials, features, spaces, and finishes that characterize other historical periods will be documented prior to their alteration or removal.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize the restoration period will be preserved.

6. Deteriorated features from the restoration period will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials.

7. Replacement of missing features from the restoration period will be substantiated by documentary and physical evidence. A false sense of history will not be created by adding conjectural features, features from other properties, or by combining features that never existed together historically.

8. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

9. Archeological resources affected by a project will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

10. Designs that were never executed historically will not be constructed.

Standards for Reconstruction

1. Reconstruction will be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture, and such reconstruction is essential to the public understanding of the property.

2. Reconstruction of a landscape, building, structure, or object in its historic location will be preceded by a thorough archeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures will be undertaken.

3. Reconstruction will include measures to preserve any remaining historic materials, features, and spatial relationships.

4. Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural designs or the availability of different features from other historic properties. A reconstructed property will re-create the appearance of the non-surviving historic property in materials, design, color, and texture.

5. A reconstruction will be clearly identified as a contemporary re-creation.

6. Designs that were never executed historically will not be constructed.

Appendix B – Timeline

The dates listed below are those that affect the subject property, Elk Lake Guard Station and its immediate surroundings. For a more complete listing of dates related to the USDA Forest Region 6 see "Utility and Service Combined with Beauty: A Contextual and Architectural History of USDA Forest Service Region 6: 1905 – 1960" by Kay Atwood, Sally Donovan, Dennis Gray, and Ward Tonsfeldt, USDA Forest Service, Pacific Northwest Region, April 2005.

1906	Elk Lake was named by Forest Ranger Roy Harvey, later to become the first supervisor of Deschutes National Forest. Elk Lake at the time was located in the Cascades Range Forest Reserve.
1908	Deschutes National Forest established July 1st.
1911	Cascades Range Forest Reserve is incorporated into Deschutes National Forest
1911-1920	Bend booms as a timber town with the arrival of the Oregon Trunk Railroad
1918	Elk Lake considered as possible location for summer resort on the Deschutes National Forest
Pre-1920	A packer from McKenzie Bridge, Oregon begins stocking Elk Lake with trout and facilitates camping trips to the area Congressional Act committed $1 million each year for road construction in national forests
1916-1926	Congressional Act committed $1 million each year for road construction in national forests

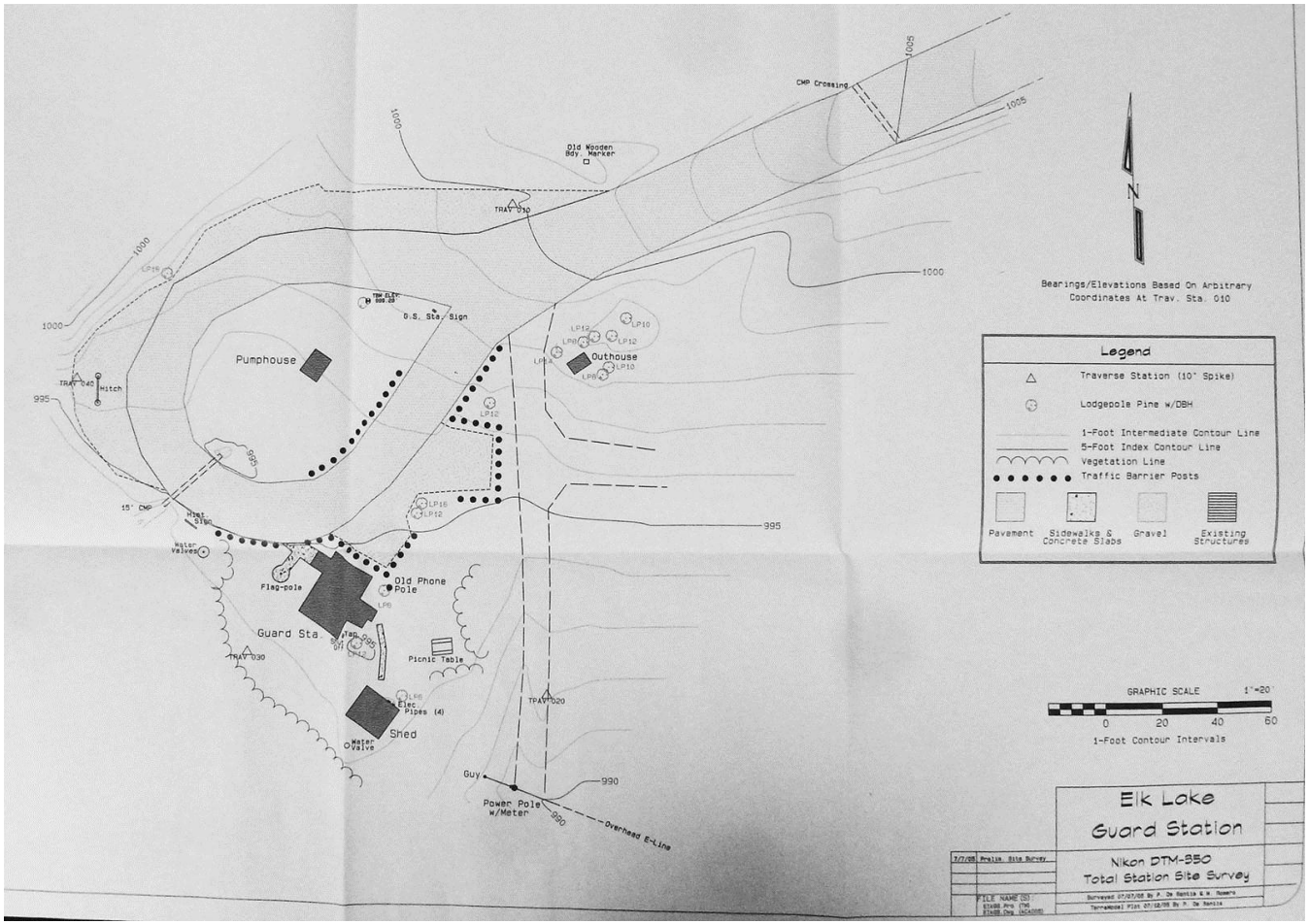
1920	Dirt wagon Road connects Elk Lake and Bend, Oregon.
1920s	US Forest Service campgrounds and summer home tracts are established in the area around Elk Lake
1921	Federal Highway Act provided additional funding for forest highways and roads
1922	Elk Lake Lodge is constructed. Log multi-use building housing hotel, restaurant, and general store. Lodge was supplemented by tent cabins.
1924	Post office constructed at Elk Lake (closed in 1954)
1929	US Forest Service constructs Elk Lake Guard Station on a flat next to the northwestern shore of Elk Lake
Pre-1935	The current site of the Elk Lake Guard Station was pack station operated by a Mr. Sherwood. Packers took visitors on excursions on the Oregon Skyline Trail (late incorporated as part of the Pacific Crest Trail)
1935 - 1942	Elk Lake Guard Station moved to present location, away from the lake, to adhere to the mission of the US Forest Service to preserve natural resources
1939	CCC spike camp located at Elk Lake
1950s	Wagon road from Bend to Elk Lake was paved and named the Century Drive because of the 100 mile length round trip. The road was paved with red volcanic cinders giving it a unique appearance.
1977	Friends of Elk Lake Guard Station was organized in September to promote the restoration, preservation, and utilization of the historic Elk Lake Guard Station

1980	Guard station is mentioned in Multiple Property Listing, "USDA Forest Service Administrative Buildings in Oregon & Washington built by the CCC"
1980s	Century Drive was paved with black asphalt and called Cascade Lakes Highway
1989	Cascades Lakes Highway officially dedicated as a National Forest Scenic Byway
1996	Corridor Management Plan and Interpretive Plan completed for Cascade Lakes Highway
1997	Cascade Lakes Highway received designation as a State Scenic Byway
1998	Cascade Lakes Highway becomes National Scenic Byway
Post - 1998	Friends of Elk Lake Guard Station convince the US Forest Service that the building should be used primarily for interpretive purposes
2003	Draft National Register Nomination prepared by US Forest Service, Bend/Fort Rock Ranger District Archaeologist, Christine Lipscomb
2004	Cascade Lakes Scenic Byway was awarded $570,000 through the Oregon Forest Highway Program to improve and develop interpretive infrastructure along the byway, including site restoration and visitor amenities to Elk Lake Guard Station

Appendix C – Drawings

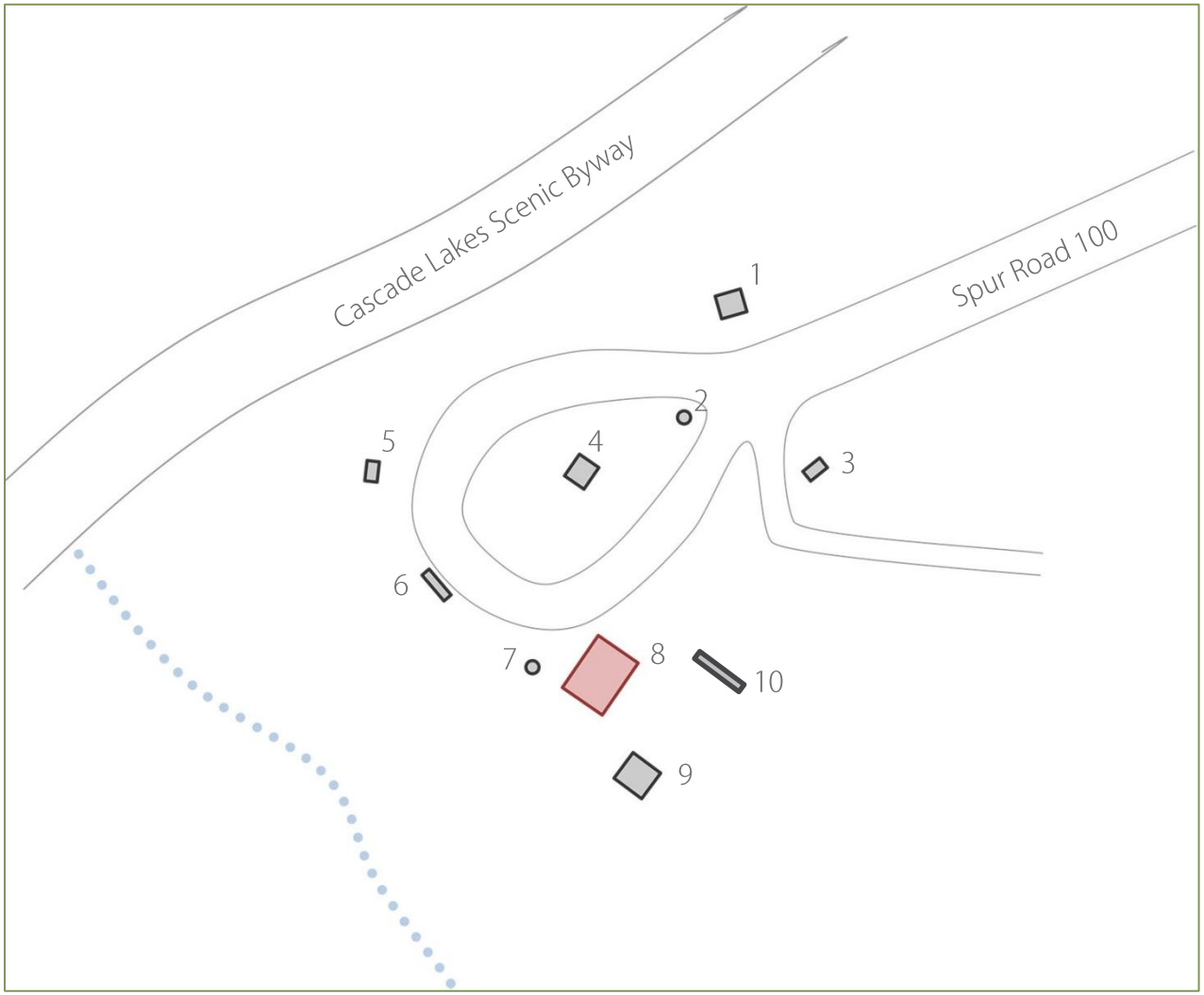
Site Design, July 2005

Source Location: US Forest Service, Bend/Fort Rock Ranger District Building Files



Current Site Arrangement, 2012

Drawn by: Jennifer Self, For reference only. Not to scale.



1. Modern vault toilet
2. Sign post
3. Older pit toilet
4. Pumphouse
5. Picnic table
6. Sign structure
7. Flag pole
8. Guard Station
9. Utility shed
10. Interpretive wall

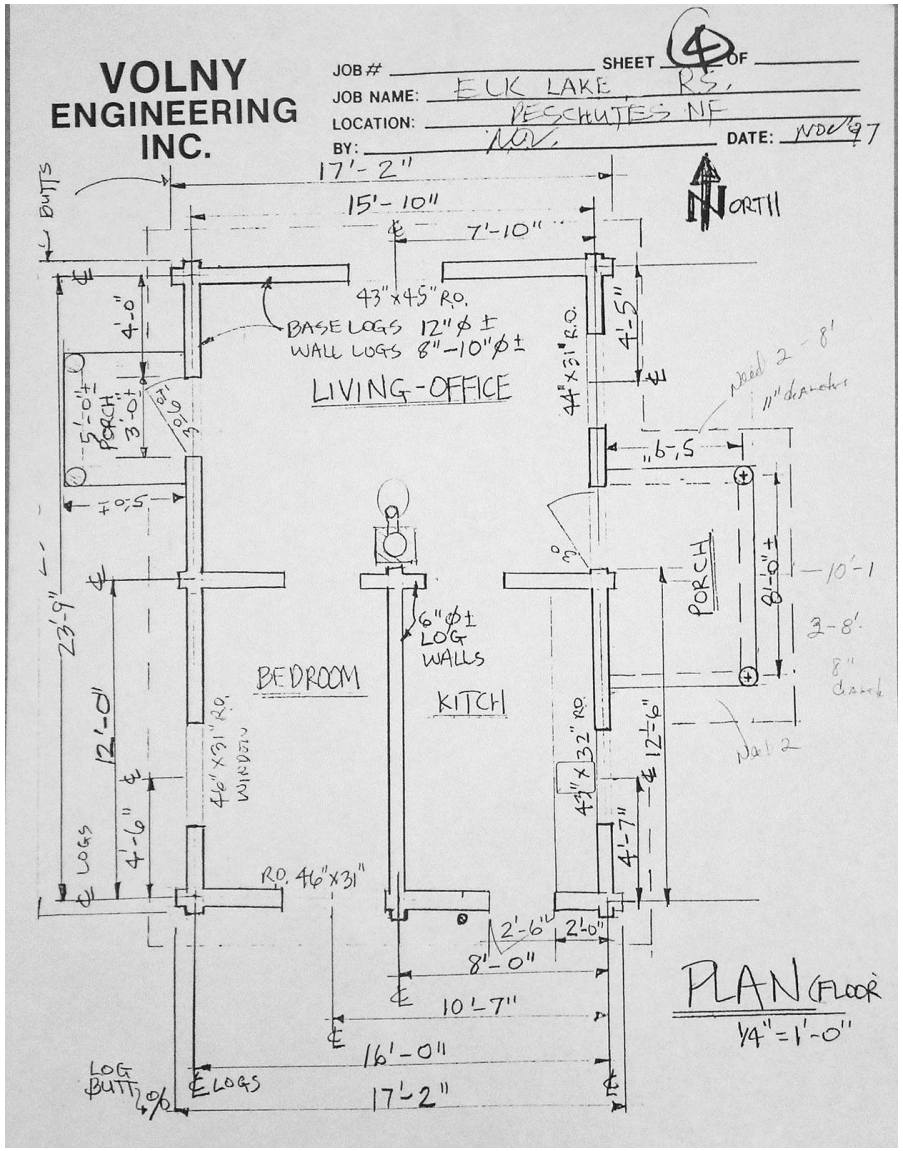
Contributing Resource

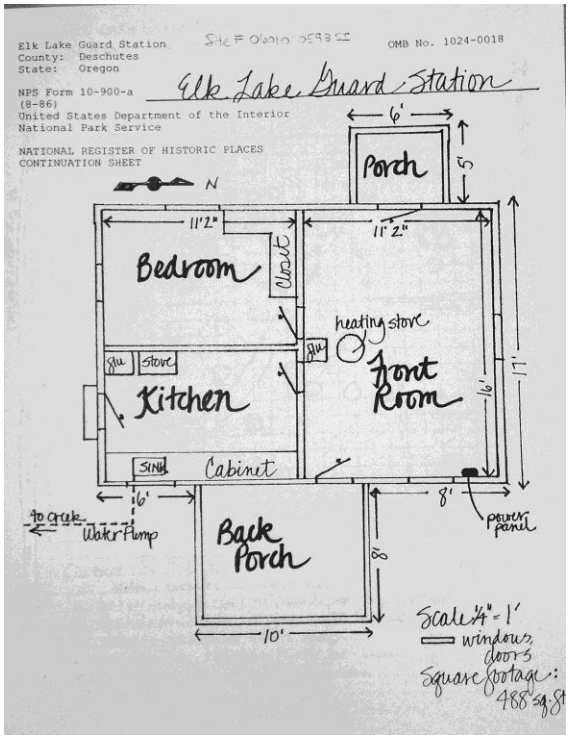
Non-contributing resources

Creek

Interior Drawings

Source Location: US Forest Service, Bend/Fort Rock Ranger District Building Files



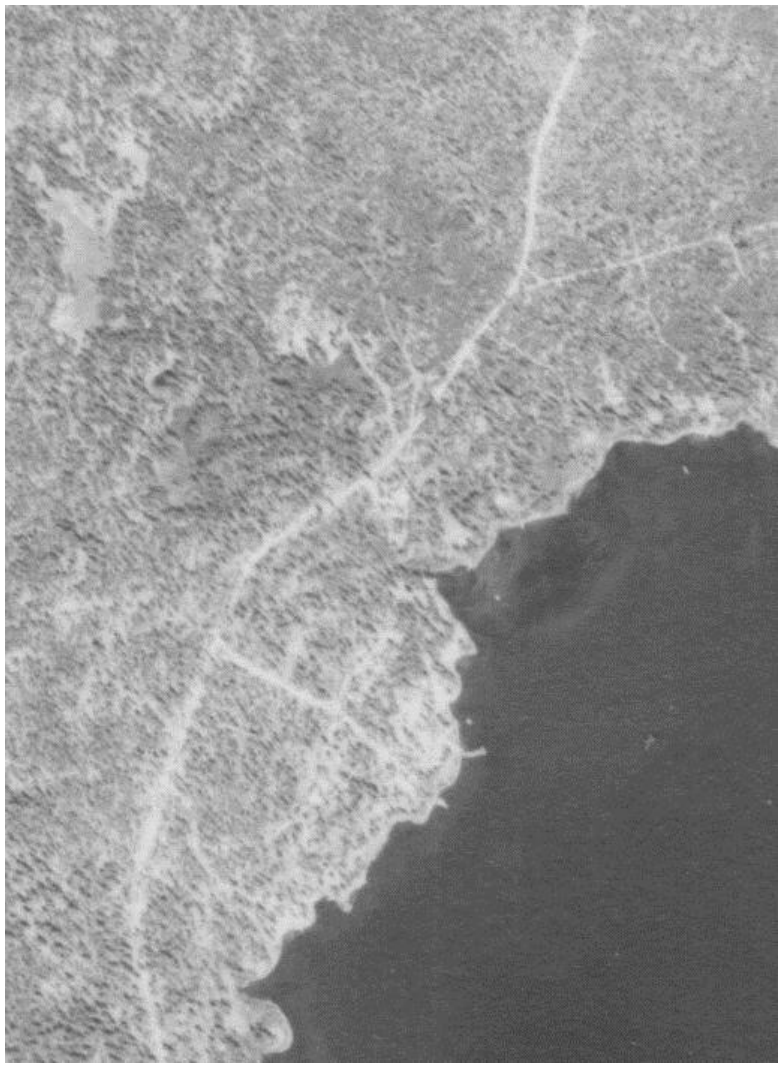


Appendix D – Aerial Photographs

Historic aerial photography of Elk Lake was obtained through the Map & Aerial Photography (MAP) Library at the University of Oregon. The following pages contain maps that date to 1949, 1959, 1967, 1974, 1979, and 1981. It is possible to scan the photographs at a higher resolution in order to view the placement and development of outbuildings; however, time constraints of this project kept me from doing so.

MAP Library Information:
Location – University of Oregon, Knight Library, First Floor, Document Center
Phone – 541.346.3051
Website - http://library.uoregon.edu/map/index.html

1949



1959

1967

1974

1979

1981