National Park Service
Cultural Landscapes Inventory
2017



# Garfield Peak Trail
Crater Lake National Park

# Garfield Peak Trail
## Crater Lake National Park

Crater Lake National Park concurs with the findings of the CLI, including the management category and condition assessment as identified below:

MANAGEMENT CATEGORY: **B: Should be preserved and maintained**

CONDITION ASSESSMENT: **Fair**

Superintendent, Crater Lake National Park — Date 8/9/17

Please return to:

Vida Germano
Cultural Landscapes Program Coordinator
National Park Service
Cultural Resources, Pacific West Region
333 Bush Street, Suite 500
San Francisco, CA 94104-2828
vida_germano@nps.gov

Oregon
Kate Brown, Governor

Parks and Recreation Department
State Historic Preservation Office
725 Summer St NE Ste C
Salem, OR 97301-1266
Phone (503) 986-0690
Fax (503) 986-0793
www.oregonheritage.org

September 12, 2017

Mr. David Louter
NPS Pacific West Region
909 1st Ave 5th Fl
Seattle, WA 98104-1060

RE: SHPO Case No. 17-1427
NPS, Crater Lake NP, Garfield Peak Trail Inventory Project
Cultural landscapes inventory
Multiple legals, Klamath County

Dear Mr. Louter:

Thank you for your submission for the project referenced above. The Oregon SHPO strongly supports your agency's efforts to document important historic resources. The SHPO concurs that the Garfield Peak Trail (Trail) is eligible for listing in the National Register of Historic Places under Criterion A for its association with the history and development of Crater Lake National Park and early National Park Service (NPS) master planning between 1917 and 1941. We also concur with the finding that the property is significant under Criterion C as an example of the Rustic style.

While the proposed fourteen-foot wide corridor for the boundary may be adequate in many circumstances, we ask that NPS consider that the setting for the Trail is a particularly important character-defining feature. The section entitled "Analysis & Evaluation of Integrity" convincingly makes the case that the Trail was designed to showcase the natural landscape and specific views toward Crater Lake. As such, it is appropriate to consider both as key character-defining features related to integrity of location, setting, feeling, and association under Criterion A and C. Acknowledging the significance of the landscape and views does not necessarily require that the boundary extend to include the entirety of the view shed, only that the significance of both be considered for management purposes in the future.

Please contact me with any further questions, comments, or concerns.

Sincerely,

Ian P. Johnson, M.A.
Associate Deputy SHPO
(503) 986-0678
ian.johnson@oregon.gov

# United States Department of the Interior

NATIONAL PARK SERVICE
Pacific West Region
333 Bush Street, Suite 500
San Francisco, CA 94104-2828

IN REPLY REFER TO:

H2215 (PWR-CR)

August 15, 2017

Roger Roper
Deputy State Historic Preservation Officer
Attn: Christine Curran, Associate Deputy SHPO
Oregon State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer St NE, Suite C
Salem, OR 97301

Re: SHPO review and concurrence with the findings of the Garfield Peak Trail Cultural Landscapes Inventory, Crater Lake National Park

Dear Mr. Roper,

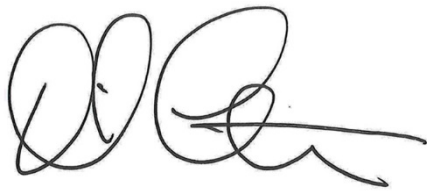
In accordance with the regulations of the Advisory Council on Historic Preservation, and Section 110(a)(2) of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended (NHPA), we are requesting your review and concurrence with the findings of the Cultural Landscapes Inventory (CLI) documentation of Garfield Peak Trail. The CLI is an evaluated inventory of all cultural landscapes having historical significance that are listed or eligible for listing on the National Register of Historic Places (NRHP).

The Garfield Peak Trail is located along the southern rim of Crater Lake in Crater Lake National Park within the Cascade Mountains of Klamath County, Oregon. The trail is easily accessed from a promenade that leads directly from Crater Lake Lodge in Rim Village to the Garfield Peak trailhead. The trail is significant under Criterion A for its association with the history and development of Crater Lake National Park and early NPS master planning. Garfield Peak Trail is also significant under Criterion C, embodying the tenets of the NPS Rustic style and naturalistic landscape design. The period of significance begins in 1917 when the trail was initially constructed as a 1.25 mile-long circuitous ascent along the caldera from Rim Village to Garfield Peak and extends to 1941 when associated planning and development activities at Rim Village came to an end.

The boundary for the 1.70 mile-long trail is a fourteen-foot wide corridor that measures seven feet from the centerline of the trail in either direction beginning at the trailhead, heading easterly along the south side of Crater Lake's rim, and terminating at Garfield Peak. The fourteen-foot-wide corridor expands to include built features along the trail. It is wider in select locations to include the base of the built walls associated with each of the six switchbacks, the system of walls, and the handrails, benches, and historic reservoir.

We are requesting your concurrence with the findings of the CLI, including the areas of significance, period of significance, list of contributing and non-contributing landscape characteristics and features, and historic property boundary. We are providing your office with a hard copy of the Garfield Peak Trail CLI and a sign-off sheet that lists the contributing and non-contributing resources of the historic property. If you

concur with the findings of the CLI, please sign the attached SHPO concurrence sign-off sheet and mail a copy to the attention of Vida Germano, CLI Coordinator, at 333 Bush Street, Suite 500, San Francisco, California, 94104-2828. We are requesting a review period of 45 days, consistent with Section 110 guidelines. If you need any additional information, or have questions or concerns regarding the CLI, please contact Vida at 415-623-2367 or at vida_germano@nps.gov.



David Louter, PhD
Chief, Cultural Resources Program
National Park Service, Pacific West Region

Enclosures:
Hardcopy of CLI
Sign-off sheet

Email cc w/out enclosures:
Craig Ackerman, NPS/CRLA Superintendent
Steve Mark, NPS/CRLA Historian
Vida Germano, NPS/PWR Cultural Landscapes Inventory Coordinator
Christy Avery, NPS/PWR List of Classified Structures Acting Coordinator

**CRATER LAKE NATIONAL PARK**
**Garfield Peak Trail**

# Oregon SHPO Consensus Determination of Eligibility

**Actions Requested:**

**1)** SHPO concurrence that the landscape characteristics as identified in the CLI contribute to the historic character of Garfield Peak Trail (see the following landscape characteristic descriptions in the Analysis and Evaluation section of the CLI: Natural Systems and Features, Buildings and Structures, Circulation, Topography, Spatial Organization, Views and Vistas, Small Scale Features):

I concur _____, I do not concur _____ that the landscape characteristics as described in the CLI contribute to the historic character of Garfield Peak Trail.

**2)** SHPO concurrence with the list of contributing and non-contributing features to Garfield Peak Trail. (See tables below and the associated landscape characteristic descriptions in the Analysis and Evaluation section of the CLI: Buildings and Structures, Small Scale Features):

*Contributing Resources:* Based on the information provided in the CLI, the following have been identified as contributing resources to the Garfield Peak Trail:

| Contributing Resource Name | Date Built | Concur | Do not Concur |
|---|---|---|---|
| Rock Wall System | During period of significance | | |
| Garfield Reservoir | 1931 | | |

*Non-contributing Resources:* Based on the information provided in the CLI, the following have been identified as non-contributing resources to the Garfield Peak Trail:

| Non-contributing Resource Name | Date Built or Modified | Concur | Do Not Concur |
|---|---|---|---|
| Handrails (2) | Post period of significance | | |
| Erosion Control Features | Post period of significance | | |
| Interpretive and Wayfinding Signs | Post period of significance | | |
| Rock Cairns | 1954 | | |

**CRATER LAKE NATIONAL PARK**
**Garfield Peak Trail**

*Undetermined Resources:* Based on the information provided in the CLI, the following have been identified as undetermined-status resources to the Garfield Peak Trail:

| Undetermined Resource Name | Date Built or Modified | Concur | Do Not Concur |
|---|---|---|---|
| Stone Benches (3) | Undetermined | | |

Reasons/comments why any 'Do Not Concur' blocks were checked:

_____

Oregon State Historic Preservation Officer Date

Please return form to the attention of:

Vida Germano
Cultural Landscapes Inventory Coordinator
Pacific West Regional Office
333 Bush Street, Suite 500
San Francisco, CA 94104-2828
415-623-2367 (phone)
415-623-2388 (fax)
vida_germano@nps.gov

# Table of Contents

Inventory Unit Summary & Site Plan
- Inventory Unit Description ..... 4
- Site Plan ..... 6
- Property Level, CLI Number, Park Information ..... 7

Concurrence Status
- Inventory Status ..... 8
- Concurrence Status ..... 8

Geographic Information and Location Map
- Inventory Unit Boundary Description ..... 9
- State and County ..... 9
- Size ..... 9
- Boundary UTMs ..... 9
- Location Map ..... 10

Management Information
- General Management Information ..... 11
- Adjacent Lands Information ..... 11

National Register Information
- Existing National Register Status ..... 12
- National Register Eligibility ..... 12
- Period of Significance ..... 12
- Area of Significance ..... 12
- NRIS Information ..... 12
- Statement of Significance ..... 13
- National Historic Landmark Information ..... 15
- World Heritage Site Information ..... 15

Chronology & Physical History
- Cultural Landscape Type and Use ..... 16
- Current and Historic Names ..... 16
- Chronology ..... 17
- Physical History ..... 20

Analysis and Evaluation of Integrity
- Summary ..... 46
- Natural Systems and Features ..... 49
- Buildings and Structures ..... 55
- Circulation ..... 70
- Topography ..... 77
- Spatial Organization ..... 80
- Views and Vistas ..... 84
- Small Scale Features ..... 87

Condition
- Condition Assessment and Impacts ..... 90

Stabilization Measures ..... 92

Treatment
Approved Treatment ..... 93

Bibliography and Supplemental Information
Bibliography ..... 94
Supplemental Information ..... 97
Repeat Photographs
Large-format Site Plan
TRACS Trail Inventory

# Inventory Unit Summary & Site Plan

**The Cultural Landscapes Inventory Overview:**

Purpose and Goals of the CLI

The Cultural Landscapes Inventory (CLI) is an evaluated inventory of all significant landscapes in units of the national park system in which the National Park Service has, or plans to acquire any enforceable legal interest. Landscapes documented through the CLI are those that individually meet criteria set forth in the National Register of Historic Places such as historic sites, historic designed landscapes, and historic vernacular landscapes or those that are contributing elements of properties that meet the criteria. In addition, landscapes that are managed as cultural resources because of law, policy, or decisions reached through the park planning process even though they do not meet the National Register criteria, are also included in the CLI.

The CLI serves three major purposes. First, it provides the means to describe cultural landscapes on an individual or collective basis at the park, regional, or service-wide level. Secondly, it provides a platform to share information about cultural landscapes across programmatic areas and concerns and to integrate related data about these resources into park management. Thirdly, it provides an analytical tool to judge accomplishment and accountability.

The legislative, regulatory, and policy direction for conducting the CLI include:

> *National Historic Preservation Act of 1966 (16 USC 470h-2(a)(1)).* Each Federal agency shall establish…a preservation program for the identification, evaluation, and nomination to the National Register of Historic Places…of historic properties…
>
> *Executive Order 13287: Preserve America, 2003.* Sec. 3(a)…Each agency with real property management responsibilities shall prepare an assessment of the current status of its inventory of historic properties required by section 110(a)(2) of the NHPA…No later than September 30, 2004, each covered agency shall complete a report of the assessment and make it available to the Chairman of the Advisory Council on Historic Preservation and the Secretary of the Interior… (c) Each agency with real property management responsibilities shall, by September 30, 2005, and every third year thereafter, prepare a report on its progress in identifying… historic properties in its ownership and make the report available to the Council and the Secretary…
>
> *The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation* Programs Pursuant to the National Historic Preservation Act, 1998. Standard 2: An agency provides for the timely identification and evaluation of historic properties under agency jurisdiction or control and/or subject to effect by agency actions (Sec. 110 (a)(2)(A) *Management Policies 2006.* 5.1.3.1 Inventories: The Park Service will (1) maintain and expand the following inventories…about cultural resources in units of the national park system… Cultural Landscape Inventory of historic designed landscapes, historic vernacular landscapes,… and historic sites…
>
> *Cultural Resource Management Guideline, 1997, Release No. 5, page 22 issued pursuant to Director's Order #28.* As cultural resources are identified and evaluated, they should also be listed in the appropriate Service-wide inventories of cultural resources.

Responding to the Call to Action:

The year 2016 marks the 100th anniversary of the National Park Service. A five-year action plan entitled, "*A Call to Action: Preparing for a Second Century of Stewardship and Engagement*" charts a path toward that second century vision by asking Service employees and partners to commit to concrete actions that advance the agency's mission. The heart of the plan includes four broad themes supported by specific goals and measurable actions. These themes are: Connecting People to Parks, Advancing the NPS Education Mission, Preserving America's Special Places, and Enhancing Professional and Organizational Excellence. The Cultural Landscape Inventory relates to three of these themes:

> **Connect People to Parks.** Help communities protect what is special to them, highlight their history, and retain or rebuild their economic and environmental sustainability.
> **Advance the Education Mission.** Strengthen the National Park Service's role as an educational force based on core American values, historical and scientific scholarship, and unbiased translation of the complexities of the American experience.
> **Preserve America's Special Places.** Be a leader in extending the benefits of conservation across physical, social, political, and international boundaries in partnership with others.

The national CLI effort directly relates to #3, Preserve America's Special Places, and specifically to Action #28, "Park Pulse." Each CLI documents the existing condition of park resources and identifies impacts, threats, and measures to improve condition. This information can be used to improve park priority setting and communicate complex park condition information to the public.

Responding to the Cultural Resources Challenge:

The Cultural Resources Challenge (CRC) is a NPS strategic plan that identifies our most critical priorities. The primary objective is to "*Achieve a standard of excellence for the stewardship of the resources that form the historical and cultural foundations of the nation, commit at all levels to a common set of goals, and articulate a common vision for the next century*." The CLI contributes to the fulfillment of all five goals of the CRC:

> 1) *Provide leadership support, and advocacy for the stewardship, protection, interpretation, and management of the nation's heritage through scholarly research, science and effective management*;
>
> 2) *Recommit to the spirit and letter of the landmark legislation underpinning the NPS*;
>
> 3) *Connect all Americans to their heritage resources in a manner that resonates with their lives, legacies, and dreams, and tells the stories that make up America's diverse national identity*;
>
> 4) *Integrate the values of heritage stewardship into major initiatives and issues such as renewable energy, climate change, community assistance and revitalization, and sustainability, while cultivating excellence in science and technical preservation as a foundation for resource protection, management, and rehabilitation*; and
>
> 5) *Attract, support, and retain a highly skilled and diverse workforce, and support the development of leadership and expertise within the National Park Service*.

## Scope of the CLI

CLI data is gathered from existing secondary sources found in park libraries, archives and at NPS regional offices and centers, as well as through on-site reconnaissance. The baseline information describes the historical development and significance of the landscape, placing it in the context of the landscape's overall significance. Documentation and analysis of the existing landscape identifies character-defining characteristics and features, and allows for an evaluation of the landscape's overall integrity and an assessment of the landscape's overall condition. The CLI also provides an illustrative site plan that indicates major features within the inventory unit and generates spatial data for Geographic Information Systems (GIS). The CLI also identifies stabilization needs to prevent further deterioration of the landscape and provides data for the Facility Management Software System.

**Inventory Unit Description:**

The Garfield Peak Trail is located along the southern rim of Crater Lake in Crater Lake National Park within the Cascade Mountains of Klamath County, Oregon. The trail is easily accessed from a promenade that leads directly from Crater Lake Lodge in Rim Village to the Garfield Peak trailhead. The period of significance begins in 1917 when the trail was initially constructed as a 1.25 mile-long circuitous ascent along the caldera from Rim Village to Garfield Peak and extends to 1941 when associated planning and development activities at Rim Village came to an end. Notably, between 1930 and 1931, the Garfield Peak Trail was realigned by the NPS to include 1.70 miles of trail.

The trail is significant under Criterion A for its association with the history and development of Crater Lake National Park and early NPS master planning. Crater Lake Lodge opened in Rim Village in 1915 and almost immediately guests established their own "trail" along the rim. While visitors never traveled as far as Garfield Peak, early use demonstrated a need to construct a trail in this location. Planning for the Garfield Peak Trail began in 1916 and construction was completed in 1917, providing "…people with a convenient setting in which to appreciate the lake's unique beauty and geology" (NPS, Rim Village CLI 2004, 16).

Frank Waugh, one of the first consulting landscape architects, said in 1917, "The designer's role is to locate the main points of scenic value, such as fine outlooks, stately groups of trees, and objects of local interest, and to lay out trails connecting these" (McClelland 1998, 184). Garfield Peak Trail fully embodied this idea and by the mid-1920s, NPS landscape architects, architects, and engineers implemented a design philosophy that provided for public enjoyment of parks without compromising their natural and scientific attributes. To ensure that the parks were developed according to these principles, comprehensive plans were established that determined the extent and manner of development. For trails, this included specifications for trail width, grade, and alignment, as a means to create a consistent experience for the visitor. In 1926, the General Development Plan for the rim area was approved and overseen by Thomas C. Vint, Chief of the Landscape Engineering Division. Between 1927 and 1932, implementation of Phase I of the comprehensive design plan for Rim Village was completed by the NPS and day (seasonal) labor. The first "Master" plan for Crater Lake National Park was initiated in 1931.

Garfield Peak Trail is a component landscape of the Rim Village parent landscape. The period of significance for the Rim Village cultural landscape begins in 1927 and extends to 1941. Conceived as a model "village" development, it was designed to concentrate visitor services in one location. Landscape elements, intended to further enhance the visitor experience, provided both passive and active recreation opportunities. These included a promenade, observation bays, walkways, concessions, and viewing platforms. The circulation component of Vint's plan proposed development of a pedestrian trail along the edge of the rim for the full length of the village, and trails to be built leading down to the lakeshore and up to Garfield Peak from Rim Village. Constructed between 1928 and 1932 by NPS staff and contract labor, Vint felt that this rim walk, the "Rim Promenade", would be one of the most important units of the rim area development. As such, it visually and functionally unified Rim Village.

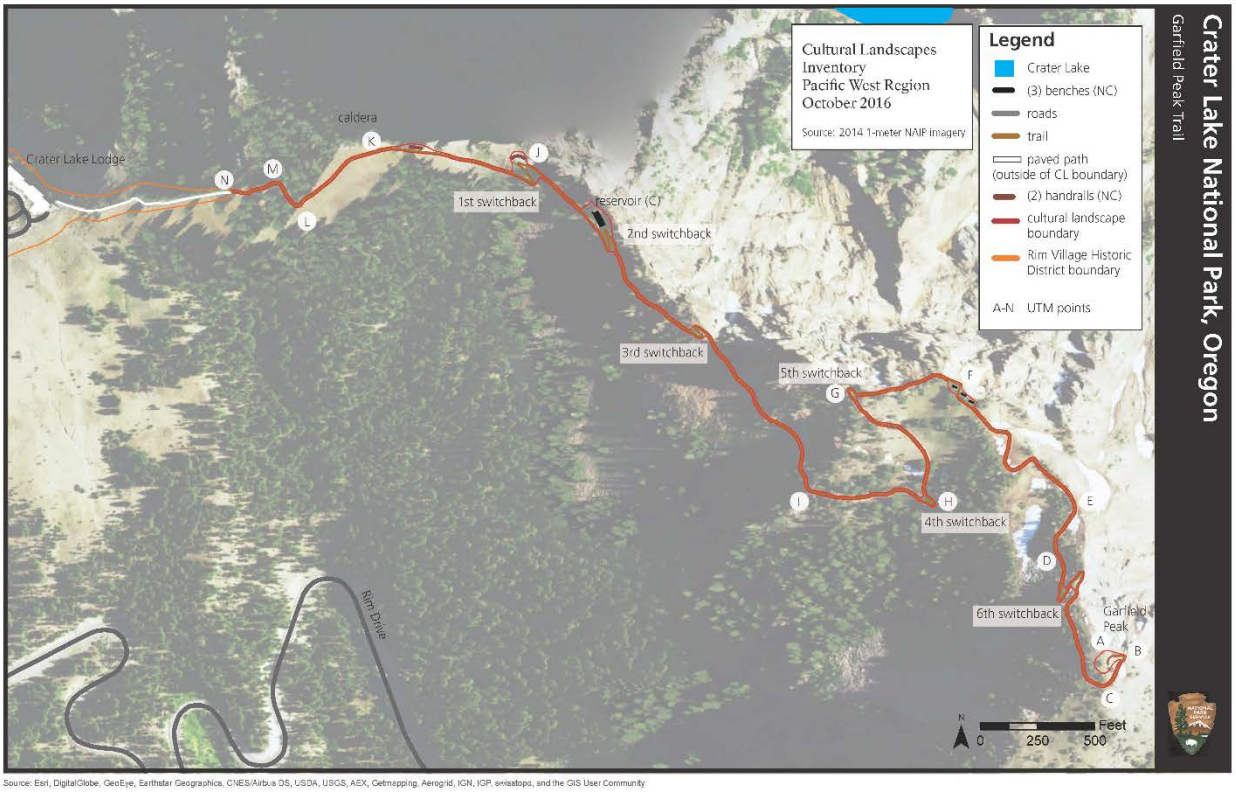
Garfield Peak Trail embodied the broad range of goals associated with early NPS master planning efforts. Both Crater Lake Lodge (construction began 1909 and the lodge opened in 1915) and Garfield Peak Trail (constructed 1917) represent early development in the area that Vint later incorporated into his design. Garfield Peak Trail specifically tied into the recreation component of the design, providing access to a popular viewpoint of the lake, in tandem with visitor services provided in the village. In 1931, the trail was realigned to adjust the width and reduce the grade to below fifteen percent in order to meet standards established in the new NPS guidelines.

Garfield Peak Trail is also significant under Criterion C, embodying the tenets of the NPS Rustic style and naturalistic landscape design. In 1927, the NPS Landscape Division was transferred from Los Angeles to San Francisco, California where a Western Field Office was created. Notably, this office joined the landscape design work associated with the NPS' Civil Engineering Division and the Bureau of Public Roads. This joint office brought together a number of professional disciplines for an era of unparalleled development in the parks (NPS, Rim Village CLI 2004 16-17). Landscape architect, Thomas C. Vint, served as the head of the San Francisco office and became a prominent figure in the implementation of planning in the parks, which was ultimately manifested in the Rustic style. Within Crater Lake National Park, Merel Sager, another landscape architect from the NPS San Francisco office, made adjustments to the alignment and grade of Garfield Peak Trail in consultation with William E. Robertson (NPS engineer) and Elbert C. Solinsky (Crater Lake Superintendent) in 1930 (Mark 2013, 26). This lengthened the trail from 1.25 miles to 1.70 miles with a grade at or below fifteen percent with an average width of four feet, per NPS requirements.

Several landscape characteristics help to convey the historic character of the Garfield Peak Trail, including natural systems and features, buildings and structures, circulation, topography, spatial organization, views and vistas, and small-scale features. Numerous elements associated with the above-mentioned landscape characteristics contribute to the feeling and association of the trail and surrounding property. The location, design, setting, materials and workmanship of the trail, and associated landscape features, convey the character of the circulation feature as a whole. Collectively, the Garfield Peak Trail is in fair condition.

Today, Garfield Peak Trail continues to reflect the importance of early park planning efforts at Crater Lake National Park, embodying the tenets of NPS Rustic style and naturalistic landscape design, which enhances the visitor experience of the lake and surrounding landscape.

## Site Plan




Site plan showing the Garfield Peak Trail. See the Supplemental Information section for a larger version of the site plan (NPS PWR CL Program, 2016).

## Property Level and CLI Numbers

| | |
|---|---|
| **Inventory Unit Name:** | Garfield Peak Trail |
| **Property Level:** | Component Landscape |
| **CLI Identification Number:** | |
| **Parent Cultural Landscape Inventory Name:** | Rim Village |
| **Parent Cultural Landscape Inventory Number:** | 400007 |

## Park Information

| | |
|---|---|
| **Park Name and Alpha Code:** | Crater Lake National Park (CRLA) |
| **Park Organization Code:** | 9320 |

## CLI Hierarchy Description

The Garfield Peak Trail is a component landscape within the Rim Village parent landscape.

## Concurrence Status

**Inventory Status:** Complete

**Completion Status Explanatory Narrative:**
Fieldwork for the Garfield Peak Trail was completed by Erica Owens, Alison Lewis, and Shannon Sawyer in June 2015. Alison Lewis and Shannon Sawyer completed the first draft and submitted the document for park review in September 2015. Additional documentation was undertaken by Cortney Cain Gjesfjeld and Shannon Sawyer in fall 2016 in support of the completion of the Garfield Peak Trail Cultural Landscape Inventory. The CLI will be complete upon review and concurrence by the Oregon State Historic Preservation Office.

**Concurrence Status:**

| | |
|---|---|
| **Park Superintendent Concurrence:** | Yes |
| **Park Superintendent Date of Concurrence:** | 08/09/2017 |
| **National Register Concurrence:** | Eligible – SHPO Consensus Determination |
| **Date of Concurrence Determination:** | 09/12/2017 |

# Geographic Information & Location Map

**Inventory Unit Boundary Description:**

Verbal Boundary Description
The boundary of Garfield Peak Trail begins northeast of Crater Lake Lodge where the paved Rim Village promenade terminates and narrows into the single-track, soil and earth tread at the Garfield Peak Trailhead. The boundary for the 1.70 mile-long trail is a fourteen-foot wide corridor that measures seven feet from the centerline of the trail in either direction beginning at the trailhead, heading easterly along the south side of Crater Lake's rim, and terminating at Garfield Peak. The fourteen-foot-wide corridor expands to include built features along the trail. It is wider in select locations to include the base of the built walls associated with each of the six switchbacks, the system of walls, and the handrails, benches, and historic reservoir. The Garfield Peak overlook at the terminus of the trail is included within the boundary, which adds 8,550 square feet to the overall acreage. The total acreage for the Garfield Peak Trail is 3.02 acres. Refer to the Site Plan for a visual representation of the cultural landscape boundary.

Boundary Justification
The boundary includes the Garfield Peak Trail as well as all features associated with the trail corridor, including walls, switchbacks, handrails, benches, and the reservoir. See the Site Plan for the UTM points that demarcate the trail's centerline.

**State and County:**

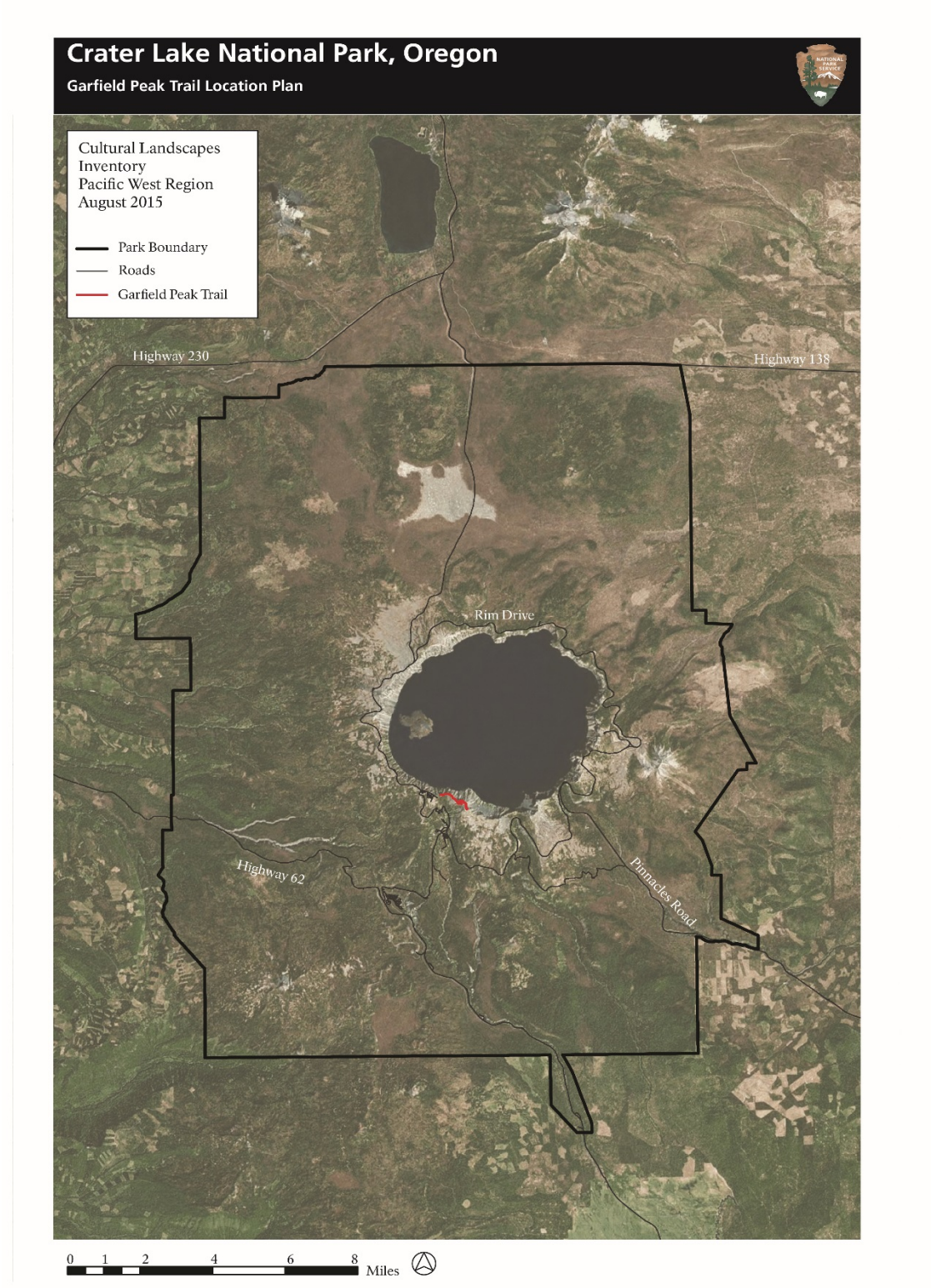
**State:** Oregon
**County:** Klamath

**Size (Acres):** 3.02

**Boundary UTMS:**

| Source | Type | Datum | Zone | Easting | Northing | Boundary Point |
|---|---|---|---|---|---|---|
| Other | Point | NAD 83 | 10 | 571568 | 4750532 | A |
| Other | Point | NAD 83 | 10 | 571589 | 4750542 | B |
| Other | Point | NAD 83 | 10 | 571562 | 4750503 | C |
| Other | Point | NAD 83 | 10 | 571498 | 4750691 | D |
| Other | Point | NAD 83 | 10 | 571524 | 4750741 | E |
| Other | Point | NAD 83 | 10 | 571371 | 4750903 | F |
| Other | Point | NAD 83 | 10 | 571224 | 4750897 | G |
| Other | Point | NAD 83 | 10 | 571337 | 4750744 | H |
| Other | Point | NAD 83 | 10 | 571171 | 4750763 | I |
| Other | Point | NAD 83 | 10 | 570783 | 4751198 | J |
| Other | Point | NAD 83 | 10 | 570612 | 4751217 | K |
| Other | Point | NAD 83 | 10 | 570494 | 4751141 | L |
| Other | Point | NAD 83 | 10 | 570464 | 4751172 | M |
| Other | Point | NAD 83 | 10 | 570411 | 4751160 | N |

**Location Map**




The Garfield Peak Trail is located on the southern rim of Crater Lake and east of Rim Village (NPS PWR CL Program, 2015).

# Management Information

## General Management Information

**Management Category:** B: Should be Preserved and Maintained

**Management Category Date:** 08/09/2017

**Management Category Explanatory Narrative:**

Landscape features associated with Garfield Peak Trail meet management criteria under Category B - Should be Preserved and Maintained. Garfield Peak Trail meets the necessary requirements for management under this category, meeting the following criteria: the trail meets criteria for significance under the National Register of Historic Places for its association with the history and development of Crater Lake National Park and early NPS master planning, especially as it relates to Rim Village development and the first master plan for Crater Lake National Park (Criterion A) as well as incorporating the park service Rustic-style architecture and naturalistic design (Criterion C). Furthermore, Garfield Peak Trail is compatible with the park's legislated significance. As a result, the Garfield Peak Trail falls under Category B - Should be Preserved and Maintained.

**NPS Legal Interest**

**Type of Interest:** Fee Simple

**Public Access**

**Type of Access:** Unrestricted

**Public Access Explanatory Narrative:**

Garfield Peak Trail is open to the public; although the trail is covered in snow typically October through May. During this time, visitors may access Garfield Peak using snowshoes; however, the trail alignment is not demarcated.

**Adjacent Lands Information**

**Do Adjacent Lands Contribute?** No

# National Register Information

## Existing National Register Status

**National Register Landscape Documentation:** Undocumented

## National Register Eligibility

**National Register Concurrence:** Undetermined

**Contributing/Individual:** Individual

**National Register Classification:** District

**Significance Level:** Local

**Significance Criteria:**
A – Associated with events significant to broad patterns of our history
C - Embodies distinctive construction, work of master, or high artistic values

**Criteria Considerations:** None

**Period of Significance:** AD 1917-1941
**Historic Context Theme:** Peopling Places
**Subtheme:** Other Peopling Places
**Facet:** Other Peopling Places

**Period of Significance:** AD 1917-1941
**Historic Context Theme:** Creating Social Institutions and Movements
**Subtheme:** Recreation
**Facet:** General Recreation

**Period of Significance:** AD 1917-1941
**Historic Context Theme:** Expressing Cultural Values
**Subtheme:** Landscape Architecture
**Facet:** Regional Planning

**Area of Significance:**

**Area of Significance Category:** Entertainment/Recreation, Landscape Architecture

**Statement of Significance**

Crater Lake National Park was established on May 22, 1902 (NPS, Rim Village CLI 2004, 13). The park was founded for its scenic beauty and ecological resources, which includes not only the awe-inspiring six-mile long Crater Lake, but two hundred and fifty square miles of diverse and beautiful valleys, pumice deserts, sphagnum bogs and high elevation ridges. The Garfield Peak Trail is locally significant under Criterion A for its association with the history and development of Crater Lake National Park and early NPS master planning. Garfield Peak Trail is also locally significant under Criterion C for its incorporation of the park service Rustic-style architecture and naturalistic landscape design. The period of significance begins in 1917 when the trail was initially constructed as a 1.25 mile-long circuitous ascent along the caldera from Rim Village to Garfield Peak, and ends in1941 when associated planning and development activities at Rim Village came to an end. Notably, in1931 the route was realigned to meet new NPS standards implemented to achieve moderate trail grades at less than fifteen percent. Today, the trail follows its historic alignment and continues to convey its original design intent—to conceal and reveal design of views of Crater Lake, while blending with the surrounding environment.

**Criterion A**

The Garfield Peak Trail is significant under Criterion A for its association with the history and development of Crater Lake National Park and early NPS master planning.

By the mid-1920s, NPS landscape architects, architects, and engineers initiated a design philosophy for the development of parks that would provide for the enjoyment of these places by the public without compromising their natural and scientific attributes. To ensure that the parks were developed according to these principles, comprehensive plans were established that determined the extent and manner of development. The master plans included designs for buildings, roads, parking areas, trails and trailheads, park service areas, residential areas, and utilities. Unified planning ensured that the development would meet visitor needs in the most efficient and least damaging way (NPS, Civilian Conservation Corps Haleakala Crater Trails District CLI 2009, 15) (Carr 1998).

As a component landscape of the Rim Village parent landscape, Garfield Peak Trail is intimately tied to the developed area's history and significance. Rim Village reflects National Park Service planning efforts at Crater Lake during the 1920s and 1930s, embodying the broad range of goals associated with early master planning efforts. Conceived as a model "village" development, Rim Village was designed to concentrate visitor services in one place. Early in the design and development stages, a range of overnight accommodations and visitor amenities including lodging, camping, meals, supplies, and various general services were planned. Crater Lake Lodge was opened to visitors in 1915. At this time, guests established their own "trail" along the caldera in the general area of the present day Garfield Peak Trail. In 1917, the NPS constructed the Garfield Peak Trail, offering visitors the opportunity to hike to Garfield Peak. As existing infrastructure, Crater Lake Lodge and Garfield Peak Trail were included in Thomas C. Vint's 1926 General Development Plan for Rim Village, Crater Lake National Park's first "masterplan". Landscape elements, such as the rim promenade and observation bays, were included in the Rim Village development to provide a "strolling boulevard for tourists to better enjoy the lake views" (Gilbert, Luxenberg 1990, 35). This concentration of various visitor services was meant to enhance the overall visitor experience. The Garfield Peak Trail was realigned between 1930 and 1931, during Rim Village's period of significance (1927-1941), providing visitors a recreational and hiking outlet with striking views along the way (NPS Rim Village CLI 2004, 16).

**Criterion C**

The Garfield Peak Trail is significant under Criterion C for its incorporation of park service Rustic-style architecture and naturalistic landscape design.

In America, antecedents of the Rustic style can be traced to the writings of 19th century landscape architect Andrew Jackson Downing who followed British and German precedents. Influenced by British landscape traditions and writing in the mid-1800s, Downing espoused rural ideals for landscape gardening and design. By the turn of the century, the fancy gardens of the Victorian era had given way to the simple, economic, “naturalistic” and “informal” gardens, sometimes called "English" or "cottage" gardens championed earlier by Downing. Journals and landscape design books of the day popularized the style that drew its inspiration directly from nature. In their writings, landscape architects and horticulturists, particularly Fredrick Law Olmsted, Henry H. Hubbard, and Frank Waugh, set down principles for designing in the naturalistic style. These principles, in turn, set the framework for the design values and philosophy of the Rustic style. At its best, the Rustic style achieved sympathy with the natural surroundings and with the past. The style became the means in which functional architecture was brought into natural environments in a visually pleasing and nonintrusive manner. Characteristics such as the use of natural materials used in proper scale, the avoidance of rigid, straight lines, and the visual character of a structure that appeared rugged, handcrafted, and built by pioneer craftsmen with limited hand tools, were the essence of the Rustic style. Structures, however, were always intended to be subordinate to their surroundings. The features to be preserved, emphasized, and appreciated in the parks were the site’s natural features and not the manmade ones. In the Rustic philosophy, the natural features were the overriding factors in determining the design vocabulary for both individual buildings and entire developments in the national parks (NPS, Park Structures and Facilities 1935, 4) (NPS, Rim Village CLI 2004, 18).

In 1927, the NPS Landscape Division was transferred from Los Angeles to San Francisco, where a Western Field Office was created, combining landscape design work with the NPS’ Civil Engineering Division and the Bureau of Public Roads. This joint office brought together a number of professional disciplines for an era of unparalleled development in the parks. Concurrently, park appropriations significantly increased, leading to an increase in park staff and general development activities. It was during this time that comprehensive planning efforts were formalized, with master plans prepared for each national park. Landscape architect Thomas C. Vint led the San Francisco office, becoming a prominent figure in the implementation of planning in the parks—planning that was manifest in the Rustic style (NPS, Rim Village CLI 2004, 16-17).

The “rustic” approach toward national parks is most clearly evident in the design of individual buildings and landscapes of the period. Eventually referred to as the “Park Service Rustic” style, NPS designers integrated “the natural landform and character of each site” and “native materials and pioneering techniques of a region” into the badly-needed new park buildings and landscapes (McClelland 1998, 5) (NPS, Civilian Conservation Corps Haleakala Crater Trails District CLI 2009, 18). Based on eighteenth-century picturesque and nineteenth-century naturalistic design theories, the rustic and naturalistic styles were used extensively in NPS architecture and landscape architecture of the 1920s and 1930s. Designers in these styles aimed to harmonize artifice and nature by minimizing the visual impact of constructed developments, while accentuating the picturesque qualities of nature. Indigenous rock, lumber, and native plants were the basic materials for these styles, so that park architecture and landscape architecture would appear as natural extensions of the living landscape. In many places, small structures are built around trees reinforcing this ideal to blend design with the natural environment. Forms of the rustic and naturalistic styles were intended to be subordinate to the natural environment, and were to

exhibit a hand-crafted or primitive appearance. This design era coincides with the most significant period of development within NPS history, a time when the NPS created what is now recognized as the hallmark style for developments within natural areas, in order to preserve their scenic beauty (NPS, Westside Road CLI 2006, 14).

These "rustic" designs complemented their sites, providing points of interest and destination for the visitor. The design of the Garfield Peak Trail exhibits many characteristics of the naturalistic and rustic design styles. These principles are reflected predominantly by the blending of the constructed trail into the surrounding natural landscape. This was accomplished through a carefully selected alignment that conforms to the topography and follows the natural contours of the ridge. Stones used in retaining walls and other trail features were carefully selected to ensure that they blended with existing geologic features along the trail. Rock cuts and fill slopes were discreetly and meticulously integrated into the existing landscape. Trail features took caution to preserve and protect existing vegetation and trees along the trail, sometimes adjusting the trail alignment to go around an existing tree. Careful consideration was also taken during the development of the trail to highlight significant views. The focal point along the trail is Crater Lake, hidden at certain points when the viewpoint changes to long site lines of the surrounding Cascade Mountains, and then suddenly the lake comes into focus once again to highlight its majesty and beauty.

## National Historic Landmark Information

**National Historic Landmark Status:** No

## World Heritage Site Information

**World Heritage Site Status:** No

# Chronology & Physical History

## Cultural Landscape Type and Use

**Cultural Landscape Type:** Historic Designed Landscape

### Historic Use/Function

**Primary Historic Function-Major Category:** Recreation/Culture

**Primary Historic Function-Category:** Outdoor Recreation

**Primary Historic Function:** Outdoor Recreation

### Current Use/Function

**Primary Current Function-Major Category:** Recreation/Culture

**Primary Current Function-Category:** Outdoor Recreation

**Primary Current Function:** Outdoor Recreation

### Current and Historic Names

| Current and Historic Name | Type of Name |
|---|---|
| Garfield Peak Trail | Both Current and Historic |

### Ethnographic Associated Groups

Crater Lake sits on the boundary between multiple tribal territories and is acknowledged as a place of religious importance. According to the ethnographic study *In the Footprints of Gmukamps*, American Indians confirmed that historically Crater Lake was considered a dangerous place that was only visited by specially ranked people. These visits were often for vision quests, a central aspect of ritual life, as a means to gain power (often utilized by spiritual doctors). More information related to historic use, occupation, and development of the land associated with Crater Lake National Park can be found in this ethnographic study: *Deur, Douglas. In the Footprints of Gmukamps: A Traditional Use Study of Crater Lake National Park and Lava Beds National Monument. U.S. Department of the Interior, National Park Service, Pacific West Region Social Science Series. 2008.*

## Chronology

| Year Begin | Year End | Event | Annotation |
|---|---|---|---|
| 1902 | 1902 | Established | On May 22, President Roosevelt signed legislation establishing Crater Lake National Park. |
| 1903 | 1903 | Explored | William Steel led an excursion of twenty-seven people to camp at Garfield Peak. |
| 1907 | 1907 | Established | William Steel named Garfield Peak for James R. Garfield, Secretary of the Interior. Garfield was the first cabinet member to visit Crater Lake. The peak was formerly known as Castle Mountain. |
| 1909 | 1909 | Built | The park concessioner started building the Crater Lake Lodge. |
| 1913 | 1913 | Established | A December 1913 letter from William Steel included a photo showing a social trail extending east from the lodge toward Garfield Peak. |
| 1915 | 1915 | Planned | General Superintendent of National Parks, Mark Daniels, prepared a plan for Rim Village during the summer of 1915, including a trail to Garfield Peak. |
| 1916 | 1916 | Established | Initial funds were allocated for construction of a trail to Garfield Peak; however, the money ($374) was eventually re-allotted to cover costs associated with the repair of buildings and fences within the park. |
| 1916 | 1916 | Established | The National Park Service was established. |
| 1916 | 1917 | Built | The Department of Interior's estimates for the 1917 season represented a more than eight-fold increase (to almost $68,000) over what Congress appropriated for the park in 1916. Trail work totaled $11,475. NPS crews, under Superintendent Sparrow, built three trails in 1917, including Garfield Peak Trail. |
| 1924 | 1924 | Developed | After World War I development increased at Rim Village. Amenities available at Rim Village included a lodge, tent houses, campground, photographic studio, comfort stations, and a community house. |
| 1926 | 1926 | Planned | The General Development Plan for the rim was approved and overseen by Thomas C. Vint, Chief of the Landscape Engineering Division. |
| 1927 | 1932 | Built | Roads and parking areas were constructed by the NPS and day (seasonal) labor. (Phase 1 of implementation of the comprehensive design plan for Rim Village) |
| 1928 | 1932 | Built | The promenade was constructed in Rim Village. |

| | | | |
|---|---|---|---|
| 1930 | 1931 | Altered | Garfield Peak Trail was realigned by the NPS. A July construction report for the lower half of the trail noted the following work had been completed: 3900 feet of trail measuring four feet wide and fifteen percent average grade, four switchbacks, 700 feet of rock wall, and several lookout points. A December construction report for the upper portion of the trail noted that the following work had been completed: preparation of the six-foot wide trail for oiling of trail, 800 feet of new trails measuring two to four feet wide that provided access to lookout points, three switchbacks, 900 feet of rock wall, and fifteen percent average grade. The trail length changed from 1.25 miles to 1.70 miles (8200 feet) (Robertson 1931). Also, stone benches were added at rest stops along the trail during this effort. |
| 1931 | 1931 | Planned | The first "Master" plan for the park was initiated. |
| 1931 | 1931 | Maintained | The Garfield Peak Trail was oiled in September using a Spearwell Trail Oiler mounted on a Cletrac 20. |
| 1931 | 1932 | Built | A new water system was constructed that replaced wood pipe with steel. Additionally, the 200,000 gallon Garfield Reservoir (located along the Garfield Peak Trail) replaced two wooden tanks (previously installed at an unknown time). |
| 1933 | 1941 | Established | Four hundred laborers associated with the Civilian Conservation Corps lived in camps within the park to undertake a variety of construction projects associated with the New Deal. |
| 1934 | 1934 | Established | The Office of the Chief Engineer published its first standards for foot and bridle trails, "Standards for Trail Construction". Specifications for trail building identified that standard features be constructed to harmonize with the natural setting. |
| 1937 | 1937 | Built | The CCC placed a total of twenty log benches and two rock seats along the Garfield Peak Trail and Crater Wall Trail. |
| 1949 | 1949 | Planned | Due to the slope and presence of loose materials along the Garfield Peak Trail corridor, staff proposed to regrade, replace shoulders, and build cribbing to hold the shoulders in place at a cost of $1,650. |
| 1956 | 1966 | Established | The NPS implemented system-wide "Mission '66" program, which created standardizing improvements in the national parks. |
| 1957 | 1957 | Established | Crater Lake's Mission 66 master plan described the park's trail system as adequate (except for the link between Rim Village and the lakeshore). |

| | | | |
|---|---|---|---|
| 1958 | 1958 | Maintained | A Mission 66 project, "Garfield Peak and Discovery Point Trail Reconstruction Project" included regrading, 600 feet of dry laid masonry repair and 100 feet of new dry laid wall, removal of loose rock and rock projecting above grade, and ¼ minus crushed stone put on the first mile of trail to stabilize the fine pumice. |
| 1965 | 1965 | Planned | Superintendent Richard Nelson deleted a number of trails shown on the master plan that had either been abandoned or never built. He wanted to encourage visitors to use existing trails that the NPS chose to maintain. At the close of Mission 66, eighteen months later, the NPS listed fifteen trails that comprised Crater Lake trail system, including Garfield Peak Trail. |
| 1970 | 1987 | Planned | The NPS undertook a series of public meetings, technical studies, and planning efforts directed toward the redevelopment of Rim Village. Four different plans were developed: 1968-71; 1974-77; 1982-84; and 1986-88. |
| 1981 | 1989 | Built | Several wooden guardrails impregnated with creosote were installed along the Garfield Peak Trail. |
| 1991 | 1994 | Rehabilitated | Crater Lake Lodge underwent a comprehensive rehabilitation. |
| 1994 | 1994 | Maintained | Phase one of the Garfield Reservoir valve work was completed. Also, the valve house addition was constructed in association with the reservoir. |
| 1995 | 1995 | Rehabilitated | Crater Lake Lodge reopened to the public after a thirty-five million dollar rehabilitation project. |
| 2007 | 2007 | Maintained | New handrails were installed on Garfield Peak Trail, replacing creosote-treated timbers. The trail crew rehabilitated historic dry-laid retaining walls and stone benches, resurfaced 1,000 feet of trail tread, and completed various trail maintenance and revegetation tasks. |
| 2009 | 2009 | Altered | Maintenance work was completed on the Garfield Reservoir including new piping, liners, and thrust blocking. The stone staircase to the valve house was obliterated. |
| 2013 | 2013 | Maintained | Twenty linear feet of rock wall was repaired on the Garfield Peak Trail. |

## Physical History

### Early Exploration and Trail Development in Crater Lake National Park Prior to 1917

The first recorded visit to the rim of Crater Lake occurred on June 12, 1853 by a group of miners searching for a gold mine.[1] Over a decade later, in 1865, two hunters associated with a project to construct a wagon road to connect Jacksonville, Oregon to an army post at the upper end of the Klamath Basin located Crater Lake. The men reported their find to their commanding officer, Captain Franklin B. Sprague, who wrote to the *Oregon Sentinel* describing Crater Lake in an effort to publicize construction of the new wagon road from Fort Klamath.[2]

In 1869, the editor of the *Oregon Sentinel*, James Sutton, led a group of visitors to Crater Lake. Sutton named the area after the small crater on Wizard Island. The resulting publicity drew new tourists to Crater Lake; however, visitation rarely exceeded several hundred people per season until the mid-1890s. William Gladstone Steel first visited Crater Lake in 1885 and lobbied Congress for the next seventeen years to establish the area as a National Park. As a result of Gladstone's efforts, President Theodore Roosevelt signed the bill creating Crater Lake National Park into law on May 22, 1902.[3] On July 15, 1907, Steel named Garfield Peak located within Crater Lake after James R. Garfield who was the Secretary of the Interior. Garfield had the distinction of becoming the first cabinet officer to visit Crater Lake.[4] Ultimately, Garfield left office after the 1908 presidential election.

For several years, staff struggled to secure public or private funds to improve the newly established National Park. An article printed by a local newspaper in 1908 noted in the headline "Park Gets Small Sum" reporting that:

> The appropriation made by Congress for the improvement of Crater Lake Park is a direct slap at the importance of this world wonder… A measly $3000 for one whole year….The amount appropriated leaves $1600 with which to build roads, to maintain those already built and pay for all of the incidental improvements that must be made each year….The plans for this year included the building of a wagon road around the lake but this will have to go until more money is available. The $1600 will be expended in running a cable along the trail down to the water and in building roads to Garfield and Applegate peaks. The small appropriation cut short the campaign of improvement as the fund is not sufficient to carry out the things under consideration.[5]

Despite funding shortfalls, by 1912, several horse trails had been established within Crater Lake. Five years later, in 1917, Crater Lake was placed under the direct administration of the National Park Service. At this time, development of park facilities became a large component of the park program. In support of this effort, Steel developed plans to construct a system of trails "… that will appeal irresistibly to visitors

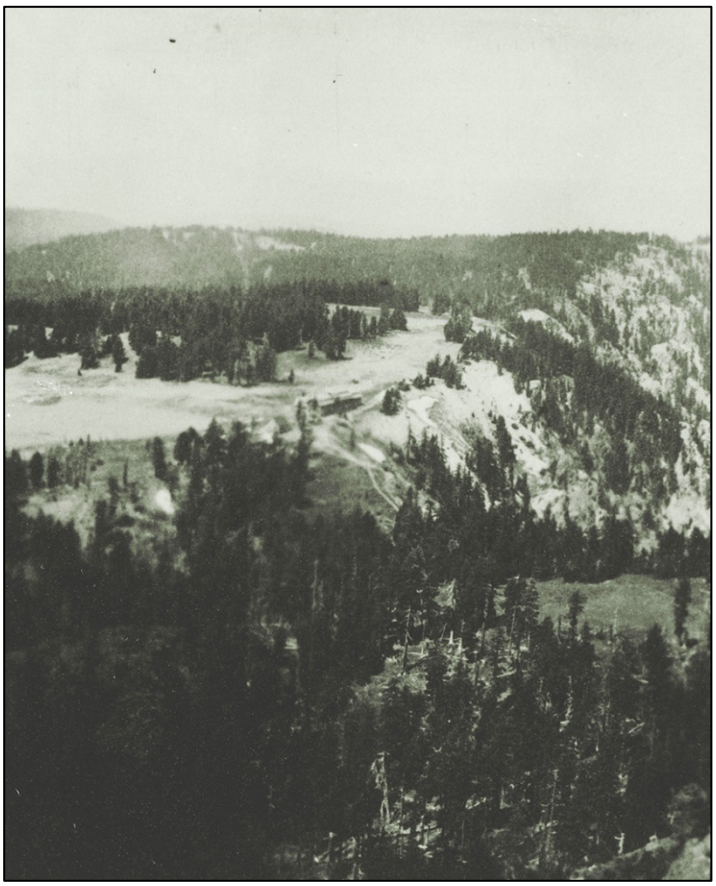
[1] Historic American Engineering Record, Addendum to Crater Lake National Park Road, HAER No. OR-107, 2003, 8.
[2] Ibid., 9.
[3] Rick Harmon, *Crater Lake National Park: A History* (Corvallis: Oregon State University Press, 2002), 78-83.
[4] Linda W. Greene, *Historic Resource Study Crater Lake National Park, Oregon,* Branch of Cultural Resources, Alaska/Pacific Northwest/Western Team, Denver Service Center, National Park Service, United States Department of the Interior, Denver, Colorado, June 1984, 301.
[5] "Park Gets Small Sum," Klamath Falls *Evening Herald*, April 28, 1908, page 1.

who delight in wandering over the bluffs, through the forests, and into uncanny spots where goblins dance by night and shadows linger by day."[6] Planning of Garfield Peak Trail began as early as 1916 when General Superintendent of National Parks, Mark Daniels, suggested the construction of a suitable trail to Garfield Peak, the first high point along the rim east of the lodge, for visitors to hike. During this period, initial funds were allocated for construction of a trail to Garfield Peak; however, the money ($374) was eventually re-allotted to cover costs associated with the repair of buildings and fences within the park.[7] Construction of a simple trail to ascend Watchman Peak; however, was initiated in 1916. Prior to this, the only existing trail in the park connected to the lake, and was narrow, steep, and subject to washouts.[8]



History Number 1: Photo showing Secretary Garfield's visit to Crater Lake National Park, 1907 (Crater Lake National Park archives).

[6] Harlan D. Unrau, *Administrative History, Crater Lake National Park*, Vol. I, U.S. Department of the Interior, National Park Service, 1987, 205.
[7] Correspondence from, Supervisor, Crater Lake National Park to Mr. R.B. Marshall, August 9, 1916. Crater Lake National Park archives.
[8] Unrau, *Administrative History*, Vol. 2, 455.



History Number 2: View of Crater Lake Lodge from Garfield Peak, 1915 (Crater Lake National Park archives).

**1917-1931: Garfield Peak Trail Construction and Realignment**

As a unit of the National Park Service, Crater Lake received additional funding in 1917. Notably, the Department of the Interior's proposed annual budget represented a more than eight-fold increase (to almost $68,000) over what Congress had appropriated for the park in 1916. Funds specifically allocated toward the development of trails totaled $11,475.[9] Prioritized trail construction activities included the development of a new trail to the lake as well as at least eight other routes, including Garfield Peak Trail.[10]

Construction of the Garfield Peak Trail, which extended from Crater Lake Lodge to the summit of Garfield Peak, was completed by the National Park Service in 1917. The four-foot wide trail measured 1.25 miles in length and cost $960 to construct. According to Crater Lake National Park Historian Steve Mark, the new trail also included examples of benching (used to maintain a uniform grade with rock in fill sections), dry laid retaining walls, and sheeting—which avoided the installation of cross drainage

[9] Stephen R. Mark, *Crater Lake National Park Trails, Chapter 19, Administrative History*, U.S. Department of the Interior, National Park Service, Pacific West Region, 2013, 10-11.
[10] Ibid.

devices like culverts or water bars by building the trail so that water is shed uniformly across it.[11] A series of photos taken by Superintendent Alex Sparrow illustrate the character of the trail after its completion (see history images number 3 and number 4). In many locations, photos show a relatively narrow trail alignment with a full-bench cut into the adjacent slope. Other photos depict the narrow trail alignment adjacent to rock walls, rugged terrain, and stacked stone cairns at the trail summit.

Through the late 1910s, development continued at Crater Lake under the direction of National Park Service Director Stephen Mather with immediate supervision the responsibility of Superintendent Sparrow. In his 1918 annual report, Mather described park improvements to roads, campgrounds, trails, and facilities. In particular, Mather reported on the success of the new trail from Crater Lake Lodge to the lake. According to the report, Garfield Peak and The Watchman trails were also popular.[12] By 1920, twenty-three miles of trail were maintained (cleared and repaired) within the park. The trails were repaired at a cost of $694.48 or $30.20 per mile. Maintained trails included The Watchman, Garfield Peak, Wizard Island, Rim to Lake, Copeland Creek, Dewie, Anna Spring to Rim, and Union Peak.[13] Seven years later, in1927, thirty-eight miles of trail system existed within the park.[14]

The trail system supported park education and interpretation goals. In 1929, a "Plan of Administration of the Educational Activities of Crater Lake National Park" was prepared by NPS Chief Naturalist Ansel F. Hall, Acting Park Naturalist Earl V. Homuth, and Superintendent Solinsky. Amongst many other things, the plan provided a summary of existing educational activities available to the public at the park. Four guide trips were available at this time: Watchman Trail (1-1/2 hours), Trail to Lake Shore (2-1/2 hours), Garfield Peak (3 hours), and Bell Canyon (2-1/2 hours). The plan also outlined six new permanent projects, one of which was focused on the labeling of select vegetation along trails and maintenance of several trails, including Rim Trail, Trail to Lake, Bell Canyon Trail to Wild Flower Garden, and Garfield Trail.[15]

Meanwhile, a full-scale plan was underway to develop a “village” on the south shore of Crater Lake. When Thomas Vint, a landscape architect in the NPS San Francisco office, arrived at Crater Lake in 1927, the village site, which had been named “Rim Village” in 1914 by Daniels, already had existing development such as the Crater Lake Lodge. Despite the development, the area suffered from an inadequate parking and circulation system, trampled grounds, lack of vegetation and dust.[16] In an effort to improve the condition of the village, Vint planned to focus on developing three components of the site: buildings, landscape and circulation. The circulation component of the plan included the development of a trail along the edge of the rim within the village and also trails to the lakeshore and up to Garfield Peak.[17] The design intent was to develop an aesthetic and functional environment for visitors through non-intrusive design. Tenets of the NPS Rustic style and naturalistic landscape design were incorporated throughout the site.

*Garfield Peak Trail Realignment*

By the early 1930s, construction and development projects at Crater Lake received a substantial boost in funding as a result of government emergency public works programs. The 1931 construction season was

[11] Ibid.
[12] Unrau, *Administrative History*, Vol. 2, 460.
[13] Ibid., 531.
[14] Greene, *Historic Resource Study*, 163.
[15] Unrau, *Administrative History*, Vol. 2, 639-640.
[16] Rim Village Cultural Landscape Inventory (CLI), National Park Service, 2004, (Part 2a) page 2 of 26.
[17] Ibid, page 3 of 26.

the first at Crater Lake to be affected by these appropriations with a total of $546,750 allotted toward park development projects.[18] Notably, an appropriation totaling $94,400 for roads and trails permitted the realignment of Garfield Peak Trail between 1930 and 1931 as well as numerous other projects.[19] The trail project was intended to replace the earlier trail that had been built by Sparrow's crew in 1917 with a wider, less steep route that could be utilized by both pedestrians and equestrians.

In an effort to prepare for the reconstruction, a reconnaissance survey was completed for the lower half of the Garfield Peak Trail on July 5, 1930. The alignment of the trail was approved by Merel S. Sager of the Landscape Division before construction.[20] The involvement of Sager ensured that the trail alignment and character would adhere to tenets of the NPS Rustic style and naturalistic landscape design. Notably, the new alignment of the Garfield Peak Trail followed an entirely new route, which cut across the old path in only a few locations.[21]

Work commenced on the Garfield Peak Trail under the direction of Ward P. Webber on July 16 and was completed by August 19, 1930. The NPS spent $4,000 to construct a total of 3,900 feet of trail. The trail averaged four feet in width and a ruling grade of fifteen percent, which was characteristic of a large portion of the trail and significantly less steep than the 1917 alignment. Four switchbacks were located in this section of the completed trail and approximately 700 feet of rock wall supported the trail grade.[22] At this time, Sager stressed the importance of understanding the trail's visibility from Rim Village, which had been kept to a minimum through the installation of dry laid rockwork for fill sections. Additionally, Sager noted that to further blend the trail with its surroundings, stone should be introduced at irregular intervals on the trail's outer edge in order to reduce a line that could be both visible and uniform.[23]

Historian Linda Greene reported that blasting had been necessary during realignment of the trail to break up large rocks noting that, "Where the old trail was narrow and steep and clung to the edge of the rim…the new trail dips and twists going upward in an even ascent….Strong rock parapets have been built to insure safety ….They are built of the natural rock and cemented together and blend in with the rustic topography of the rim."[24] Historic photographs from 1930 illustrate excavation along the rock face showing rock masses at outer edge of trail to mark the grade. Photos from the period also illustrate low rock walls associated with switchbacks and the absence of waste dirt on lower slopes.[25]

The remainder of Garfield Peak Trail was realigned during the 1931 season and an additional $5,000 was spent to widen the existing lower section of the trail to six feet.[26] Work was started on June 10, 1931 and completed in early August.[27] The project included an extension of the trail to the top of Garfield Peak, which sits at 8,060 feet. The extension of the trail measured six feet wide in order to accommodate machinery that would be used to oil the trail surface. The total length of the main trail extended 8,100 feet

[18] Ibid., 479.
[19] Ibid., 478.
[20] W.E. Robertson, "Crater Lake National Park Report on 1931 Construction Activities as of November 1, 1931," Field Headquarters, San Francisco, California, November 1, 1931, 4. Crater Lake National Park archives.
[21] Greene, *Historic Resource Study*, 164.
[22] Ward P. Webber, "Final Construction Report on Garfield Peak Trail – 566," Field Headquarters, San Francisco, Cal., July 1, 1931. Crater Lake National Park archives, CRLA 8889.
[23] W.E. Robertson, "Crater Lake National Park Report on 1931 Construction Activities as of November 1, 1931," Field Headquarters, San Francisco, California, November 1, 1931, 4. Crater Lake National Park archives.
[24] Greene, *Historic Resource Study*, 164.
[25] Ward P. Webber, "Final Construction Report on Garfield Peak Trail – 566," Field Headquarters, San Francisco, Cal., July 1, 1931. Crater Lake National Park archives, CRLA 8889.
[26] Mark, *Crater Lake National Park Trails*, 27-28.
[27] William E. Robertson, "Crater Lake National Park Final Construction Report on Garfield Peak Trail," Field Headquarters, San Francisco, Cal., December 17, 1931. Crater Lake National Park archives, CRLA 8889.

(1.53 miles) and rose approximately 1,000 feet in elevation.[28] Three switchbacks[29] were constructed on the upper portion of this trail, and approximately 900 feet of rock wall was built to sustain the grade.[30] All work was performed using hand labor; however, some drilling was necessary to complete the project.[31] In an effort to ensure that the trail work blended with the surrounding environment, all vegetation growing along the trail side was protected to the extent possible during construction.[32]

Several small foot trails, measuring two to four feet in width, were also constructed at prominent viewpoints along the trail in 1931. In sum, the foot trails totaled approximately 800 feet in length.[33] Additional trail development activities included the construction of resting places where hikers could leave the trail for short distances and utilize stone seats. These resting places were carefully sited in locations where visitors could enjoy "…beautiful and interesting views….of the lake and surrounding country."[34]

At the end of September 1931, the park purchased a Spearwell Trail Oiler and mounted it to a Cletrac 20. Using this equipment, NPS staff spread 2,500 gallons of 40-50 road oil on Garfield Peak Trail at the rate of about ½ gallon per square yard. Oiling of the Garfield Peak and Crater Wall trails was completed within the year at a cost of $849.24.[35] During the application of oil, the high line that was used to facilitate ongoing construction of the reservoir was accessed to transport the oil needed for the upper part of the trail.[36] As a result of the dry light pumice dust, park staff anticipated that several park trails, including the Garfield Peak Trail, would be oiled annually and was considered a"…necessity if we expect to keep the important trails popular with the many visitors who use them."[37] A construction unit cost report noted that $5,093.78 had been expended on the Garfield Peak Trail. Costs included excavation, embankment and labor as well as materials and supplies.[38]

[28] W.E. Robertson, "Crater Lake National Park Report on 1931 Construction Activities as of November 1, 1931," Field Headquarters, San Francisco, California, November 1, 1931, 4. Crater Lake National Park archives.
[29] Construction reports noted above indicate that a total of seven switchbacks were constructed during the realignment of 1931. The documents did not provide maps or detail in the narrative to suggest their precise locations. Today, six switchbacks are clearly defined by steep sites with a v-shaped reversal in direction with cut and fill material held by various types of dry-laid walls and cliffs. Two possibilities for the seventh switchback could be between UTM points E and F on the Site Plan, or the final curve in the trail near the summit; however more research is needed to confirm these locations.
[30] William E. Robertson, "Crater Lake National Park Final Construction Report on Garfield Peak Trail," Field Headquarters, San Francisco, Cal., December 17, 1931. Crater Lake National Park archives, CRLA 8889.
[31] Ibid.
[32] "Crater Lake National Park Report on Operations and Approved Construction Projects Season of 1931 (1932 Fiscal Year)," 27. Crater Lake National Park archives.
[33] W.E. Robertson, "Crater Lake National Park Report on 1931 Construction Activities as of November 1, 1931," Field Headquarters, San Francisco, California, November 1, 1931, 4. Crater Lake National Park archives.
[34] "Crater Lake National Park Report on Operations and Approved Construction Projects Season of 1931 (1932 Fiscal Year)," 28. Crater Lake National Park archives.
[35] "Record of Improvements – Crater Lake Natl Park – 5/1/45", Trails, pages 11-12. National Archives and Records Administration – Seattle, Record Group: 79; Series Description: Crater Lake Park Files, ca. 1919-1953; Box 5; Folder Name: 600 Lands, Buildings, Roads and Trails - Record of Improvements, 1925-1945.
[36] W.E. Robertson, "Crater Lake National Park Report on 1931 Construction Activities as of November 1, 1931," Field Headquarters, San Francisco, California, November 1, 1931, 9. Crater Lake National Park archives.
[37] "Crater Lake National Park Report on Operations and Approved Construction Projects Season of 1931 (1932 Fiscal Year)," 27. Crater Lake National Park archives.
[38] "Construction Unit Cost Report – Account No. 566, Garfield Peak Trail Construction," December 1, 1931. Crater Lake National Park archives, CRLA 8889.

Shortly after the trail project was completed, the trail was already very popular amongst visitors. A report on operations and approved construction projects for the 1931 season noted that "The trail is so located that the views from the various points, where the trail strike the rim, are spectacular and beautiful. Interesting views are also obtained from several points of the area lying south and west of the park."[39] Notably, also during this period, numerous improvements were underway at Rim Village and Rim Drive. On Rim Drive, construction efforts began on the first segment of road (7-A)[40] and at Rim Village, a parapet wall that extended to the foot of Garfield Peak Trail was completed in 1932.[41] See the 2004 Rim Village CLI as well as the 2011 Rim Drive Historic District CLI for additional information related to broader park development during this period.

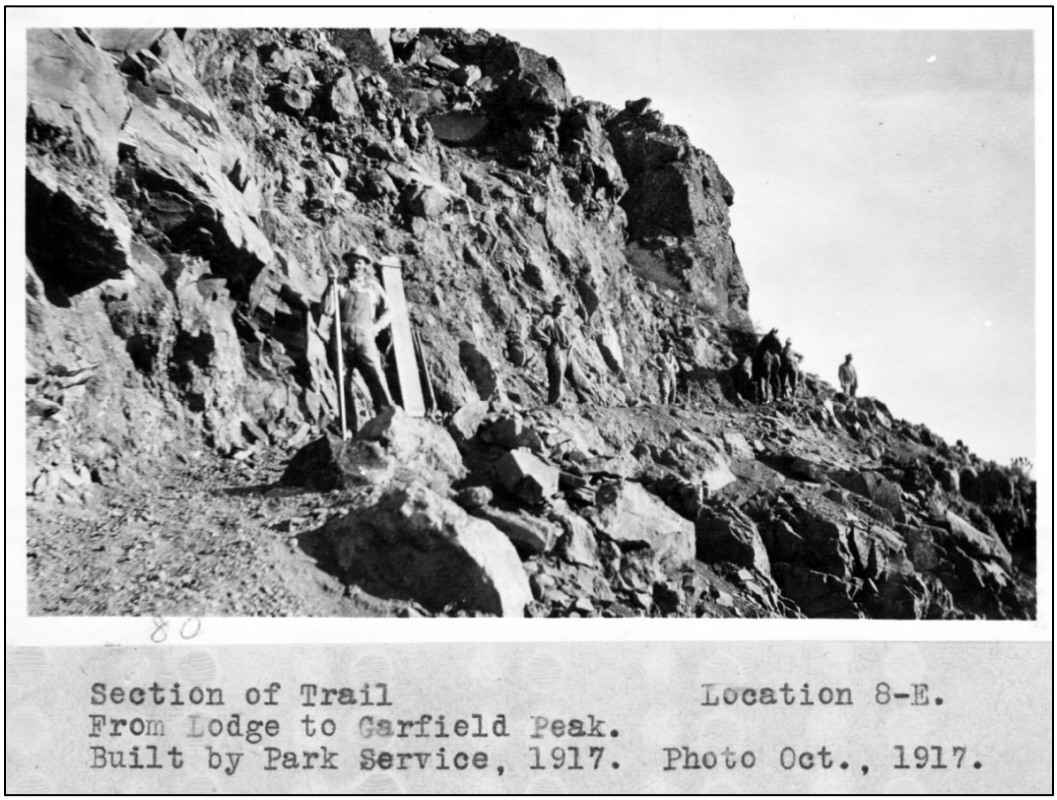
*Garfield Reservoir*

Also in 1931, the NPS initiated construction of a reservoir adjacent to the Garfield Peak Trail. The reinforced concrete tank, constructed to replace two wooden tanks, was sited on the southwest slope of Garfield Peak at an elevation where it would provide adequate head to supply water to Rim Village.[42] Selection of this location was made in cooperation with landscape architect Sager.[43] The inside of the tank measured 67 x 27 x 14 feet and had a capacity of approximately 200,000 gallons.[44] A construction report described the arrangement of pipes that supported the system, which included 2,800 feet of six-inch cast iron pipe that extended from the reservoir to the rim area, and approximately 1,600 feet of four-inch galvanized iron pipe that connected this main with the present main line from the pumping plant.[45] Additionally, approximately 2,800 feet of two-inch galvanized iron pipe was laid from the reservoir to a spring on Garfield Peak, which was used to support construction purposes and furnish gravity water for the system.

Supplemental funds were required to complete the Garfield Reservoir project. By the end of 1931 construction season, the reservoir still required water-proofing and the exposed section of the structure needed to be faced with a masonry wall to conceal the reservoir from the rim area.[46] Additional funds were requested through supplemental estimates in the fall of 1931.[47] In March 1932, correspondence from the Acting Director of the National Park Service to Thomas Vint, noted that Superintendent Solinsky had submitted a supplemental estimate for completion of the water storage system. The total cost included $2,750 of which $1,800 would be expended for a masonry wall to conceal the Garfield

[39] "Crater Lake National Park Report on Operations and Approved Construction Projects Season of 1931 (1932 Fiscal Year)," 27. Crater Lake National Park archives.
[40] See Appendix A: "Rim Drive Road Survey and Location" in the 2011 Rim Drive Historic District Cultural Landscape Inventory for additional information related to a proposed 4-mile route known as 7-E, which park planners hoped to construct between Sun Notch and Crater Lake Lodge by way of the "high line" past Garfield Peak.
[41] David Arbogast, Linda W. Greene, Catherine H. Blee and James M. Ellis, *Historic Structure Report, Crater Lake Lodge*, Crater Lake National Park, Crater Lake, Oregon, National Park Service, Denver Service Center, April 1984, 94.
[42] Greene, *Historic Resource Study*, 211.
[43] W.E. Robertson, "Crater Lake National Park Report on 1931 Construction Activities as of November 1, 1931," Field Headquarters, San Francisco, California, November 1, 1931, 13. Crater Lake National Park archives.
[44] "Crater Lake National Park Report on Operations and Approved Construction Projects Season of 1931 (1932 Fiscal Year)," 17. Crater Lake National Park archives.
[45] "Crater Lake National Park Report on Operations and Approved Construction Projects Season of 1931 (1932 Fiscal Year)," 16. Crater Lake National Park archives.
[46] W.E. Robertson, "Crater Lake National Park Report on 1931 Construction Activities as of November 1, 1931," Field Headquarters, San Francisco, California, November 1, 1931, 13. Crater Lake National Park archives.
[47] "Crater Lake National Park Report on Operations and Approved Construction Projects Season of 1931 (1932 Fiscal Year)," 16. Crater Lake National Park archives.

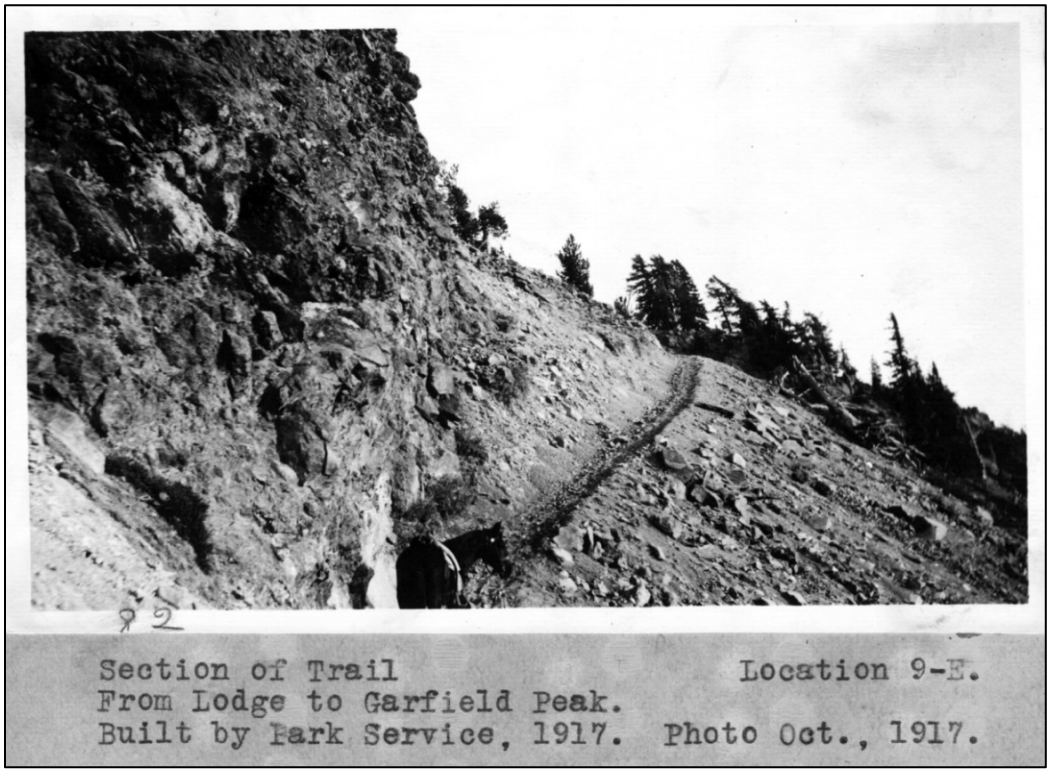
Reservoir. The Acting Director noted, "This appears like a lot of money for this purpose when it would seem that the masonry wall will be about as artificial as the present concrete tank. Has any thought been given to using other means of landscaping this, such as planting trees or vines? If this is practical, what would be the difference in cost as compared with the masonry wall? Please advise us promptly on this matter".[48] (See history image number 7 for an early photo of the reservoir under construction.) A few days later, Solinsky sent a letter to Vint offering a justification for the cost associated with construction of the masonry wall, noting that "Of course you are aware of the location of this tank and the expense that would be incurred if we attempted to transplant trees and shrubs to conceal it. Also as the tank is sitting on solid rock and the space is front, between the retaining wall and the tank, is extremely limited it does not seem that it would be practical to conceal it with planting. However, this is for you to decide."[49] Ultimately, Solinsky received his funding request and the stone masonry facing was applied to the Garfield Reservoir.



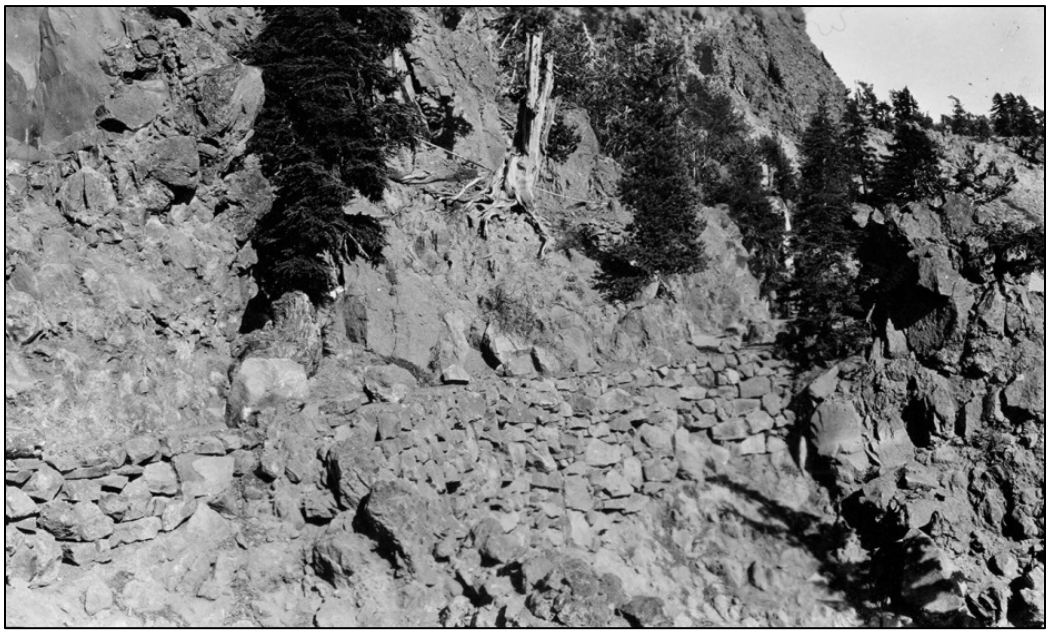

History Number 3: Photo of Garfield Peak Trail showing rugged, steep terrain and adjacent rock walls, 1917 (Crater Lake National Park archives).

[48] Correspondence to Thos. C. Vint, Chief Landscape Architect, Natl. Park Service from Acting Director, National Park Service, Washington D.C., February 27, 1932. National Archives and Records Administration – Seattle, Record Group: 79; Series Description: Crater Lake Park Files, ca. 1919-1953; Box 18; Folder Name: 665-05 Water Systems (Reservoirs), 1931-1932.

[49] Correspondence to Mr. T.C. Vint, Chief Landscape Architect, N.P.S. from E.C. Solinsky, Superintendent, March 3, 1932. National Archives and Records Administration – Seattle, Record Group: 79; Series Description: Crater Lake Park Files, ca. 1919-1953; Box 18; Folder Name: 665-05 Water Systems (Reservoirs), 1931-1932.




History Number 4: Photo of Garfield Peak Trail showing the cut slope and narrow trail bench, 1917 (Crater Lake National Park archives)



History Number 5: View of a completion stacked stone retaining wall along the Garfield Peak Trail, 1931. Note how wall blends with the surrounding rock walls (CRLA 8889 – Garfield Peak Trail Report, Crater Lake National Park archives).



History Number 6: Finished section of the realigned Garfield Peak Trail showing retaining walls and border stones lining the edge, 1931 (CRLA 8889 – Garfield Peak Trail Report, Crater Lake National Park archives).

**1932-1966: Trail Maintenance and Mission 66 Trail Improvement Activities**

*Trail Maintenance and Improvement*

Claimed as "…one of the most scenic and convenient trails in the park," Garfield Peak Trail remained an important component of the trail system throughout the early 1930s.[50] During this period, twice-weekly guided trips were provided to the summit of Garfield Peak and the new trail to The Watchman was constructed using the same standards as that which was used for the Garfield Peak Trail.[51] Other park trails present in the early 1930s included Sparrow Trail, Cascade Divide Trail, Munson Valley Trail, Union Peak, Pinnacles of Sand Creek, Mount Scott, and Wizard Island.[52]

Following the completion of the Garfield Peak Trail realignment, in September 1933, Garfield Peak and Mount Scott trails were oiled at a cost of $625.31.[53] In 1934, the trail was highlighted in a publication called *Nature Notes from Crater Lake* (Vol. 7 No. 2). Four articles were printed in the volume, each authored by a different ranger-naturalist at Crater Lake. Topics included geology, ecology and birds as a well as story entitled "The Trailside Speaks." (See footnote for individual authors and titles.)[54]

In 1937, two CCC camps were located in the park at Annie Spring and Lost Creek. Between June 15 and October 15, enrollees were engaged in landscaping, road bank sloping, cleanup, motorway maintenance, firefighting, fish planting, residence construction, improvements to building interiors, wood cutting, obliteration of old roads, and snow removal from roads, trails, and buildings.[55] Among one of their projects, in the fall of 1937, was the construction of twenty log seats along Garfield Peak and Lake (Crater Wall) trails.[56] Francis Lange reported that the seats "...were constructed and placed at needed points along the….trails"[57] A "record of improvements" document prepared May 1,1945 also described this project; however, it suggested that in addition to the twenty log seats, two rock seats had also been constructed using Civilian Conservation Corps labor.[58] The log benches were composed of "…logs cut in half and further divided into sections of six feet, then placed into smaller supports on the ground that were notched to hold the seat."[59]

Additional trail oiling occurred on the Garfield Peak and Lake Tails in 1936, 1938, and 1940 at a cost of $1,171.75.[60] "Foot trail maintenance" was also completed throughout the park in 1941, which included

[50] Greene, *Historic Resource Study*, 167.
[51] Ibid., 165.
[52] Ibid., 165-167.
[53] "Record of Improvements – Crater Lake Natl Park – 5/1/45", Trails, pages 11-12. National Archives and Records Administration – Seattle, Record Group: 79; Series Description: Crater Lake Park Files, ca. 1919-1953; Box 5; Folder Name: 600 Lands, Buildings, Roads and Trails - Record of Improvements, 1925-1945.
[54] The following articles were printed in *Nature Notes from Crater Lake*, Volume 7, No. 2, August 1934. Carl R. Swartzlow, "The Geology of Garfield Peak Trail." Berry Campbell, "The Ecology of the Garfield Peak Trail." Craig Thomas, "We and the Birds." Russell P. Andrews, "The Trailside Speaks."
[55] Unrau, *Administrative History*, Vol. 2, 491-492.
[56] Francis G. Lange, "Monthly Narrative Report to the Chief Architect," Crater Lake National Park, August 25, 1937 to September 25, 1937." Crater Lake National Park archives.
[57] Francis G. Lange, "Final Narrative Report Civilian Conservation Corps, Minor Roads and Trails, Major Roads, Park Operators to Chief Architect, September 25, 1937 to October 25, 1937." Crater Lake National Park archives.
[58] "Record of Improvements – Crater Lake Natl Park – 5/1/45", Trails, pages 11-12. National Archives and Records Administration – Seattle, Record Group: 79; Series Description: Crater Lake Park Files, ca. 1919-1953; Box 5; Folder Name: 600 Lands, Buildings, Roads and Trails - Record of Improvements, 1925-1945.
[59] Mark, *Crater Lake National Park Trails*, 43.
[60] "Record of Improvements – Crater Lake Natl Park – 5/1/45", Trails, pages 11-12. National Archives and Records Administration – Seattle, Record Group: 79; Series Description: Crater Lake Park Files, ca. 1919-1953; Box 5;

clearing snow as well as oiling The Watchman, Lake and Garfield Peak trails.[61] Notably, at this time, trail improvements did not come without controversy. In July 1937, wildlife technician E. Lowell Sumner, protested use of a small tractor for oiling the Garfield Peak Trail. According to Steve Mark, "He [Sumner] attributed the 'surprising width' of this and several other trails to the machine used to oil them. At six feet wide, however, such a trail actually discouraged use by hikers who had since shortcut the 'highway' by making a path of their own with a width of some 18 inches. Sumner noted that the wider the trail had an 'aggravated tendency' toward bank erosion and often led to situations where work crews more often undermined important trailside trees by chopping away lateral roots. In his view, trails of that width conveyed 'no feeling of isolation, no feeling of primitive nature no matter how rugged the surroundings into which they are introduced."[62]

In early 1940s, prior to U.S. involvement in World War II, record numbers of visitors were traveling to Crater Lake. Visitation had reached all-time records (to date) with 252,482 visitors in 1940 and 273,564 in 1941. Visitors engaged in hiking, auto touring, camping, boating, and fishing activities. The most popular trails (in order) included Lake (Crater Wall), Watchman Lookout, Garfield Peak, Wizard Island, and Mount Scott."[63] In addition to these trails, the following trails were also available to hikers: Devils Backbone, Crater Peak, Castle Crest Wildflower Gardens, Canyon Rim Loop Trail (Godfrey Glen), Hillman Peak Trail, Sun Notch, Crater Peak, Union Peak, and Snow Crater.[64]

During and in the years immediately following World War II, funds for new trail construction were not readily available. As a result, the list of trails provided above remained consistent throughout the decade. Many of the interpretive programs were reinstated at Crater Lake in 1946. Evening lectures and geology lectures were highlights, while four self-guiding trails, including Garfield Peak, Castle Crest Wildflower Garden, Lake Trail (Crater Wall), and Lake Rim, were opened and supplied with botanical labels.[65]

Maintenance of the Garfield Peak Trail was the subject of a 1949 trails and trail work estimate memo. Due to the location of the trail on a slope and the presence of loose materials along the 1.70-mile trail corridor, staff proposed to regrade, replace shoulders and build cribbing[66] along the trail to hold the shoulders in place at a cost of $1,650.[67] In a subsequent memo, the Park Superintendent reported to the Regional Director that the "…trail is heavily used by park visitors and the Service and should be graded, ditched, and oiled at a cost of $2,000. The materials for oiling would have to be transported by manpower, unless our Nidgi-Krawl tractor or other small tractor could be used. Difficulty is always experienced on switchbacks and narrow portions of the trail."[68] At this time, the mileage of the park trail system was

Folder Name: 600 Lands, Buildings, Roads and Trails - Record of Improvements, 1925-1945.

[61] "Record of Improvements – Crater Lake Natl Park – 5/1/45", Trails, pages 11-12. National Archives and Records Administration – Seattle, Record Group: 79; Series Description: Crater Lake Park Files, ca. 1919-1953; Box 5; Folder Name: 600 Lands, Buildings, Roads and Trails - Record of Improvements, 1925-1945.

[62] Mark, *Crater Lake National Park Trails*, 43.

[63] Unrau, *Administrative History*, Vol. 2, 592.

[64] Greene, *Historic Resource Study*, 167-170.

[65] Unrau, *Administrative History*, Vol. 2, 654.

[66] Cribbing was noted along the Garfield Peak Trail in the 2008 TRACS inventory.

[67] Memorandum from Ranger Duane S. Fitzgerald to Regional Engineer H.S. Shilko, Subject: "Trails and Trail work estimates as requested (approximate costs)," Crater Lake National Park, August 13, 1949. National Archives and Records Administration – Seattle Record Group: 79; Series Description: Crater Lake Park Files, ca. 1919-1953; Box 14; Folder Name: 640 Trails (General Correspondence), 1949-1953.

[68] Memorandum from Superintendent, Crater Lake National Park to Regional Director, Region Four, Subject: "Trails and trail work estimates, Crater Lake National Park," August 24, 1949. National Archives and Records Administration – Seattle, Record Group: 79; Series Description: Crater Lake Park Files, ca. 1919-1953; Box 14; Folder Name: 640 Trails (General Correspondence), 1949-1953.

31.51 miles, which included 29.35 miles of Class 1 trail and 2.16 miles of Class 2 trail. Garfield Peak Trail measured 1.70 miles and was noted as a Class 1 trail.[69]

Minor construction projects were completed in the park in the early 1950s despite funding shortfalls in the postwar years. In 1951, a new electric-driven pump was installed in the Munson Spring pump house in an effort to keep the Garfield Reservoir filled to capacity. This improvement would ensure that the rim area would have sufficient water for domestic use and fire protection.[70] Also, a trail inventory was completed in 1955, which described nearly twenty new miles of trail.[71]

*Mission 66*

Tourism at Crater Lake continued to grow through the early 1950s with annual visitation surpassing 370,000 people in 1954.[72] Two years later, in 1956, the National Park Service undertook a new and large development program called Mission 66 in response to increasing visitation and deferred maintenance throughout the national park system. As a result of an influx of funding associated with the Mission 66 program, numerous improvement and development projects were implemented in the park. A document entitled "Mission 66 for Crater Lake National Park" provided a summary of expenses for the initiative, which included $3,798,100 for roads and trails of which over 95 percent would be used to improve existing circulation features. Additionally, the document included expenses for campgrounds, picnic areas, wayside exhibits, utilities, as well as a visitor center, employee housing, maintenance building and other minor buildings. The total of cost of physical development was projected to be $5,721,200.[73]

Several road and trail projects were identified in early Mission 66 planning documents at Crater Lake. "Mission 66 for Crater Lake National Park" described the circulation system itself as adequate; however, it noted that the "Trails that have become unsafe from enforced neglect will be restored." Additionally, it indicated that self-guiding trail system would be "expanded and improved."[74] Despite the early plans, a large proportion of the Mission 66 funding allocated toward trail work was used for a project associated with the relocation of pedestrian access to the lake from Rim Village. The new route superseded the Lake Trail (Crater Wall) and extended from the northern part of Rim Drive to Cleetwood Cove.[75]

Other Mission 66 projects included the installation of picnic sites with picnic tables and pit toilets along Rim Drive as well as improvement of the Garfield Peak and Discovery Point trails.[76] Work began on the Garfield Peak Trail on July 22, 1957 and work was suspended on September 13, 1957 with all major work completed. The small remaining project balance was carried over until spring to make minor repairs, which were completed by July 1958. Reportedly, Mission 66 expenditures associated with the trail improvement work cost $6,991.02.[77] Cost sheets from the completion report of the construction project suggest that the trail project for both Garfield Peak and Discovery Point trails included scale,

[69] Correspondence to Newton B. Drury, Director, National Park Service from W.G. Carnes, Acting Chief of Development, National Park Service, Washington D.C., August 30, 1949. National Archives and Records Administration – Seattle, Record Group: 79; Series Description: Crater Lake Park Files, ca. 1919-1953; Box 14; Folder Name: 640 Trails (General Correspondence), 1949-1953.
[70] Unrau, *Administrative History*, Vol. 2, 504.
[71] Mark, *Crater Lake National Park Trails*, 53-54.
[72] Ibid., 54.
[73] Mission 66 for Crater Lake National Park, United States Department of the Interior, National Park Service, December 1956, 7. Document retrieved from etic.nps.gov.
[74] Ibid., 4.
[75] Mark, *Crater Lake National Park Trails*, 54.
[76] Unrau, *Administrative History*, Vol. 2, 508.
[77] Mission 66 Expenditures - Crater Lake National Park, 1956 through 1966". Crater Lake National Park archives.

grading and resurfacing of 2.7 miles of three-foot wide trail, repair of 700 feet of "rock dry wall", construction of 400 feet of "rock dry wall" and construction of 100 feet of rock masonry wall and curb. The surface of both trails was regraded with particular attention to removal of loose rock and rock projecting above grade, which created tripping hazards. Additionally, a ½ minus to ¼ minus crushed reject stone (to a depth of one to two inches) was laid on one mile of the trail surface in an effort to stabilize the fine pumice. Portions of the trail may have also been treated with a coat of oil to stabilize the surface. Improvements specifically to the Garfield Peak Trail included the repair of 600 feet of dry laid retaining wall and the construction of 100 feet of new dry laid wall.[78] The trail construction completion report also noted 100 feet of guard rails along both of the trails, which is evident in an image included in the report (see history image number 13). In summary, the narrative construction report noted "A much improved trail resulted from this work."[79]

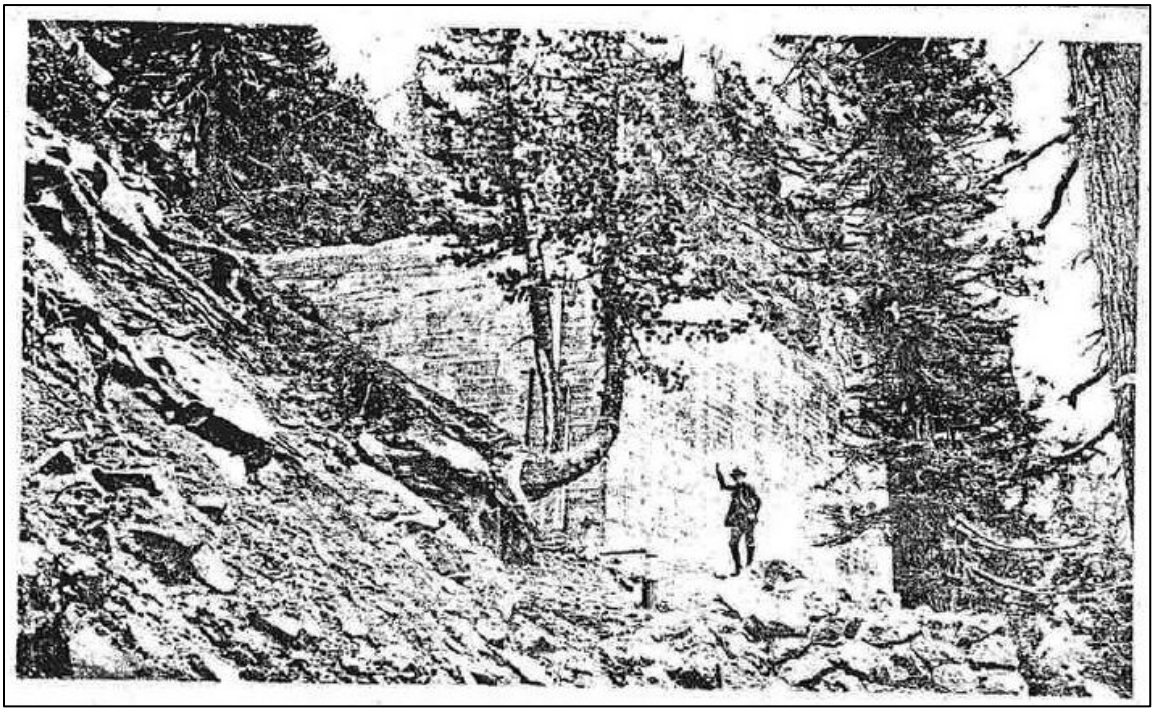
In addition to trail improvement activities, in 1960, as part of the Mission 66 program, planners acknowledged the need for a system of self-guiding trails in effort to enhance interpretive opportunities. The result was the installation of new plastic labels to identify plants in Rim Village and along the Garfield Peak, Discovery Point, and Castle Crest Wildflower Garden trails.[80] Also, master planning efforts completed in 1961 indicated that "The circulation system of roads and trails gives a good access to the Park and to features within the Park. Only minor extensions and additions are warranted in the foreseeable future."[81]

Mission 66 accomplishments for Crater Lake between July 1, 1956 and June 30, 1963 included the construction or reconstruction of minor park roads, parking areas, campground roads and trails, walks (usually paved), etc. Construction costs for completed trails, walks, etc. was over $82,000 and included 1.04 miles added or deleted. Reconstruction activities associated with trails, walks, etc. totaled nearly $69,000 and 3.2 miles of completed work.[82] At this time, the park had 32.1 miles of trail in 1963, many of which were spur trails from roads to points of interest that were maintained by trail crew.[83] By 1965, a trails memo indicated that "Short nature walks are highly desirable; and, as demand increases, their development will be programmed near areas of public concentration and use."[84]

Ultimately, Mission 66 activities at Crater Lake included limited construction of new facilities with the majority of the funding directed toward the improvement of existing facilities, such as roads and utilities. During this period, the most costly development included the realignment and repaving of the park's road system, including completion of the Rim Drive Loop. Construction of the Steel Circle Residential

[78] Partial transcription of Fiche 190 by Crater Lake National Park Historian, Steve Mark, under file code D24, in CRLA 8894, Museum and Archives Collections, file title Garfield Peak and Discovery Point Trail Reconstruction, 1959. PWR Cultural Landscapes Program staff located the original document in Box #6 of transfer number T079-97-0010 in the Federal Records Center, Seattle, WA.
[79] "Completion Report, Reconstruction Trails, Garfield Peak and Discovery Point", U.S. Department of the Interior, National Park Service, Crater Lake, 1959. Document retrieved from Box #6 of transfer number T079-97-0010, Federal Records Center, Seattle, WA.
[80] Mark, *Crater Lake National Park Trails*, 57.
[81] U.S. Department of the Interior, "Master Plan Narrative for Crater Lake National Park," Volume I, Chapter 1, Objectives and Policies, National Park Service, March 1961, 4. Document retrieved from etic.nps.gov.
[82] Memorandum to Regional Director, Western Region, from Superintendent, Crater Lake, subject: "Mission 66 accomplishments", August 24, 1963. Crater Lake National Park archives.
[83] U.S. Department of the Interior, "Master Plan Narrative for Crater Lake National Park," Volume I, Chapter 4, Park Operations Outlines, National Park Service, April 1963, 4-5. Document retrieved from etic.nps.gov.
[84] Memorandum to Regional Director, Western Region from Acting Superintendent, Donald M. Robinson, Subject: National Trails System, Crater Lake National Park, date stamped August 18, 1965. Document retrieved from etic.nps.gov.

Complex in Munson Valley was also completed during this period in an effort to provide quality year-round housing. Additional improvements included the installation of wayside interpretive exhibits, the construction of Mazama Campground and Cleetwood Trail.[85] Many of these improvements were made to accommodate the ever growing number of visitors to the park.



History Number 7: Garfield Reservoir concrete structure prior to the application of rock facing, circa 1932, (Crater Lake National Park Archives).

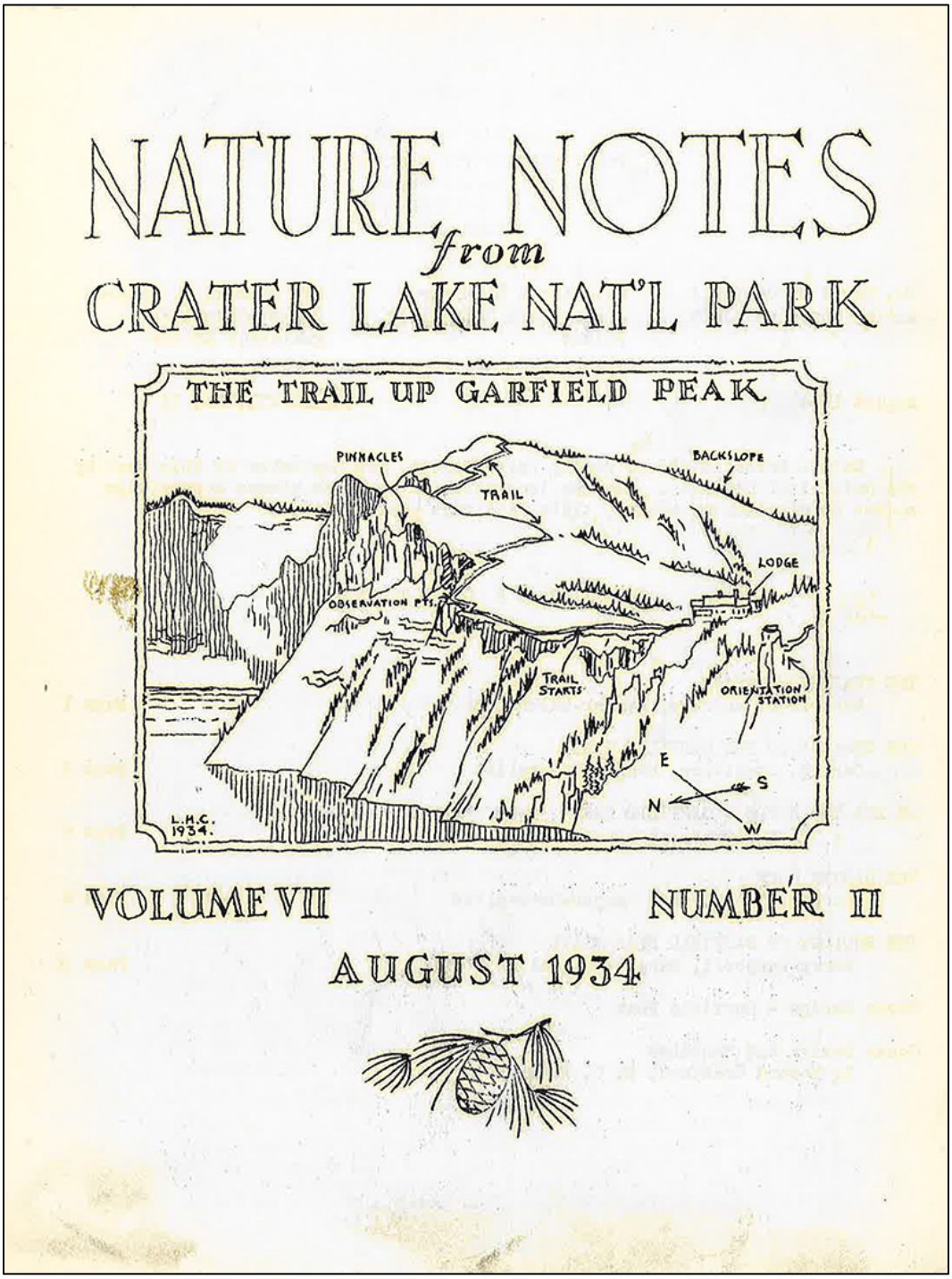
[85] Kelly Marie Christensen, "Wilderness Values, the Environmental Movement and Mission 66", master's thesis, University of Oregon, 2011, 86.



History Number 8: Photograph showing rockwork and a naturalistic grouping of trees that were retained along Garfield Peak Trail, 1932. Note the set of stairs in the middle of the photo behind the trees, which led to a rest area (Crater Lake National Park archives).




History Number 9: Segment of a historic map showing proposed trail oiling along Garfield Peak Trail, 1933 (Crater Lake National Park Archives, CRLA 8899-0311-9-a).




History Number 10: Cover of *Nature Notes from Crater Lake Nat'l Park* illustrating the trail up Garfield Peak, 1934 (Crater Lake National Park archives).



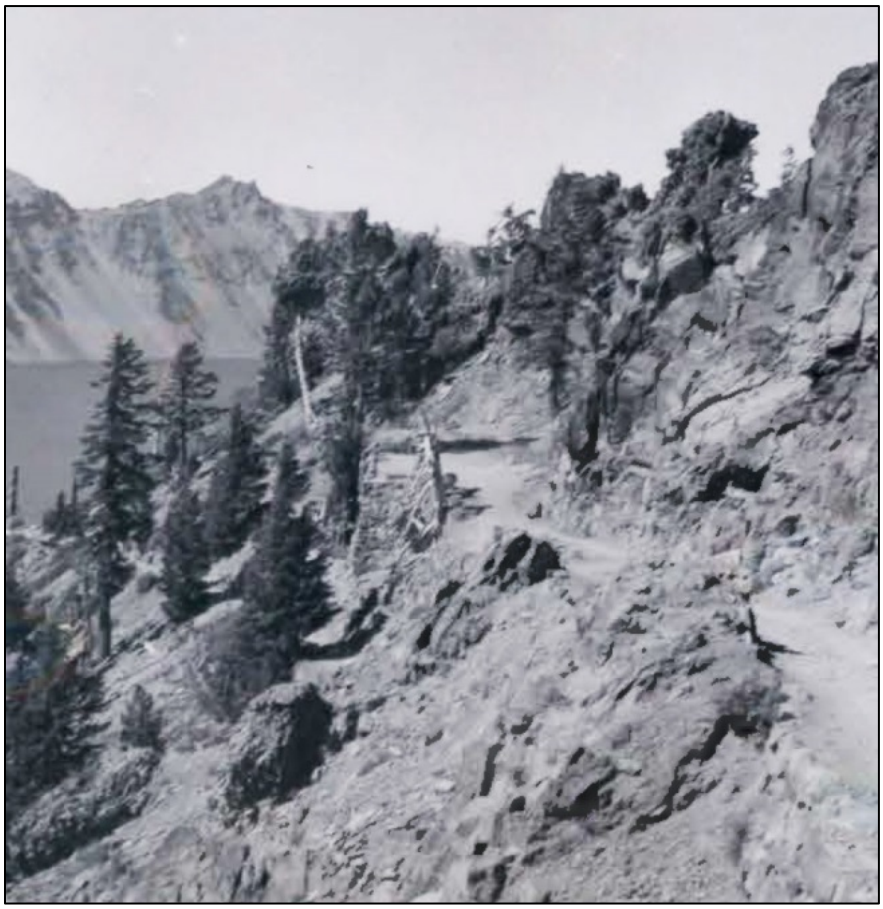
History Number 11: Garfield Peak Trail illustrating its curvilinear alignment and wide tread through a wooded portion of the trail, circa 1935. Note the trail oiling equipment in background (Crater Lake National Park archives).



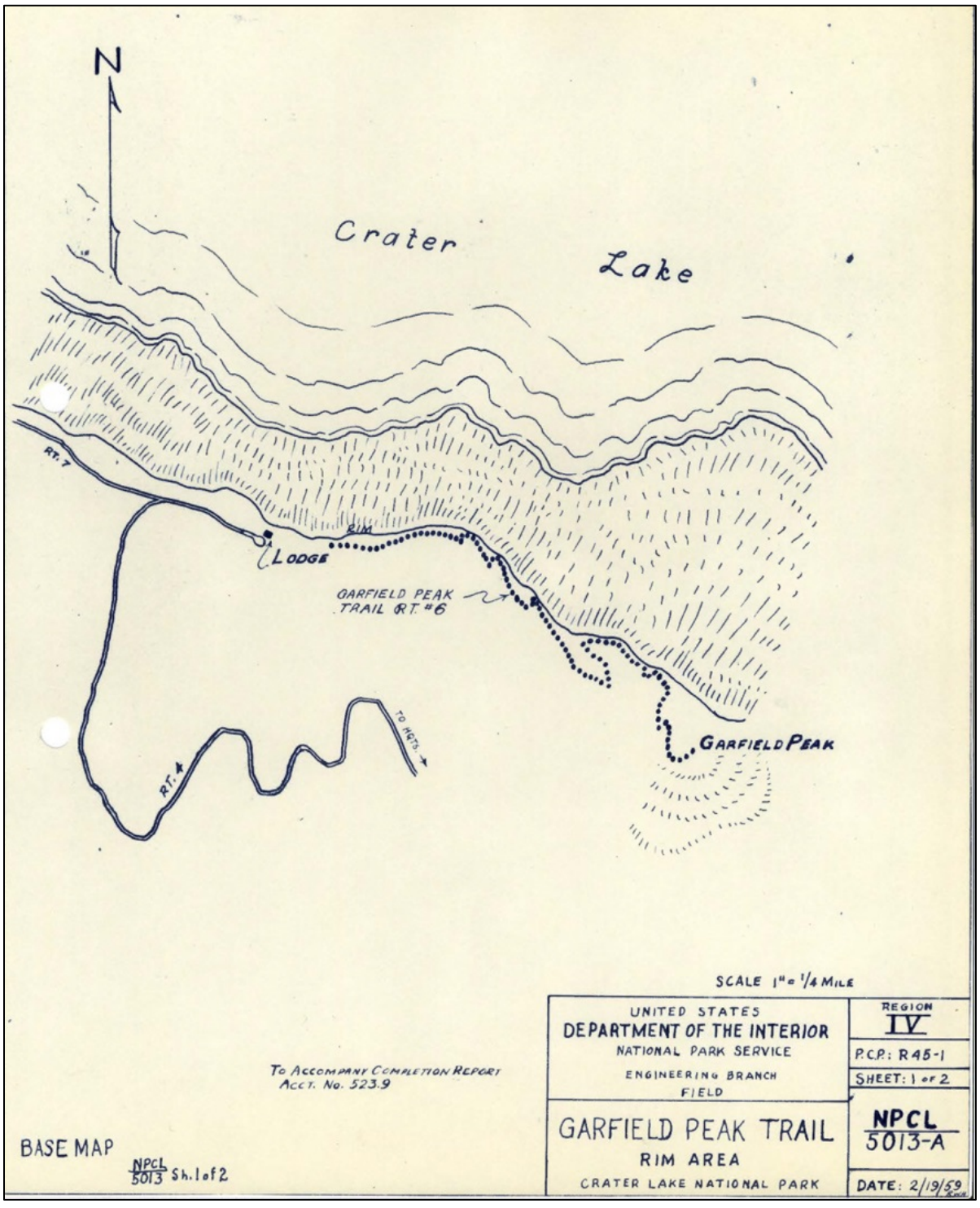
History Number 12: Terminus of the trail at Garfield Peak showing recently completed rockwork, 1957 ("Completion Report, Reconstruct Trails, Garfield Peak and Discovery Point," 1959, Box #6 of transfer number T079-97-0010, Federal Records Center, Seattle, WA).



History Number 13: Crater rim section of the Garfield Peak Trail, 1957 ("Completion Report, Reconstruct Trails, Garfield Peak and Discovery Point," 1959, Box #6 of transfer number T079-97-0010, Federal Records Center, Seattle, WA).



History Number 14: Garfield Peak Trail near the Garfield Reservoir, 1958 ("Completion Report, Reconstruct Trails, Garfield Peak and Discovery Point," 1959, Box #6 of transfer number T079-97-0010, Federal Records Center, Seattle, WA).




History Number 15: Map showing the alignment of Garfield Peak Trail in 1959 ("Completion Report, Reconstruct Trails, Garfield Peak and Discovery Point," 1959, Box #6 of transfer number T079-97-0010, Federal Records Center, Seattle, WA).

**1967-Present: Continued Use and Maintenance of the Garfield Peak Trail**

Throughout the latter part of the 1960s, the NPS continued to utilize and maintain the Garfield Peak Trail; however, funding for trail maintenance activities was largely stagnant after Mission 66 ended. In 1965, the park trail maintenance budget was $7,500 and four years later, in 1969, the trail maintenance budget had only increased to $9,200.[86] Despite the lack of funding, Garfield Peak served as one of the most popular hiking trails in the park during this period, which was confirmed from a detailed analysis of park visitation and visitor trends that was completed in 1968. The study noted that Cleetwood Cove, Watchman Lookout, and Garfield Peak trails received the most visitor use.[87] Notably, also in 1968, the Pacific Crest Trail (PCT) was established by Congress. The trail extended north-south through the length of the park as it traversed from Canada to Mexico.[88]

In 1972, an interpretive prospectus was prepared for Crater Lake National Park by the Denver Service Center. The document was intended to serve as a "….guide for the orderly development of an interpretive program in the park by inventorying the park resources, identifying its thematic elements, and recommending appropriate facilities and services through which the message could be communicated to the public."[89] Ultimately, the prospectus proposed very little modification to the interpretation associated with the existing trail system. The inventory component of the report; however, did provide a summary of visitor use patterns. It identified that the most heavily used existing pedestrian circulation features were characterized by short trails that provided access to viewpoints on the rim. Discovery Point, Garfield Peak and Annie Creek Canyon trails were used for regularly scheduled guided walks. Castle Crest, Godfrey Glen, and Grotto Cove were noted as self-guiding trails. The Watchman Trail continued to be heavily used by visitors, while Cleetwood Trail was used primarily by those visitors taking the guided launch trip on the lake. Similar to the 1968 report, Mount Scott Trail continued to be utilized to a lesser degree than other trails in the park during this period.[90]

By the late 1970,s the number of park visitors had peaked with a total of 617,000 visitors in 1977.[91] Hiking continued to grow in popularity; however, the actual numbers and rate of growth is difficult to determine due to different counting methods. Nevertheless, many of the users continued to hike on front country trails, which included Cleetwood Cove, Garfield Peak, Watchman, and Mount Scott. During this period, the NPS also acknowledged increasing back country use, which was monitored through overnight permits and day use registers, as a means to justify maintenance of backcountry trails. Ultimately, by 1978 the NPS maintained approximately seventy miles of trail in the park, though much of that total included what had been fire access roads (motorways) before 1971.[92]

Trail maintenance activities continued on established park trails throughout the 1980s, with virtually no new trail development. One of the few small projects implemented during this period included the installation of several wooden guardrails impregnated with creosote along the Garfield Peak Trail and on the rim at Sun Notch.[93] Similar types of trail maintenance continued through the 1990s with many projects limited to the trail crew's involvement.[94] Meanwhile, at Rim Village, phase one of the Crater

[86] Mark, *Crater Lake National Park Trails*, 60.
[87] Unrau, *Administrative History*, Vol. 2, 605.
[88] Ibid., 609.
[89] Ibid., 662.
[90] Ibid., 666.
[91] Mark, *Crater Lake National Park Trails*, 60.
[92] Mark, *Crater Lake National Park Trails*, 64.
[93] Mark, *Crater Lake National Park Trails*, 70-71.
[94] Ibid., 78.

Lake Lodge rehabilitation project commenced in May 1991 and was completed in the fall of 1994.[95] On May 20, 1995, Crater Lake Lodge reopened to the public. Plans to rehabilitate the promenade's stone wall began in 1993 with a structural condition evaluation and were followed by another evaluation in 2000.[96] While these projects did not directly influence Garfield Peak Trail, they were important components of the adjacent Rustic designed historic district.

In anticipation of future improvements to the Garfield Peak Trail, in 2003, an archeological survey of the circulation feature was completed. The pedestrian survey employed a 33-foot transect interval along both side of the trail where feasible. During the survey, no new cultural resources were recorded or observed.[97] Also in 2003, Crater Lake staff completed a survey of threatened and endangered plants along the Garfield Peak Trail in anticipation of future rehabilitation of the trail. At this time the team noted no rare plants in any locations proposed for trail maintenance; however, *Pinus albicaulis* was observed nearby. Additionally, rare plants were observed in two locations outside of the project area. These included *Arabis suffrutescens* var. *horizontalis* near summit and *Arnica viscosa* midway along trail.[98]

Project planning associated with rehabilitation of the trail continued in 2004. The project description noted that the overall goal was to "…provide needed improvements to the existing trail structures and to repair any damage that has occurred to the cultural landscape from erosion caused by high visitor use and/or natural causes. Other improvements will include repairing, improving and/or replacing existing signs."[99] The rehabilitation project included an inventory of the structures associated with the trail, which noted the presence of creosote handrails, log benches, stone benches and dry-laid stone walls. The project proposed to remove the creosote handrails due to safety issues associated with deterioration of the rails and replacement of the structure with a native log and stone handrail. Project planning reports noted that "…selections were chosen to provide a more structurally sound handrail in the Garfield environment and to be more aesthetically pleasing from a cultural landscape perspective."[100] Two types of benches (wood and stone) were also located along the trail. Some of the benches were constructed of creosote material (in part) and were in poor condition showing signs of vandalism and deterioration due to natural elements. Plans called for the replacement of wood benches using either salvaged logs similar in design to those on Godfrey Glen Trail or "…by possibly constructing a rock bench in appropriate locations."[101] Existing rock benches appeared to be in good condition and as a result, plans did not suggest their modification. Due to deferred maintenance, numerous repairs were needed to rehabilitate the dry-laid stone walls along the trail. The project scope noted that the stone walls would be analyzed with higher priority segments receiving priority. Challenges associated with a component of the project located in wilderness were also addressed when making plans to use motorized equipment to complete the work."[102] In addition to the inventory of trail structures, revegetation activities along the trail were considered during the project planning. Numerous social trails were identified along the main trail, which were causing erosional

[95] Rim Village Cultural Landscape Inventory (CLI), National Park Service, 2004, (Part 2b) page 4 of 6 adapted from Gretchen Luxenberg and Cathy Gilbert, "The Rustic Landscape of Rim Village, 1927-1941" (Seattle: National Park Service, 1990) 1-9.
[96] Rim Village Cultural Landscape Inventory (CLI), National Park Service, 2004, (Part 2b) page 4 of 6.
[97] Kelly N. Kritzer, "Report on the Archeological Survey of the Proposed Garfield Peak Trail Improvements, Crater Lake National Park, United States Department of the Interior, Crater Lake, Oregon, December 19, 2003.
[98] Wendy J. Coleman, "Threatened and endangered plant survey for rehabilitation of trail structures on the Garfield Peak Trail", Crater Lake National Park, 2003.
[99] Crater Lake National Park, "Rehabilitation of Trail Structures on the Garfield Peak Trail", January 22, 2004. Crater Lake National Park files.
[100] Ibid.
[101] Ibid.
[102] Ibid.

damage. Two primary areas of erosion were located and a revegetation plan was prepared to address the most efficient means to correct and/or slow down the erosion.[103]

In preparation for implementation of the trail rehabilitation project, a 2007 draft minimum requirements worksheet for the Garfield Peak Trail project noted that the lower section of trail, which experienced the most visitor use, "…was in the worst condition and as a result would receive the most attention." Additionally, a 2007 map entitled "Garfield Peak Trail Project" prepared by Crater Lake National Park, illustrated several features along the trail including three signs, four handrails, eleven benches, the Garfield Reservoir and two areas near picnic tables that were identified as "erosion problem zones."

After years of planning, in 2007, the Garfield Peak Trail rehabilitation project was undertaken by the park. Several projects were completed on the Garfield Peak Trail in an effort to improve its condition from poor to good. A Project Management Information System (PMIS) component completion report noted the following work associated with handrails and benches: removal of four non-historic creosote handrails, removal of five non-historic wooden benches, replacement of two handrails with new compatible handrails, restoration of three historic benches, and replacement of two wooden with stone benches that are compatible with historic character of previous benches. In addition, the project included a revegetation component that included: pruning vegetation, reconstructing tread away from white bark pine trees, collection of seeds from specific areas of the site and seeding damaged areas after restoration efforts were completed. As part of this effort approximately one mile of social trail was also removed and four informational signs regarding shortcutting and erosion were installed. Completed trail maintenance activities included the repair of the entire trail tread. Approximately 100 feet of trail was widened, 1,000 feet of trail resurfaced, 1,000 feet of historic dry laid walls rehabilitated, 40 erosion devices of an unknown type were installed and 75 feet of historic edging was maintained.[104]

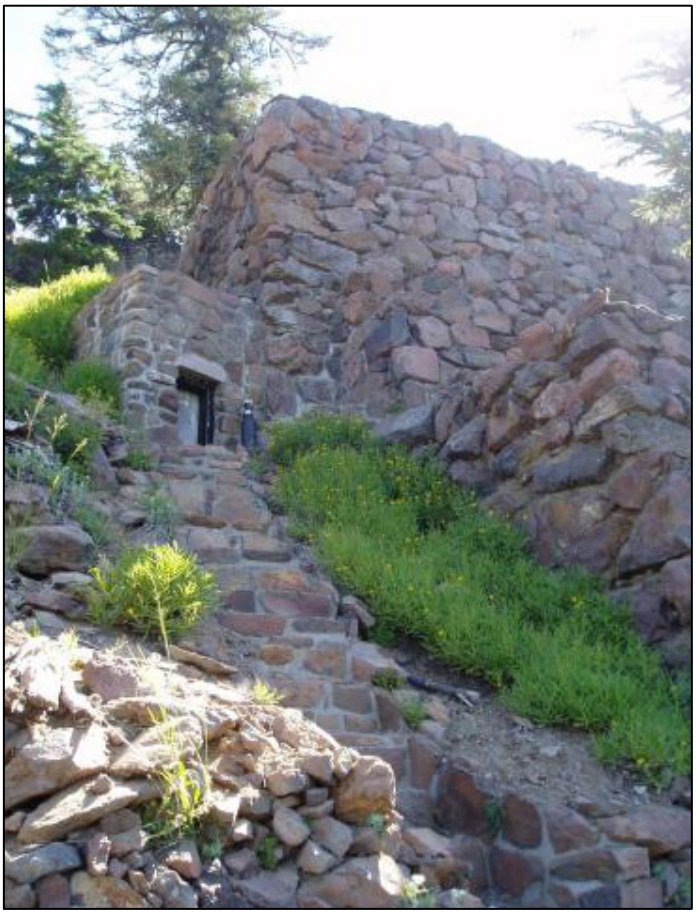
In 2008, a document entitled "Revegetation at Crater Lake National Park: A Survey of Historic and Active 'Orphaned' Sites" was prepared. The document noted that the top of the Garfield Reservoir was characterized by barren pumice soil with little vegetation. At this time, the author recommended that the "Top of the tank [reservoir] should be revegetated and a barrier to foot traffic installed to keep hikers off the tank."[105] Also in 2008, a Trail Assessment and Condition Survey (TRACS) was prepared for Garfield Peak Trail. The inventory noted that the trail extended 8,108 linear feet (1.54 miles) and the tread measured three feet wide. Trail tread, stone retaining walls as well as several other types of features including wood cribbing were also noted in the inventory. The inventory also included a list of signage associated with the trail. Three signs were identified: a fiberglass trailhead panel (installed in 2013), a regulatory marker located adjacent to the panel, and a regulatory sign along the trail that reads "Please Don't Cut Trail." See supplemental information for additional information.

The following year, in 2009, upgrades were made to the Garfield Reservoir with the replacement of the liner as well as the valves and fittings associated with the structure.[106] Also at this time, the stairs to the 1994 valve house addition were obliterated.[107] Previous work on the structure had been completed in 2006 and included the replacement of existing waterlines with new supply and distribution lines to improve the water quality for Rim Village and offer enhanced fire protection for historic structures at Rim

[103] Ibid.
[104] Project Management Information System (PMIS) 87065 "Restore Historic Garfield Peak Trail," Component Completion Report, 2007.
[105] Susie Roe Andersen, "Revegetation at Crater Lake National Park: A Survey of Historic and Active 'Orphaned' Sites," Crater Lake National Park, September 26, 2008.
[106] Project Management Information System (PMIS) 121214 "Replace Tank Liner and Upgrade Valve System on Historic Reservoir," Component Completion Report, 2010.
[107] "Garfield Water Reservoir Improvements," Construction Drawings, Crater Lake National Park, 8/07/09.

Village.[108] The most recent improvements to Garfield Peak Trail were completed in 2013, when twenty linear feet of rock wall were repaired.[109] Plans were underway as recently as 2014 to develop a comprehensive Trails Management Plan for Crater Lake National Park and a workshop was held in the park in October 2016; however, the plan has not been completed at the time of this writing in April 2017.[110]

Today, the Garfield Peak Trail is managed as a Class 3 Trail (developed/improved) and is located in the front country.[111] It continues to serve as a popular day hike for many visitors due to its close proximity to Rim Village and beautiful views of Crater Lake.



History Number 16: Photograph of the Garfield Reservoir prior to demolition of the stairs leading to the valve house, 2008 (Crater Lake National Park).

[108] Project Management Information System (PMIS) 60880 "Correct Deficient Water System for Garfield Reservoir," Component Completion Report, 2006.
[109] Project Management Information System (PMIS) 193712 "Repair Rockwalls Along Park Routes and Trails", Component Completion Report, 2013.
[110] "Develop a Comprehensive Trails Plan for Crater Lake National Park," Project Management Information System (PMIS) 168351.
[111] "Trail Class Breakout" excel spreadsheet, Crater Lake National Park, n.d. Crater Lake Nation Park files.

# Analysis & Evaluation of Integrity

### Analysis and Evaluation of Integrity Narrative Summary

Located along the southern part of Crater Lake's caldera, Garfield Peak Trail continues to convey its historic significance as an NPS Rustic designed trail. The trail was constructed in 1917 and realigned in 1931 by NPS landscape architects to blend with the natural environment. This included a low grade, curvilinear alignment, standard width, stone retaining walls and switchbacks. Seven landscape characteristics help to convey the historic integrity of the trail including natural systems and features, buildings and structures, circulation, topography, spatial organization, views and vistas and small scale features. The analysis and evaluation of key landscape characteristics is based on historical research and documentation of existing conditions.

Natural Systems and Features: Garfield Peak Trail was planned in order to take advantage of the views of Crater Lake, while also siting the trail to provide panoramic views of the surrounding landscape. Natural systems and features, including the area's climate, topography, hydrology, native vegetation, and fauna, create the unique environment within which the Garfield Peak Trail is oriented. Of these, the topography, patches of conifers and sheer rock faces of igneous rock play heavily in creating a variety of scenes and experiences through which visitors may traverse. The steep grade of the caldera, weather patterns, and foot traffic requires constant trail maintenance of the rock walls and trail tread to prevent erosion. Despite these challenges, the forces of erosion create the setting which defines the character of the trail.

Buildings and Structures: The Garfield Peak Trail was designed in the Rustic-style, which emphasized the blending of built works into their setting. The attention to detail and adherence to naturalistic design principles is still evident throughout the entirety of the trail. Contributing structures include the stone walls and the Garfield Reservoir. In response to the steep topography of the trail, stone retaining walls remain prominent features along the length of the trail. Modifications completed after the period of significance have generally been sensitively completed and are compatible with the existing historic fabric. Non-contributing erosion control features such as water bars and check dams have been installed throughout the length of the trail. Along with their simple rough cut edges, they are generally constructed from stones gathered within the immediate vicinity and complement the rugged rustic style design of harmonizing with their surroundings.

Circulation: The trail has changed little since the end of the period of significance (1941). The circulation corridor is characterized by scenic overlooks which, in concert with the natural topography, determined the trail's circuitous path along the caldera. At a number of points, the trail joins the ridge and offers impressive views of Crater Lake and the landscape situated to the north.

Topography: The topography along the trail largely responds to the natural geography of the site where grade changes reflect the shift from steep scree fields to the more gentle slopes of open meadows. Along the majority of the trail, the use of tread cuts and fill sections are required to negotiate the rough, steep terrain characteristic near the rim. Switchbacks and stone retaining walls are also prominent features employed along the trail to navigate the terrain. As a reflection of naturalistic design, the trail alignment hugs the natural contours and tread cuts are fashioned with sensitivity to the surrounding landscape.

Spatial Organization: Historically, the trail served as a route from Rim Village to Garfield Peak and continues to be managed as such. The trail reflects its historic spatial organization that is characterized by its alignment around the caldera and as it traverses up towards the peak to highlight the natural beauty of the lake and the rugged surroundings shaped by the eruption of Mount Mazama.

Views and Vistas: The overall experience of Garfield Peak Trail offers spectacular views of Crater Lake and the surrounding forested landscape, including distant peaks such as Mount Scott, Mount McLoughlin and Mount Thielsen. These views are further framed by features present at a number of overlooks including Whitebark pine skeletons, rock faces, rock spires or stands of conifers. Today, the views that inspired the design and subsequent development of Garfield Peak Trail still remain.

Small Scale Features: Small scale features associated with Garfield Peak Trail include contemporary signs, and a fiberglass interpretive panel constructed after the period of significance. Additionally, rock cairns, which are non-contributing, but compatible, are situated at the terminus of the trail at Garfield Peak. It should also be noted that there are three stone benches located along the trail; however, their status is underdetermined. Additional research should be undertaken to understand their historical development.

**Integrity Assessment**

The Garfield Peak Trail retains all seven aspects of integrity. Since its initial construction in 1917 and subsequent realignment in 1931, the NPS has successfully completed work to stabilize the trail, while incorporating Rustic and naturalistic design principles.

Location: The main trail follows its historic alignment, which provides visitor access to the unique geologic features and views of Garfield Peak and the lake.

Design: The original design of the trail evolved considerably from its initial construction with a realignment that reduced overall grade and increased tread width. Despite this modification, the final configuration of the main trail has not changed since that time. The trail featured 800 linear feet of small foot trails that led to rest stations with stone benches and viewpoints that no longer exist and has resulted in some loss of integrity.

Benching was used in the original trail to protect against erosion. Water bars and check dam erosion control features today have replaced the benching method. These changes are attributed to the steep topography, highly erodible soils, and the high level of precipitation, which have an ongoing effect on the Garfield Peak Trail. Since the trails were first developed by the NPS to the present, seasonal storms and high snow load have repeatedly damaged the trails. Most new water bars and check dams have been constructed in a manner that is compatible with its rustic character, preserving the overall form and character of the features of the trail.

Rustic-style principles are still apparent in the design of individual trail features. Still clearly evident is the emphasis on integrating the trail into the natural surroundings.

Setting: The setting is the same as the period of significance. Along the trail, the visitor experiences unique and rugged geologic features, a variety of plant communities, and dramatic vistas and views of the lake.

Materials: The durable native stone material of which the Garfield Peak Trail and associated features have survived with little deterioration. The materials, which comprise the contributing resources have been preserved, and any changes to materials are in-kind maintaining the same palette of native materials, such as the components of the stone retaining walls. Some modern materials have been introduced to the trail, including three non-contributing wooden water bars at the beginning of the trail in the meadow; however, these changes are reversible.

Workmanship: The high level of workmanship produced by the NPS during the period of significance is still visibly evident in the surviving trail features including stone retaining walls, tread cuts, switchbacks, and cuts and fills. A high percentage of the historic constructed features are stable and are fine examples of naturalistic design. Two areas of incompatible workmanship include the 2007 mortared stone handrails and the 1994 mortared stone vault house addition on the reservoir that do not match the quality of the historic features.

Feeling: The integrity of the trail features and natural setting allows the trail to retain much the same feeling and associations of the period of significance. The trail designed by the NPS follows the principles of naturalistic landscape design and engineering. Under this philosophy, built works and natural features were integrated to create a unified overall design in which the trail and its associated features were intended to appear, to the greatest extent possible, as natural extensions of the living landscape.

Where new additions have been made, such as stone retaining walls, they have not compromised the integrity of the original feeling and association because they have utilized the same materials and overall, similar methods of workmanship employed during the period of significance and are compatible with its historic character. The trail retains the feeling of enclosure from groves of trees and openness from rock outcroppings with long views.

Association: The Rustic-style of design, popular during the period of signifiance, is clearly visible in the retained trail and features.

Some changes since the period of significance have slightly impacted the historic integrity of Garfield Peak Trail. The greatest alteration has been access to view-points along the route. Where there were once two to four foot wide maintained trails off of the main path to rest stations, these side trails are no longer maintained and have become unofficial trails with no rest stations. Water bar and check dam erosion control features have replaced the benching method used during the period of significance. Another change is to the workmanship of some features along the trail. Two handrails, constructed in 2007, do not maintain the same character of other masonry along the trail. The handrails are larger and heavier in style than other features along the trail, which tend to be simpler or low profile. Despite these changes, the trail continues to convey historical significance and integrity.

**Natural Systems and Features**

Natural systems and features are defined as the natural aspects that have influenced the development and physical form of the landscape. Among other aspects, it can include climate, geology, hydrology, soils, and native vegetation.

Crater Lake sits within the caldera of what was once Mount Mazama, estimated to stand between 10,000-12,000 feet tall. Seven thousand seven hundred years ago, a major eruption emptied the magma chamber supporting Mount Mazama causing its collapse. This cataclysmic event formed a caldera roughly 4,000 feet deep. Minor eruptions continued inside the caldera, which formed Wizard Island and Merriam Cone (submerged). Approximately 5,000 years ago, another small eruption formed a lava dome east of Wizard Island, which is also under the surface of the water. Crater Lake was formed after hundreds of years, rain and snow filled the caldera. The park not only includes the awe-inspiring Crater Lake, but two hundred and fifty square miles of diverse and beautiful valleys, pumice deserts, sphagnum bogs and high elevation ridges. From the subalpine sections of the park, one can scan the horizon and take in the other impressive volcanic mountains that make up the Cascade Range. Sitting at 1,943 feet deep (592 meters), Crater Lake is the deepest lake in the United States and ninth deepest in the world. Its four and one-half-mile by six-mile width gives it a round, jewel-like appearance, set off by the caldera rim that rises an average of over 900 feet above the lake's surface (NPS, Munson Valley CLI 2013).

Garfield Peak is adjacent to Rim Village, which is sited on the southwest corner of the Crater Lake caldera, approximately 7,100 feet above sea level. Within the Rim Village area, slopes of approximately 5 to 30 percent extend downward from the rim. Soils developed on the surface of Mazama include pumice, alluvium (stream deposits), and glacial debris. In general, the soils contain poorly defined soil horizons (NPS, Design Analysis Package 1999, 46).

Rock colors along the trail are a mixture of yellows, reds, browns and grey. The reds and browns are iron oxides (iron united with oxygen) and may be found in many of the igneous rock types found in the park. Spire-shaped columns of volcanic agglomerate line the caldera as well as large andesite boulders which descend from the rim in bands. The predominant vegetation types found in this area include montane meadows with flowering plants and sedges between small stands of mountain hemlock (*Tsuga mertensiana*), Whitebark pine (*Pinus albicaulis*), Shasta red fir (*Abies magnifica var. shastensis*), and noble fir (*Abies procera*) (NPS, Rim Village CLI 2004).

Garfield Peak Trail follows the topography of the caldera's landscape, where at times it will parallel steep contour lines and at others, traverse the more mellow slopes through patches of meadow or conifer stands. The trail to the top of Garfield Peak winds along Castle Crest ridge, named for its various rugged crags along its profile. Dramatic embankments on either side in certain sections of the trail are secured by Crater Lake currants (*Ribes erythrocarpum*), newberry's fleeceflower (*Aconogonon davisiae*) and mahala mat. The stones which make up low-lying walls and structure include a mixture of pumice and andesite, hosting an array of color and texture.

Along the trail, the visitor will find many sections of fallen boulders and scree fields featuring a rainbow of rock with different colors and textures. At higher elevations, longleaf arnica (*Arnica lonshophylla*) and Crater Lake rockcress (*Arabis suffrutescens var. horizontalis*) grow in patches. The latter is of particular interest as it is currently a species of concern at the park. At many points along the trail, large boulders protrude underfoot with a sheer rock face sloping to the lake below.

The varied topography, dispersed open meadows and closed forest, moments of expansive views followed by enclosed rock wall spaces and traverses across steep, rocky hillsides are important components of the

landscape that direct how visitors experience this place. The trail responds to these features in its circuitous path that follows the natural topography of the caldera. In turn, the engineered path impacts the landscape through the addition and subtraction of rock, in an attempt to make a more comfortable hiking experience. This is done through the six sets of switchbacks cut into the landscape as well as pulling natural material to build the reservoir, culverts and retaining walls.

Geology

Mount Mazama, nearly 400,000 years old, is one of the younger andesitic volcanoes that make up this portion of the Cascade Range. The older generations of volcanoes are represented in the park by Union Peak and Timber Crater, which were both active 1.2 million years ago. The landscape within the park and beyond has been heavily influenced by erosion caused by water and ice, which caused the less resistant ash and breccia deposits of the upper portions of these volcanoes to be eroded away leaving a central spire. This characteristic is significant because many of the peaks hosting this prominent spire are within the view shed of Garfield Peak Trail and thus, this history of weathering greatly influences the visitor's experience.

With both andesitic and dacitic bedrock are visible today—these features act as evidence of the volcanic history. Pyroclastic igneous rock types may be found in two main forms along Garfield Peak Trail: clumping masses called volcanic agglomerate, where large pieces of stone are bound together with what looks similar to cement, or a finer version called welded tuff, which features smaller stones bound together in a similar cement-like fashion. The formation of both the welded tuff and volcanic agglomerate were formed long before the climactic event which created Crater Lake.

The trail is composed of towers, scree fields, ledges, and jutting rock formations. Areas of these rock outcroppings and escarpments can be several hundred feet in length and several hundred feet in height and are a result of geologic faults or glacial action.

Topography

The Garfield Peak Trail is considered one of the most popular hiking trails in the park, primarily due to its close proximity to Rim Village and Crater Lake Lodge. The trail leads eastward, following the ridge's contours which offer views of the entire lake as well as Klamath Basin and the Cascades. With a summit at 8,060 feet, the approach to the summit gains 1,000 feet of elevation in 1.70 miles. For this reason, the trail often has a "strenuous" rating on most hiking websites (including NPS's trail profile). The grade is variable ranging from 2 percent in some sections to 10 percent in others.

Beginning at an elevation of 7,090 feet, Garfield Peak Trail traverses rugged topography as it ascends nearly 1,000 feet over the distance of 1.70 miles to the peak. As a response to the steep topography, retaining walls were built during the period of significance along the six switchbacks and along most of the trail. The stone retaining walls were constructed to support the outer edge of the trail and the back slope and in most cases, were designed to blend with the natural features they abutted. The form of the retaining walls varied according to the natural surroundings and changing geologic conditions, often curving to follow the alignment of the trail.

Hydrology

With a jagged appearance, the caldera rim ranges in elevation from 6,700 feet to 8,150 feet. The Garfield Peak Trail follows the caldera from the trailhead to Garfield Peak with an increase in approximately 1000 feet of elevation gain. This steep slope, combined with the volcanic pumice and rocky surface material have caused the hydrology along the trail corridor to become a constant maintenance factor since the trail's first construction. When the trail was initially constructed, sheet flow methodology was used to minimize hydrologic erosion. Today, drainage features such as check steps and water bars are found along the corridor's entirety in order to control the hydrology on site and prevent trail damage.

Climate and Weather

Weather plays an important role not only in how Crater Lake was formed, but also how the National Park is managed today. During the winter months, snow generally begins in October and does not melt in most places until the following June or July. This accounts for the majority of precipitation seen in the area. During these months, visitors to the park may snowshoe or cross country ski in select areas. Snowfall averages 533 inches annually, and by early spring, it is typical to have ten to fifteen feet of snow on the ground. While snowfall is common in the Cascade Mountains, Crater Lake National Park is one of the snowiest areas in the Northwest where regular records are kept. Because Garfield Peak Trail is south-facing, there is both less snow to contend with during the winter months as well as drier trails in spring due to the southern exposure. This does not change the fact that in general, the trail hiking season within the park is severely limited by the amount of snowfall.

Summer weather is more predictable: warm, dry days and cool nights are typical with average temperatures during June through August around 67 degrees Fahrenheit (although it may range from 40 degrees Fahrenheit to 80 degrees Fahrenheit or more). Summer thunderstorms may occur from June through mid-September, bringing a spectacular spectacle of lightening shows.

The large amount of snowfall and weight of that snow causes damage to the trail annually. The rock wall system is the most prominent feature along the length of the Garfield Peak Trail. The intricacies of stone work demand a high level of precision and regular maintenance especially due to erosion from regular high snow loads. As the snow melts, erosion which undermines the tread is a constant threat. The entirety of the trail corridor is snow free for only a short time during the peak summer tourist season, thus maintenance staff have a short window to assess and solve weather related issues at the same time tourists seek the views from Garfield Peak.

Native Vegetation

Crater Lake National Park is nearly all forested, but there are areas of open alpine meadows, swales and rock outcroppings. Typical tree species are mountain hemlock (*Tsuga mertensiana*), Shasta red fir (*Abies x shastensis*), Whitebark pine (*Pinus albicaulis*), and lodgepole pine (*Pinus contorta*) and to a lesser extent, western white pine (*Pinus monticola*), subalpine fir (*Abies lasiocarpa*), and white fir (*Abies concolor*). Vegetation that comprises the understory layer is often variable and is influenced by the elevation, precipitation, type of soil, and overstory canopy. As mentioned under the “Climate and Weather” section, most of the precipitation is received in the form of snow.

Snow has also affected the type of plants that may survive at Crater Lake. Garfield Peak Trail transitions between conifer forest of mountain hemlock and Whitebark pine and meadows of sparse clumping grasses along the route. Within the first quarter mile, the trail meets the lake’s caldera where only hearty grasses and flowers may exist. The two conifers most prevalent along Garfield Peak Trail are the Whitebark pine and mountain hemlock, both of which are well suited for large snow loads. The trail was designed to follow the caldera to Garfield Peak and was routed around specimen trees and through stands of both mountain hemlock and Whitebark pine. See Spatial Organization photo number 3 and Supplemental Information photo 1 for examples of how the trail design incorporated the native conifer forest trees into the experience of the hike. Whitebark pine occurs at the highest elevations in the park and at the caldera’s edge. The trees are adapted to survive in exposed areas where competition from other species is less fierce and occur in a narrow band around the rim of the lake and on high, wind-exposed ridges and mountainsides. Elevation typically ranges from 7,000 to 8,000 feet. Because of the cold temperatures in winter, exposure to high winds, long periods of snow cover, and frost in summer, the growing environment is harsh. The Mountain Hemlock is found between 5,200 and 7,500 feet and its

distinctive, droopy leader allows the tree to bend and curl as the weight of snow accumulates and slowly stand upright as the snow melts. (Craterlakeinstitute.com, soil survey)

Meadow areas, found all along Garfield Peak Trail are strongly correlated to soil types with the boundaries between forests and meadows often abrupt with rare instances of trees within the meadow itself. In general, these areas have the greatest diversity of plant species; thus they also have higher value as wildlife habitat. In spring, a great number of wildflower species may be found both within the meadows and in general, any place there is sun exposure (even on rock outcroppings with little soil substrate). Examples of these flower varieties are as follows: pumice sandwort (*Arenaria pumicola*), sulphur flower (*Eriogonum umbellate*), mahala mat (*Ceanothus prostratus*), applegate's paintbrush (*Castilleja applegatei*), blooming creamy stonecrop (*Sedum oregonsense*), drummond's anemone (*Anemone drummondii*), longleaf arnnica (*Arnica lonchophylla*), Crater Lake rockcress (*Arabis suffrutescens var. horizontalis*), davidson's penstemon (*Penstemon davidsonii*), cascade aster (*Aster ledophyllus*) and cobwebby paintbrush (*Castilleja arachnoidea*) (Craterlakeinstitute.com, soil survey).

Along Garfield Peak Trail, the ecological classification may be placed within the category of alpine meadows with intermingled forests. Within this category, there is also the further classification of the Ashy Alpine Desert which sits at the higher elevations. The two main tree species found in this alpine desert setting are the before-mentioned mountain hemlock and Whitebark pine. This area supports very sparse vegetation because of the rock and pararock fragments on the thin soil surface, an extremely wide range of diurnal temperatures, and low soil fertility. These areas emerge in microclimates where the snowpack often stays well into summer, limiting germination and establishment of plants. The dominant plant species are small, shrubby Shasta buckwheat (*Erigonium pyrolifolium*) and newberry knotweed (*Polygonum davisiae*). Since the construction of the trail, the native vegetation has provided for interpretive opportunities in the form of plant identification labels and ranger hikes. Starting in 1931, a guided 3-hour trip up the Garfield Peak Trail was made each morning by a ranger-naturalist who explained rock formations and identified wildflowers (Craterlakeinstitute.com, soil survey).

The harsh environment along the Garfield Peak Trail offers abundant research and learning opportunities for how plants adapt and stunning views for the recreational hiker, yet the fragile vegetation has seen impacts in recent years. Below is a list of a few examples of projects highlighting the Garfield Peak Trail's vegetation.

- A 2003 plant survey of the Garfield Peak Trail observed two rare species along the trail. Crater Lake Rockcress (*Arabis suffrutescens var. horizontalis*), threatened or endangered throughout the range, was located near Garfield Peak summit. Shasta Arnica (*Arnica viscosa*), threatened, endangered or extirpated form Oregon but secure elsewhere, was located midway along the trail. (Coleman 2003)
- Cultural Cyclic funds in 2007 paid for the restoration of the trail by pruning vegetation, reconstructing of tread away from Whitebark pine trees, collecting seeds from the specific site and seeding damage areas after restoration efforts were completed (PMIS 87065).
- A 2008 report, "Revegetation at Crater Lake National Park: A Survey of Historic and Active 'Orphaned' Sites", included the Garfield Peak Reservoir as an active revegetation/restoration site currently impacted by visitors using it for observation. The top of the tank is barren pumice soil lacking vegetation.



Natural Systems and Features Number 1: Photo showing rock spires of volcanic agglomerate featured along the rim (PWR, June 2015).



Natural Systems and Features Number 2: Photo looking west featuring the first meadow along the trail (PWR, June 2015).



Natural Systems and Features Number 3: Photo showing a stand of Western Hemlock conifers (PWR, June 2015).

**Buildings and Structures**

Buildings are features constructed for sheltering any form of human activity. Structures are features constructed for purposes other than sheltering human activity, and may include mechanical and structural engineering systems.

There are no buildings associated with the trail; however, structures on the Garfield Peak Trail include the contributing Garfield Reservoir and rock wall system. Non-contributing, but compatible features include modern handrails.

The structures along the trail are constructed of native stone and abide by the principles of the NPS Rustic style. The trail was reconstructed in 1931 following naturalistic and Rustic design trail standards that would be later formalized in "Standards for Trail Construction," published by the Office of the Chief Engineer in 1934. The first standards called for a set trail width of 4 feet, which could be accommodated by cutting into the slope or by benching the supporting ground with a dry-laid wall of large stones. Dry random rubble walls could be built downhill to retain soil and rocks on a steep slope or uphill to retain material above the trail and prevent slides. All walls were to be battered. The trail was to be routed around large trees, and walls and other features were to be constructed to harmonize with the natural setting and to avoid the destruction of natural features (McClelland 1998, 242). Success of harmonization depended on freehand lines and rusticity of the roughly cut stone, avoidance of right angles and straight lines, integration of battered stone walls into the contours of adjoining slopes and rock formations, and curvature to follow natural contours. When stone masonry structures were built at Crater Lake National Park, the Rustic style of architecture was believed to enhance the beauty of the natural landscape most successfully through the use of natural materials, appropriate scale, careful positioning on the landscape, appropriate use of color, avoidance of rigid lines, and a rugged and handcrafted appearance (Gilbert, Luxenberg 1990, 20). When viewed from afar, the mortared stone is indistinguishable from the natural outcrops from which it emerges. The rock wall system and reservoir are excellent examples of these early trail standards.

Rock Wall System – Contributing (LCS #TBD)

The rock wall system is comprised of dry-laid stone walls which require minimal use of tools and materials, rely on skill of placement and the force of gravity and frictional resistance, and adjusts to settlement without damage. The batter of the original angle is determined by the height of the wall. Wall types include retaining walls, guard walls, and edging.

The rock walls found on the Garfield Peak Trail are a structural engineering system. Over time, sections of rock walls have been added and replaced, yet as a whole, the system functions and serves the same purpose as it did historically. It is difficult to decipher the age of the individual walls; however, the majority of the rock wall system appears to be historic. Some have black moss and lichen, which may suggest older age in this subalpine environment. Discussions with the trail supervisor indicate that the historic walls have a higher level of workmanship compared to walls built in more recent years. All walls were constructed from localized stone to fit into the character of the surrounding landscape and thus contribute to the historic character of the trail. Refer to Building and Structure Photos 7a & 7b for a comparison of slope and vegetation stabilization. During the 2007 season, 1000 feet of the historic dry-laid stone wall was restored and 75 feet of historic stone edging was restored (PMIS 87065). In 2013, 20 linear feet of rock wall was repaired (PMIS 193712).

Wall height varies, and in many cases, depends upon the grade of the fill slope. The trail consists of low edging walls one stone high to 12-foot tall dry-laid retaining walls. Wall length also greatly varies with

certain walls only 10 feet long to stabilize a particular curve in the trail to others of hundreds of feet long, wrapping the trail edge, allowing the alignment to follow the steep contours of the ridge. All stone walls in the system are battered dry-laid retaining walls. It should be noted that variable wall height and length may be the result of damage from rock slides and erosion, causing walls which may have historically been continuous to appear as several individual walls. In other places, the walls stop and start around adjoining large protruding volcanic boulders and rock. According to the 2008 TRACS Trail Inventory, the Garfield Peak Trail is comprised of 1,066 linear feet of dry stone rock edging and 4,322 linear feet (12,611 square feet) of dry stone rock wall.

There are patterns within the rock wall system dependent on the surrounding landscape, grade, and trail alignment which are described below. These dry-laid rock wall styles with various stone types seamlessly transition according to the geology of the surrounding landscape. For example, a portion of the trail transitions from large boulders, to a short scree field, into a taller rock wall with an increased batter extending for a distance while curving around a bend in the trail. Each transition, from one type of wall to the next, is smooth, guided by the natural environment. Sizes of chosen stones for rock walls also fit into the surrounding environment. Edging walls typically are constructed using a combination of small and medium sized stones, whereas singular feature walls are commonly constructed of a similar size medium stone/boulder.

- Low Edging Rock Walls/Tread Edging: In 1931, Merel Sager, a landscape architect from the NPS office in San Francisco, commented on the trail realignment that the trail's visibility as seen from below had been kept to a minimum by using dry-laid rockwork for fill sections and he mentioned introducing stone at irregular intervals on the trail's outer edge in order to reduce a line that could be both visible and uniform (Mark 2013, 27). Low edging rock walls are typically found on the downslope side. They are found throughout the length of the trail and especially in the gently sloped meadows and forested sections where taller walls are seldom found. Large, single boulders spaced off the trail act as edging in the meadows as well. An edging wall funnels the hiker to the destination, the peak, acting as navigators.

- Scree Fields: The trail passes through scree fields at several locations. The trail in these areas is accompanied by a low retaining wall. Sand and small stones are often seen tumbling over the walls. Vegetation in these areas stabilizes the slope whereas vegetation in other areas along the trail, growing between the stones can destabilize the structure. On scree fields near the trail, large boulders were intentionally placed to stabilize the tread. They are in no particular pattern, but fit into the appearance of the natural scree and stone sections.

- Natural Cliff/Blasted Stone Walls & Dry-Laid Retaining Walls: Much of the Garfield Peak Trail passes through natural blasted stone, in which case, there is no need for a constructed retaining wall. Several areas have naturally occurring stone interspersed with a dry-laid retaining wall. The rock wall transitions with the natural stone material of the area, breaking into segments where needed to allow the natural stone to act as the wall.

- Piles of Stone, Not Stacked: On a steep, rocky section along the trail near the peak is an area of trail that transitions into large dark boulders. These make up a natural wall on the cut bank, and smaller sized boulders are placed in a pile on the fill slope.

- Dry-Laid Retaining Walls/Singular Features: There are numerous dry-laid retaining walls along the Garfield Peak Trail that stand out as extraordinary features. One such example is of the largest and tallest (approximately 10-12 feet tall) dry-laid stone wall stabilizing the tread along a steep cliff section. It terminates at a large dark massing of volcanic agglomerate and massive, connected boulders which extend out over the cliff. This wall is in excellent condition. Other

singular featured retaining walls can be found along curves in the trail and as the alignment passes through the various ecological and geological communities on the caldera.

- Switchback Walls: Switchback walls are the most numerous of all wall types found on the Garfield Peak Trail. They were constructed with great care to harmonize with the area and blend into the surrounding environment. Switchback walls are a combination of dry-laid stone retaining walls and rock cliffs that have been blasted. The walls vary in distance and height, some very substantial walls to others acting as a tread edging. Switchback numbers correspond to the Site Plan.
    - Switchback #1: The approach is marked by dry-laid retaining walls on both sides of the trail of red and yellow oxidized igneous rock. This switchback has three steep tiers, with walls varying in size and condition. Walls are interspersed where needed between natural, stone-cliff walls and vegetation.
    - Switchback #2: The long rock wall of the reservoir transitions into a switchback retaining wall. This is a steep three tiered switchback and the first place on the trail where the natural stone cliff is distinctly used to function as a retaining wall. The walls here are a combination of natural stone cliff walls, bands of volcanic agglomerate, and dry-laid retaining walls. The igneous rock here has a reddish hue. The second tier reveals the observation point on the reservoir roof then leads up the final tier with a natural stone wall on the uphill cliff side with a long short rock wall on the downslope side. Areas of large natural stone break up this rock wall into segments.
    - Switchback #3: Out of the colorful natural stone in this area, a durable dry-laid rock wall is seen on the cliff side if one looks up. This is the approach of the third switchback. Dry-laid rock walls on either side of the trail, on one side of the trail, and areas of no walls, are found on this switchback. Small to medium sized stones are characteristic of this area, which is also how the walls were constructed in order to fit into their environment. The three tiers on this switchback provide a view of the lake. The downslope side of the trail here has a low edging type dry-laid rock wall that quickly transitions into a taller well-constructed causeway.
    - Switchback #4: Switchback four begins with a dark, taller dry-laid wall on either side of the trail. This switchback has only two tiers and is less steep than the previous. Looking up from the first tier, one can see a combination of natural large boulders and dry-laid walls constructed of the same stone, creating contrast and visual interest. The switchback is a combination of dry-laid walls and natural walls. A dry-laid wall on the first tier is in poor condition and is crumbling and sliding down the cliff. The second tier also ends with a wall in poor condition, creating obstacles in the trail path and stones falling down the cliff. Columnar andesite acts as the wall for much of this switchback, which is one of this trail's highlights.
    - Switchback #5: The fifth switchback is very gentle and has only two small tiers. Large boulders placed in piles are the extent of any type of wall here.
    - Switchback #6: The last switchback of the trail is gentle with only two tiers, like the previous switchback. There are walls on either side of the trail, which are located where needed. Following the switchback, there are walls on both sides of the trail that are made of small to medium sized stone that extend a fair distance. The walls are in good condition.

Garfield Reservoir – Contributing (LCS #TBD

The Garfield Reservoir, composed of stone masonry construction, provides water for Rim Village and serves as a popular stop along the trail for visitors.

The reservoir is visible from the Crater Lake Lodge and much thought was taken into consideration on how to blend this large structure into the landscape. Correspondence between the Regional Director, Superintendent Solinksy, and Thomas Vint reveal discussions concerning the cost of a native stone veneer to cover the large concrete structure and whether the native stone wall would blend well enough into the landscape or if vegetation should be brought to the site to attempt to hide the structure. The final decision used a combination of both, the native stone facing includes terraces in which existing trees were salvaged and helped to blend portions of the large structure into the surroundings. The Garfield Reservoir was not seen as a separate utility structure on the side of the trail, but as part of the overall trail design. The reservoir structure is the only historic wet stone masonry feature along the trail.

The Garfield reservoir was built to service the Rim Village development. The General Development Plan for Rim Village was approved in 1926 and implemented between 1927 and 1932. In 1931, construction of the reinforced concrete reservoir (67' x 27' x 14' inside dimensions) was undertaken according to this plan on the southwest slope of Garfield Peak at a point that gave ample head for all Rim Village water service. Until this time, Munson Spring water had been pumped into two wooden tanks located on a hill behind the Rim Campground. The 200,000 gallon Garfield Reservoir replaced the wooden tanks, as well as replaced all wooden pipes with steel ones. A 6" cast iron pipe 2,800 feet in length was laid to connect the reservoir with the Rim Village, and about 1,600 feet of 4" galvanized iron pipe was laid to connect this main with the Pumping Plant main line. Approximately 2,800 feet of 2" galvanized iron pipe was also laid from the reservoir to a spring on Garfield Peak for construction purposes and also furnished gravity water for the system. Additional work needed to complete this system included water-proofing the reservoir and facing the exposed section of the reservoir with a masonry wall for the purpose of concealing the reservoir from vantage points at Rim Village. The location of the reservoir site was made with the cooperation of Sager of the Landscape Division. The water storage system cost $14,400 in 1931 (Robertson, 1931).

Today, over 400 linear feet of dry-laid rock wall on the interior, uphill side of the trail smoothly transitions into the reservoir structure. According to a 2009 AutoCAD drawing set, the current interior structure without rock facing is 28'1"wide, 68'10" long, 18'-5" tall. The battered, uncoursed, stone masonry is applied as veneer. This veneer is not cut, but rather an entire, full size rock wall applied onto the structure with incised mortar. The joints follow historic specifications of 1-1 ½ inches wide and never exceeding 2 ½ inches or below ¾ inches (Hewes 1942, 437). The joints are raked out to the historic specification depth of ½ inch (Mark, Watson 2009, 32). Due to various maintenance projects, different color and conditions of mortar exist on the rock facing today. Historic mortar in Crater Lake National Park is identified by a red tint (from using the surrounding pumice), coarse grained sand, and high lime content (making mortar soft and pliable whereas Portland cement is hard). Two known phases for maintenance valve work occurred in 1994 and 2009.

Built into the stone wall of the reservoir façade, terraces hold enough soil for large Whitebark pine and Mountain Hemlock trees to thrive. A historic photo of the concrete structure before the stone facing was installed depicts large trees that appear to be the same trees in one of the terraces today. The stone, a mixture of pumice and andesite with an array of colors and textures, is localized to the trail area, making this large structure seem to blend into the landscape. The workmanship on the veneer is of high quality; however, there is a noticeable section of the lower dry-laid rock wall recently repaired from the 2009 valve project that creates a contrast in overall wall workmanship. With a careful eye, it is noticeable where stairs leading to the valve door have been obliterated. These stairs were not original to the structure but were added after the period of significance and therefore, a historic feature was not lost when the stairs were obliterated. It is believed that the dry-laid rock wall existed during the period of significance, but was removed with the addition of the stairs. Once the stairs were obliterated, the wall was rebuilt.

The stone retaining wall of the trail transitions into the rock wall base of the reservoir. This leads to the second switchback along the trail. Concrete, metal, hatches, manholes, and bright yellow columns on the roof make it clear that this is a functional water structure. Water from Annie Creek is pumped into the Garfield Reservoir, which in turn is pumped for use at Rim Village.

With great care, the waterlines for the reservoir water system were installed to blend into their surroundings. The beginning of the Garfield Peak Trail gently passes along a meadow, where on the downslope side of the trail the waterline is concealed beneath the naturalistic landscape. The gentle grading, natural vegetation, and boulder placement hide the utility from the average tourist. Water meters and NPS utility water access points are discreetly located. However, as the hiker approaches the beginning of the reservoir, the trail has several water line maintenance disturbances where the features protrude due to excessive trail erosion. In this area there are three blue water meters, one green valve box, and a black water pipe running parallel to the trail. According to a construction document set from April 2003, utility upgrades were completed for the waterline and reservoir. These utility features are contemporary and are outside of the historic property boundary.

Handrails - Non-Contributing Compatible

Cultural cyclic maintenance funds in 2007 paid for the removal and replacement of creosote handrails that were installed during the 1980s. At this time, two new handrails were installed in the same location near the base of the trail and at the first switchback (see Site Plan). The two new handrails are constructed of a combination of techniques: uncoursed stone masonry with wood members. The workmanship is not of the same quality as the surrounding historic stone retaining walls, with mortar covering stones and cracking. The log beams were not seasoned prior to installation, and as a result, several checks are noticeable and the paint is chipping. It seems their construction was attempting to fit into the NPS Rustic style found throughout Crater Lake National Park using local materials, yet feels out of place on this trail, as all other walls aim to blend into the natural environment. The handrails are larger in scale than the historic masonry features associated with the trail.

The first of the two handrails is located near the beginning of the trail, where the grade begins to increase and transition from meadow to rocky caldera rim. The 30-foot-long and 4-foot tall wall protects visitors against a steep cliff edge and provides a good viewing area of the lake. Buried log cribbing is located on the lake side of the wall and forms the outside edge of the handrail. The top courses are visible, from obvious erosion of the sandy, loose pumice of the cliff side. The handrails are constructed from the areas' andesite stone and are mortared in place with five brown painted 5-8" diameter log beams. The concrete base is raised from the rest of the tread, due to erosion of the trail.

The second of the 2007 handrails is located at the top of the first switchback. This 26-foot-long and 4-foot tall handrail is in the same style and condition as the lower handrail and curves around the corner of the switchback turn out. The handrail is made of mortared stone with four painted-brown log rails. Log cribbing supporting the handrail is not apparent on the lake side, where a steep drop off begins immediately. This handrail blocks a social trail.

Erosion Control Features – Non-Contributing Compatible

Through erosion, the trail surface can drop in grade below the adjacent terrain. The loss in grade leads to accelerated water erosion along the trail surface. Trail building methods employed during the period of significance used sheeting methods so that water shed uniformly across it rather than cross drainage

devices such as culverts or water bars. Drainage is an important component of sustainable trail design. Based on consultation with park staff trail maintenance professionals, today's budgetary constraints limit the amount fill is used to control erosion, and thus non-contributing check dams and water bars are installed. According to the 2008 TRACS Trail Inventory for Garfield Peak Trail, there are: 3 wooden water bars, 38 rock water bars, 9 soil water bars, and 6 rock check dams. These are all non-contributing features, associated with modern trail building activities and are a modern response to the over 80 years of erosion.

The water bars were installed after the war to encourage cross drainage on the trail.. Typically they consist of two to four cut stones linearly arranged across the trail surface above the existing trail grade with the area behind the water bar backfilled. They are arranged at an angle to divert the water off of the trail. The beginning of the trail has three wooden water bars constructed of milled lumber that does not reflect rustic-design materials.

Check dams are used to stabilize the trail surface and increase the grade along the trail so water flows off the trail. They are constructed of several square cut stones running perpendicular to the trail protruding above the trail surface, redirecting the flow of water in a waterfall effect off the trail.

Along with their simple rough cut edges, the water bars and check dams are generally constructed from stones gathered within the immediate vicinity and thus complement the rugged rustic style design of harmonizing with their surroundings. They are usually found several in a row. Drainage issues are apparent along the length of the trail. The trail supervisor mentioned the erosion control features are not functioning properly and need repair (NPS, High Peaks Trail System 2009, 80) (NPS, Civilian Conservation Corps Haleakala Crater Trails District CLI 2009, 88). Cultural cyclic maintenance funds in 2007 paid to repair the trail tread, widen 100 feet of trail, resurface 1000 feet of trail, and reconstruct 40 erosion control devices (PMIS 87065).

**Contributing Features:**

Feature: Rock Wall System
Type of Feature Contribution: Contributing

Feature: Garfield Reservoir
Type of Feature Contribution: Contributing

**Non-Contributing Features:**

Feature: Handrails (2)
Type of Feature Contribution: Non-Contributing - Compatible

Feature: Erosion Control Features
Type of Feature Contribution: Non-Contributing - Compatible



Buildings and Structures Number 1: Photo of stone retaining wall. Note the rustic character of the wall as it seamlessly blends with its surrounding environment (PWR, June 2015).



Buildings and Structures Number 2: Photo of rock wall articulating the curvilinear nature of Garfield Peak Trail (PWR, June 2015).



Buildings and Structures Number 3: Photo of dry-laid retaining walls at switchbacks blending into the natural geologic patterns of the area (PWR, June 2015).



Buildings and Structures Number 4: Photo of the tallest dry-laid retaining wall on the Garfield Peak Trail (PWR, June 2015).



Buildings and Structures Number 5: Photo of wall condition in a scree field. The rock wall is failing due to erosion. The vegetation on the nearby portion of the wall is holding the structure in place (PWR, June 2015).



Buildings and Structures Number 6: Photo showing a wall of varied sized stones crumbling, loose stones tipping over, and erosion causing this wall to severely fail (PWR, June 2015).



Building and Structure Number 7: Photo showing historic workmanship of retaining walls and care of slope vegetation and soil stabilization. A 1931 Construction Report photo caption read, “Note absence of waste dirt on lower slope” (Crater Lake National Park Archives, 1931).



Building and Structure Number 8: Photo showing present day retaining wall and state of slope vegetation and soil stabilization in a location near by the location shown in Photo 7a. Note lack of vegetation to stabilize the slope. Arrows in photos 7a & 7b refer to same rock feature (PWR, June 2015).



Buildings and Structures Number 9: Photo showing the uphill view of the reservoir, which harmonizes with the area (PWR, June 2015).



Buildings and Structures Number 10: Photo of obliterated stairs that led into the vault (PWR, June 2015).



Buildings and Structures Number 11: Photo showing the reservoir terraces that provide a growing medium for Whitebark pine and mountain hemlock trees. These vegetated terraces further blend the structure into the landscape (PWR, June 2015).



Buildings and Structures Number 12: Photo of a section of rock wall in poor condition. Different mortars are visible in varying conditions and colors. Mortar is cracking in places. Vegetation is destabilizing the structure and damaging the mortar (PWR, June 2015).



Buildings and Structures Number 13: Photo showing the local stone of the area (andesite, oxidized igneous stone) chosen to blend into the natural environment (PWR, June 2015).



Buildings and Structures Number 14: Photo of stone veneer on concrete reservoir structure. View looking toward the lake from reservoir roof (PWR, June 2015).



Buildings and Structures Number 15: Photo of wall condition. There exists a visible transition of historic (right) to contemporary (left) wall. Notice the sand falling over wall and vegetation growing in the wall joints (PWR, June 2015).



Buildings and Structures Number 16: Photo of below grade water line along visibly graded route. Care was taken to blend this functional component of the reservoir with the landscape (PWR, June 2015).



Buildings and Structures Number 17: Photo viewing the entirety of the first handrail. Notice a large stone is missing (PWR, June 2015).

**Circulation**

Circulation comprises the spaces, features, and applied material finishes which constitute systems of movement in a landscape.

During the period of significance between 1917 and 1941, Garfield Peak's trail alignment was designed to provide views of Crater Lake and associated volcanic and mountainous features, while blending with the natural environment. The trail was originally 1.25 miles long and was later realigned to 1.70 miles long. Architect and Landscape Architect Merel Sager spent much of the 1930 summer season at Crater Lake adjusting the alignment and grade of Garfield Peak Trail (in consultation with NPS Engineer W.E. Robertson and Crater Lake Superintendent E.C. Solinsky). The realignment was undertaken in order to provide a wider tread surface for horses and pedestrians and also to reduce the trail's average grade. The NPS spent $4,000 that summer on the lower half of the trail, building it 4 feet wide. Sager commented that the trail's visibility as seen from below had been kept to a minimum by using dry-laid rockwork for fill sections. Additionally, he proposed the use of stone at irregular intervals on the trail's outer edge in order to reduce the visibility of the edge of the trail tread. The NPS spent another $5,000 in 1931 to widen the lower portion of the trail another two feet after completion of the upper section of trail. Crews also built short spur trails between two and four feet in width at several prominent viewpoints. These totaled roughly 800 feet in length and included rest stations with stone seats that were "carefully selected for the beautiful and interesting views to be had of the lake and surrounding country" (Mark 2013, 21).

Alignment
The trail mainly has an east-west orientation with a series of switchbacks cutting to and from the lake's caldera. Following design tenets established by naturalistic landscape design principles, Garfield Peak Trail exhibits a curvilinear alignment and low grade. It also follows the natural contours of the topography to promote a scenic hiking experience while minimizing, when possible, the effort exerted to reach the summit. While sections of the trail are characterized by a straight alignment, the overall character of the trail design features curves, especially in areas with rugged topography. There are no spur trails along the primary trail; however, near the peak, along the caldera rim, the trail comes around a curve to a section where trees are in the middle of the trail. This is one of the very few places the primary trail splits into two and provides a route on either side of the clump of trees.

Materials
The entrance to Garfield Peak Trail begins at the terminus of a paved promenade path extending from the Crater Lake Lodge in Rim Village. From this point onward, materials used along the entirety of the trail are largely utilized from the existing geology. Often the rock used to construct the walls and steps along the trail are constructed of the same rock types as the adjacent rock outcroppings. The tread along the trail also mirrors the surrounding geography, featuring loose rock of varying size through scree fields or sandy soil through meadows and steep inclines.

Grading
The initial construction of Garfield Peak Trail in 1917 was followed by a realignment effort in 1931.This modification both lengthened the trail and decreased the grade to comply with NPS standards for grade. The trail has a slope that varies from 2-10 percent, with the steepest sections of the trail located near the summit of Garfield Peak.

Width
During the 1930 construction season, the realignment modified the lower portion of Garfield Peak's trail (3,900 feet) to comply with a four-foot standard width to accommodate both humans and horses. It embodied the engineering and naturalistic landscape architectural qualities intended by the Crater Lake

Master Plan, as envisioned in the 1920s. However, in 1931 the trail was widened to six feet in order to fit a mechanical oiler along the trail corridor. An additional 800 feet of trail, measuring two to four feet in width, was constructed to lookout points. (Robertson 1931)

Overlooks

Garfield Peak Trail is defined by optimal views of the lake, Cascades, and valley below. In 1931, stone benches were added at rest stops during the trail's realignment. The location and number are unknown. This documentation of early rest stops attests to the designers' intent to provide visitors with optimal places to view Crater Lake. Today, there are a series of overlooks as the visitor ascends toward Garfield Peak. At the trailhead, the visitor may take in the first of many views of Crater Lake. Such overlooks exist along the trail in any location where the lake is visible. They are characterized by clearings with little vegetation and free of most vertical elements which obstruct views. Two such overlooks are delineated by two non-contributing handrail features with open lake views over the structures. Located just prior to the first handrail is an overlook bound by a clearing in the trees at a steep cliff along the caldera, offering an expansive lake view. Three stone benches are located in the shade near another overlook with panoramic views of the lake. It is unknown if these benches are the same as those placed along the trail in 1931 or if they were installed at a later date by the CCC or the NPS. Today, these viewpoints provide both photo opportunities and rest stops for hikers.

Changes to the Trail Post Period of Significance

As a result of the dynamic nature of the landscape, Garfield Peak Trail has been subjected to regular repair. Records indicate that numerous annual trail repair projects have been completed in response to damage incurred by storm events. In many places, small sections of washed-out trail called for new drainage systems in an effort to stabilize the trail tread, such as stone check steps and check dams.

The Mission 66 program was initiated in 1956 to upgrade park facilities, staff, and resource management before the fiftieth anniversary of the agency. As part of Crater Lake National Park's Mission 66 activities, a 1959 project entitled "Garfield Peak and Discovery Point Trail Reconstruction" for $6,991 included regrading, 600 feet of dry laid masonry repair and 100 feet of new dry laid wall, removal of loose rock and rock projecting above grade, and ¼ minus crushed stone added to the first mile of trail tread to stabilize the fine pumice surface. Although the project was called a reconstruction, the project activities were actually associated with trail maintenance and improvement. The historical integrity of the trail's design was not affected by these activities.

Social Trails

The living and non-living (mainly tree and rock) boundaries do little to deter people from creating their own paths to achieve different views along the caldera. In some sections, unofficial paths exist along the rim where visitors wish to experience more views of the lake as well as between switchbacks where people cut the trail.

Today, the trail's historic design is still evident in its gradient, alignment, and materials. The trail grade has been maintained since the end of the period of significance, while the trail width varies from three to six feet, which is within the historic width. The trail continues to provide the overall feeling and association intended by the original designers; circulation therefore, is a landscape feature that contributes to the overall integrity of the Garfield Peak Trail.

**Contributing Features:**

Feature: Garfield Peak Trail
Type of Feature Contribution: Contributing

**Non-Contributing Features:**

Feature: Social Trails
Type of Feature Contribution: Non-Contributing



Circulation Number 1: Photo showing the trail alignment through the first meadow with a smooth tread, no edging and four to six feet wide (PWR, June 2015).



Circulation Number 2: Photo showing the rugged landscape with the trail cutting through this small scree field (PWR, June 2015).



Circulation Number 3: Photo showing a section of the trail where engineers blasted a rock face (PWR, June 2015).



Circulation Number 4: Photo showing trail along the caldera rim through a stand of conifers (PWR, June 2015).



Circulation Number 5: Photo of a stone check dam. Notice that the feature is perpendicular to the trail (PWR, June 2015).



Circulation Number 6: Photo of an incompatible wooden water bar installed at an angle (PWR, June 2015).

**Topography**

Topography is defined as the three dimensional configuration of the landscape surface characterized by features (such as slope and articulation) and orientation (such as elevation and solar aspect). Contributing topographic features of Garfield Peak Trail include the cuts and fills used to create tread within the steep terrain along the rim of the caldera.

Along the majority of the trail, the use of tread cuts and fill sections are required to negotiate the rough, steep terrain characteristic near the rim. Switchbacks and stone retaining walls are also prominent features employed along the trail to navigate the terrain. As a reflection of naturalistic design, the trail alignment hugs the natural contours and tread cuts were designed with sensitivity to the surrounding landscape.

Tread Cuts
Tread cuts, also known as rock cuts, are sculpted rock faces of varying heights created through steep, rocky terrain, typically involving a near-vertical cut on the interior, uphill side of the trail. In keeping with the principles of naturalistic landscape architecture, NPS landscape architects specified several measures to be undertaken in order to ensure that the artificial rock cuts blended seamlessly with their natural environment. Rock cuts were not made perfectly vertical, but were altered at an angle, or blasted to leave overhanging ledges, to simulate a natural rock outcropping. Masons were directed to work other faces of the cuts in order to hide the drill scars that remained after the initial blasting and cutting process. The top edges of the rock cuts were typically tapered into the natural slope and re-vegetated in order to further enhance the naturalistic properties of the cuts (NPS, Civilian Conservation Corps Haleakala Crater Trails District CLI 2009). Today, one will notice modern cuts made in the stone along Garfield Peak Trail where rocks have been exposed in the trail tread due to erosion, a departure from the original intention to hide human manipulation of the rock.

Cuts and Fills
Cuts and fills are commonly found along portions of the trail that traverse moderate to steep topography. A typical trail cross section constructed using cut and fill techniques includes a cut carved into a slope and the subsequent use of fill material to widen the trail. In many cases the trail builders attempted to equalize the amount of cut with a similar amount of fill material. After the cut and fill was completed, retaining walls were often built to stabilize the fill slopes.

Switchbacks
Like retaining walls and cut and fill slopes, switchbacks are built in rugged locations where ordinary trail construction techniques cannot be utilized. Often characterized by sharp turns proceeding in alternating directions up a steep incline, switchbacks are constructed to gain elevation at a reasonable grade to promote ease of trail use, but usually as a last resort since they are expensive to maintain. The construction of switchbacks often, but not always, requires cutting into the uphill side and filling the downhill side of the trail surface to create an area large enough for the trail surface as it turns 180 degrees. To provide additional stability, switchbacks are supported by dry-laid stone retaining walls constructed using igneous rock found in the area. Garfield Peak Trail features 6 switchback sets which are labeled on the Site Plan.

Today, the tread cuts, cuts and fills and switchbacks, which serve as character defining features of Garfield Peak Trail, retain integrity and contribute to the proposed historic district.



Topography Number 1: Photo showing a typical switchback (PWR, June 2015).



Topography Number 2: Photo showing a steep grade. The cut rock at this section blends well with the environment (PWR, June 2015).



Topography Number 3: Photo showing causeway where this section of trail has been filled and stabilized with a retaining wall (PWR, June 2015).

**Spatial Organization**

Spatial organization is the three-dimensional organization of physical forms and visual associations in the landscape, including the articulation of ground, vertical and overhead planes that define and create spaces.

The siting and design of the trail was carefully planned to offer visitors numerous rewards including variable views, diverse vegetation patterns, and a dynamic trail gradient. The trail's circuitous route hugs the caldera, taking opportunities to both follow the ridge, as well as dropping below the ridge, offering views of the landscape southward. It succeeds in creating different experiences as the ground plane, vertical elements and overhead features change. Along the way, visitors enjoy multiple views along the entire path of different sections of the lake. This hide and reveal effect, a design strategy that builds anticipation and interest, keeps the visitor engaged with the many different appearances of both the water and surrounding landscape, given changes in elevations and orientation. The variation is in the form of verticality from rock formations, overhead cover from tree canopy and different tread as the trail intercepts sand, scree and rock. Beginning at Rim Village, the hiker experiences a series of varying geological and vegetated scenes, until the final peak is achieved offering the reward of an expansive view of Crater Lake. In 1931, several small foot trails totaling approximately 800 feet in length were constructed leading to prominent viewpoints. The exact locations of the foot trails are unknown and have since been obliterated. Overall, the original character of Garfield Peak Trail is retained and contributes to defining the trail as intended during the period of significance.

Trailhead
As a linear landscape, the trail connects two points: Rim Village with Garfield Peak. The trail originates at the terminus of the Rim Village's paved promenade with a trailhead containing wayfinding signage and an overlook. The trailhead is located at the most easterly point of Rim Village Historic District.

Overlooks
Garfield Peak Trail is defined by the pursuit of Garfield Peak, the intent of which is to offer a recreational opportunity and an optimal view of the lake, Cascades, and valley below. There are a series of overlooks as the visitor ascends toward Garfield Peak. At the trailhead, the visitor may take in the first of many views of Crater Lake. Such overlooks exist along the trail in any location where the lake is visible. They are characterized by clearings with little vegetation and free of most vertical elements which obstruct views. The final 50 yards to Garfield Peak hosts a 360 degree view of the peaks and forested land surrounding the lake.

Meadows
Dispersed along the trail are open meadows, which in the early to mid-summer months may feature an array of wildflowers, mixed with hearty alpine grasses. The feeling evoked by these meadows differs from other sections for a number of reasons: the rolling hills and grasses give this landscape a soft appearance which, in addition to a lower grade, juxtaposes a predominantly rocky and often steep Garfield Peak Trail.

Scree and Rock outcroppings
Sections of the trail which host rock walls, rock fields, boulders or spires are the most common of the landscape features along the trail. The exposed scree fields, which typically sit on steep faces, leave the visitor acutely aware of how sheer the caldera's walls may be at times. In scree and rocky areas of the trail, the trail's tread also becomes rocky in conjunction with the surroundings. In other sections of the trail, protruding boulders and towers create a certain sense of scale in the face of these giants.

Conifer stands

Periodically along the trail, visitors find themselves in stands of mountain hemlocks and whitebark pines. These trees not only offer a reprieve from the elements, they also create an enclosed space that may evoke a feeling of refuge. Along the final ascent, the trail splits with three rock benches offering a place of respite under shady pines.

Terminus of Trail at Peak

Once at Garfield Peak summit, the spatial layout is open and rocky with cairns dispersed around the area. Scattered pines offer shade and shelter from the wind on what is otherwise a very exposed face. There is a distinctly desert quality to both the summit and last ¼ mile of trail before the summit. This is evident from the texture of soil (which becomes a fine-grained sand) in addition to sparse vegetation. Ultimately, the summit of the trail provides visitors with an opportunity for expansive views from many locations.

Although the small foot trails to viewpoints no longer exist, the spatial patterns associated with the primary Garfield Peak Trail established during the period of significance have been retained and therefore contribute to the historic property.



Spatial Organization Number 1: Photo showing the open character of the trail through a meadow and conifer stands (PWF, June 2015).



Spatial Organization Number 2: Photo showing a more enclosed feeling of the trail as it passes through a scree and rock outcropping (PWR, June 2015).



Spatial Organization Number 3: Photo showing the enclosed spaces of the trail as it passes through stands of conifers (PWR, June 2015).



Spatial Organization Number 4: Photo showing the wide-open space at the Garfield Peak summit looking back toward the trail (PWR, June 2015).

**Views and Vistas**

Views are defined as the expansive or panoramic prospect of a broad range of vision, which may be naturally occurring or deliberately contrived. Vistas are the controlled prospect of a discrete, linear range of vision, which is deliberately contrived.

The Garfield Peak Trailhead was conveniently sited at the end of the pedestrian promenade near the Crater Lake Lodge. A report on operations and approved construction projects for the 1931 season noted how views of the lake and the surrounding landscape dictated the design and location of the trail, making it immediately popular amongst visitors. Throughout the 1930s, it claimed to be one of the most scenic and convenient of all in the park's trail system (Greene, 167). Today, the overall experience of Garfield Peak Trail offers views that open and close of the lake. These views are further framed by features present at a number of overlooks including Whitebark pine skeletons, rock faces, rock spires or stand of conifers. With a jagged appearance, the caldera rim ranges in elevation from 6,700 feet to 8,150 feet. As there is only one circuitous path to the lake, most visitors enjoy the lake from 2,000 feet above the water's surface. Garfield Peak Trail is one of several trails that feature views of Crater Lake from the rim. Along the way, visitors enjoy spectacular panoramic views of different sections of the lake and surrounding forested landscape, including distant peaks such as Mount Scott, Mount McLoughlin and Mount Thielsen.

From the overlooks, the winding turns of Rim Road are visible, as well as a snow-covered, pyramidal Mount McLoughlin, around the second set of switchbacks (see Site Plan). As a strato-volcano, Mount McLoughlin was formed from alternate eruptions of lava and pyroclastics, much like Mount Mazama and other high Cascade volcanoes. At this point along the trail, it is possible to look beyond the conifer trees and vertical rock, where a small section of the southern-most portion of Crater Lake is just visible. At the top of these switchbacks is the second handrail along the trail where a view of the lake, as well as the prominent peak of Mount Thielsen to the north. Beyond the rim's edge, it is striking how far from the water's surface this section of the trail sits where boats below appear miniscule in the lake's mass. Looking down the trail southwestward, the visitor may also view Union Peak with buildings at Rim Village in the distance. At 7,700 feet, Union Peak is one of the most prominent peaks in the park. It is the remnant core of an ancient shield volcano formed almost entirely from successive basaltic lava flows.

The fifth set of switchbacks (see Site Plan) offers a 360 degree view of the area where all surrounding peaks are visible from this vantage point. Continuing along the caldera, the path often widens when there are views of the lake and narrows when there are not. These may be considered unofficial vistas; an example of which is the first location where Phantom Ship Rock is visible. Beyond this point, the trail continues into a stand of trees. A historic access trail which is no longer maintained continues to offer views of the lake as it follows the rim. As the trail turns southward, there is one last view of the lake before reaching the peak, which is visible through a valley-like opening in the caldera. This series of hide and reveal spaces continue through the final stretch with views both of the lake and land to the south. The final 50 yards to Garfield Peak hosts a 360 degree view of the peaks and forested land surrounding the lake. Today the views that inspired the design and subsequent development of Garfield Peak Trail still remain.



Views and Vistas Number 1: Photo showing a view of Crater Lake at one of the overlooks near the trailhead (PWR, June 2015).



Views and Vistas Number 2: Photo showing trail and views of the surrounding landscape including Cascade Range (PWR, June 2015).



Views and Vistas Number 3: Photo taken at approach to summit of Garfield Peak of the surrounding landscape (PWR, June 2015).



Views and Vistas Number 4: Panoramic views of Crater Lake and surrounding landscape abound at Garfield Peak. Note Garfield Peak Trail approaching the summit along the caldera (PWR, June 2015).

**Small Scale Features**

Small scale features are the elements which provide detail and diversity for both functional needs and aesthetic concerns in the landscape. Small scale features associated with the Garfield Peak Trail include a small number of functional elements, which do not contribute to the historic character of the trail. These include signage (such as contemporary wood signs and a fiberglass interpretive panel), rock cairns, and stone benches, which are undetermined.

Signs – Non-Contributing

Two signs mark the trailhead. A thirty-six inch wide by forty-eight inch tall fiberglass interpretive panel illustrates the trail route with a description of the length, difficulty, and time. It has a brown painted aluminum tubing base and was installed in 2013. A small wooden roof-top style sign is located adjacent the interpretive panel and includes regulatory symbols representing no pets, bikes, horses, or camping.

A small brown sign on a treated wooden post with white painted letters is situated at the top of the first switchback. It reads: "Shortcutting causes erosion/ stay on trail." Although this single post and cross arm sign is non-historic, it follows Albert Good's 1938 prescription: "Where there is no vegetation threatening to obscure them, signs are best kept low" (Good 1938, 45).

In addition, a wooden sign with a broken post is leaning against a tree in an area near a highly visible social trail. This bolted cross arm on a single post sign is constructed of faded gray wood with carved lettering, "Trail" and a carved arrow. It is located in an area with a highly visible social trail. This non-historic sign is functioning to demarcate the trail boundary; however, it was not properly installed. The base of the sign, and intended sign location, is not visible in the ground within the surrounding area.

Rock Cairns – Non-Contributing Compatible

Rock cairns (deliberately stacked rocks) can be seen in early summit photos, in 1915 and 1917. Various sizes and shapes of rock cairns are also found on the summit today, always changing as new hikers dismantle existing cairns and create their own. The individual rock cairns do not remain in the same locations or configurations, but the practice of constructing them on Garfield Peak and using the same materials remains the same. Refer to Supplemental Information repeat photography for imagery.

Stone Benches – Undetermined

Stone benches were constructed at rest stops during the 1931 trail realignment, yet the location and number of benches is unknown. In 1937, the CCC placed a total of twenty log benches along the Garfield Peak Trail and Crater Wall. These features utilized logs cut in half and further divided into sections of six feet, then placed into smaller supports on the ground that were notched to hold the seat. Enrollees then added two rock seats that were presumably similar to the benches placed along Watchman Trail in 1932. (Mark 2013, 43)

Today, the second switchback has a small four-square-foot sitting area at the first turnout. It is apparent that local flat stones were at one time arranged into a bench sitting area; however, the stones are toppled over to the point that it is no longer a bench. The 2008 TRACS Trail Inventory notes this as one of the few benches along the Garfield Peak Trail.

Near the peak, along the caldera rim, the trail comes around a curve to a section where trees are in the

middle of the trail. This barrier naturally slows the hiker to take in the surrounding view, while a series of three stone benches constructed from monolithic local stones are located nearby to provide seating for one to two people. Each bench has views of the lake and takes advantage of the shade from the trees here in the middle of the trail. The third stone bench is larger and has a stone backrest.

It is unclear if the existing stone benches are of historic materials and if they are in the historic 1931 locations. More research is needed to determine if the stone benches are a contributing feature.

**Non-Contributing Features:**

Feature: Interpretive and Wayfinding Signs
Type of Feature Contribution: Non-Contributing

Feature: Rock Cairns
Type of Feature Contribution: Non-Contributing - Compatible

**Undetermined Features:**

Feature: Stone Benches (3)
Type of Feature Contribution: Undetermined




Small Scale Features Number 1: Photo of two non-contributing trailhead signs (PWR, June 2015).



Small Scale Features Number 2: Photo of a large stone bench with a back rest on Garfield Peak Trail. The historic status of the three remaining benches along the trail remains undetermined (PWR, June 2015).

# Condition

## Condition Assessment and Impacts

**Condition Assessment:** Fair

**Assessment Date:** 6/23/2015

**Condition Assessment Explanatory Narrative:**

Through the analysis and evaluation of landscape characteristics and features, it has been determined that the Garfield Peak Trail is in "Fair" condition. The landscape shows clear evidence of minor disturbances and deterioration by natural and/or human forces, and some degree of corrective action is needed with 3-5 years to prevent further harm to its cultural and/or natural values. If left to continue without the appropriate corrective action, the cumulative effect of the deterioration of many of the landscape characteristics will cause the inventory unit to degrade to a poor condition.

**Impacts:**

**Type of Impact:** Visitation

**External or Internal:** Internal

**Impact Description:** In many places, visitors have developed social trails near the established trail system. The informal development of social trails exacerbates erosion problems and has denuded vegetation adjacent to the trail. Due to the fragile nature of the ecosystem, hikers must stay on marked trails.

**Type of Impact:** Erosion

**External or Internal:** Internal

**Impact Description:** Erosion poses the greatest threat to stone walls. Snow load may be a leading cause of wall failure. Erosion is a constant issue along the trail, which is exacerbated by deferred maintenance. Erosion has created gullies in the trail tread and slumping cut and fill slopes. The historic trail needs a sufficient drainage system to remove excess water off the trail surface. Portions of historic walls are damaged by erosion, which is evident from collapsed sections of rockwork. Erosion on steep slopes cause soil and rubble to fall over and dismantle retaining walls and low edging walls. The trail tread is failing in places and needs the outer edge supported where no retaining walls currently exist.

**Type of Impact:** Deferred Maintenance

**External or Internal:** Internal

**Impact Description:** Erosion control features that frequently require maintenance such as check dams and water bars have been installed along the trail. These features need to be maintained in order to avoid erosion impacts. Rehabilitating the trail tread to allow for sheet flow would reduce erosion and minimize the maintenance required to maintain the trail tread.

**Type of Impact:** Deferred Maintenance

**External or Internal:** Internal

**Impact Description:** Dead/diseased trees located along the trail corridor pose a threat to visitors as well as historic structures.

**Type of Impact:** Structural Deterioration

**External or Internal:** Internal

**Impact Description:** Portions of the 2007 mortared stone handrails and mortar on the reservoir structure exhibit loose or cracking sections and missing stones.

**Type of Impact:** Inappropriate Maintenance

**External or Internal:** Internal

**Impact Description:** The first three check dams along the trail are constructed from milled lumber, which is incompatible with the existing stone features.

**Type of Impact:** Inappropriate Maintenance

**External or Internal:** Internal

**Impact Description:** Excessive erosion along the trail tread has led to stone protruding from the surface of the route. Contemporary tools have been used to cut the protruding stone, leaving visible tool marks. This is incompatible with the character of historic stone features that do not exhibit tool marks.

**Type of Impact:** Vegetation/Invasive Plants

**External or Internal:** Internal

**Impact Description:** In some cases, woody vegetation is encroaching on the system of walls, which can destabilize them. Vegetative growth in mortared walls increases the accumulation of rocks and debris that can hinder drainage. Their roots damage the stones, and the mosses and lichen that slowly appear in this subalpine environment retain moisture that erodes the stone and mortar.

**Type of Impact:** Deferred Maintenance

**External or Internal:** Internal

**Impact Description:** The Garfield Reservoir roof is currently utilized as an overlook by hikers who access the roof via the second switchback of the Garfield Peak Trail, which leads directly to the structure. Due to concerns regarding visitor health and safety as well as the security of the water system, access to the Garfield Reservoir roof should be limited. The 2008 "Revegetation at Crater Lake National Park: A Survey of Historic and Active 'Orphaned' Sites," identified the roof as an active revegetation/restoration site that was impacted by the heavy foot traffic of visitors. At that time, the roof consisted of barren pumice soil with little vegetation, lacking a barrier or any signage to educate tourists about the functional water system structure rather than an overlook opportunity (Andersen 2008).

**Stabilization Measures:**

Remaining historic trail features that date to the period of significance should be stabilized and preserved until a Trail Management Plan is completed. Notably, this document would provide a coordinated treatment strategy for the park's trail system as a whole, including Garfield Peak Trail.

The following stabilization measures are applicable to the Garfield Peak Trail:

1. Stabilize stone walls that have been damaged by rock slides, visitors, erosion, or land slumping. Remove non-historic stones with tool markings or flip non-historic stones so tool markings are not visible.

2. Revegetate areas where social trails have denuded vegetation adjacent to the trail.

3. Remove vegetation from any walls, switchbacks, or other stone constructed features where roots are destabilizing the features.

4. Reduce the downward angle of water bars, check dams, and dips where the angle is too steep leading to accelerated erosion during rain events. Add rock-armored outfalls to the drainage system to disperse and/or divert water away from the trail and reduce erosion. Remove the milled lumber water bars and replace with a more compatible material such as stone.

5. Repair or repoint mortared walls where necessary on reservoir and handrails.

6. Remove hazard trees along Garfield Peak Trail corridor.

7. Revegetate Garfield Reservoir roof and add a visually-compatible barrier and signage to educate hikers that roof is part of the functional water system, rather than an overlook point.

## Treatment

**Approved Treatment:** Preservation

**Approved Treatment Document:** General Management Plan

**Approved Landscape Treatment Document Date:** May 2005

**Approved Landscape Treatment Explanatory Narrative:**

According to the preferred alternative for the Crater Lake National Park General Management Plan and Environmental Impact Statement:

"The National Park Service would implement resource management policies that preserve the natural resources values of the cultural landscapes as well as their culturally significant defining patterns and features in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes* (GMP 2005, 126)."

# Bibliography and Supplemental Information

## Bibliography

Andersen, Susie Roe. “Revegetation at Crater Lake National Park: A Survey of Historic and Active “Orphaned” Sites.” Crater Lake National Park, National Park Service, 2008.

Arbogast, David, Linda W. Greene, Catherine H. Blee and James M. Ellis. *Historic Structure Report, Crater Lake Lodge*. Crater Lake National Park, Crater Lake, Oregon, National Park Service, Denver Service Center, April 1984

Carr, Ethan. *Wilderness by Design: Landscape Architecture and the National Park Service*. Lincoln: University of Nebraska Press, 1998.

Coleman, Wendy J. "Threatened and Endangered Plant Survey for Rehabilitation of Trail Structures on the Garfield Peak Trail." Crater Lake National Park, National Park Service, 2003.

Christensen, Kelly Marie. “Wilderness Values, the Environmental Movement and Mission 66”, master’s thesis, University of Oregon, 2011.

Crater Lake Park Files, ca. 1919-1953. Seattle Record Group 79, National Archives and Records Administration, Seattle, WA. (See footnotes for specific box and folder information.)

Crater Lake National Park. Garfield Peak Trail files, CRLA 8889, Crater Lake National Park archives.

Crater Lake National Park. Garfield Peak Trail files, Box #6 of transfer number T079-97-0010, Federal Records Center, Seattle, WA.

Crater Lake Institute. "A Naturalist's View of Crater Lake Lodge." http://www.craterlakeinstitute.com/online-library/nature-notes/vol26-crater-lake-lodge-p.htm (accessed August 2016).

Crater Lake Institute. "Rustic Landscape." n.d. http://www.craterlakeinstitute.com/online-library/rustic-landscape/intro1.htm (accessed June 2015).

Crater Lake Institute. "Smith Brothers Chronological History of Crater Lake National Park." n.d. http://www.craterlakeinstitute.com/cultural-history/smith-brothers-chronology/b-garfield.htm (accessed June 2015).

Crater Lake Institute. "Soil Survey of Crater Lake National Park." n.d. http://www.craterlakeinstitute.com/online-library/crater-lake-soil-survey/complete.htm (accessed June 2015).

Deur, Douglas. *In the Footsteps of Gmukamps: A Traditional Use Study of Crater lake National Park and Lava Beds National Monument.* Seattle: National Park Service, 2008.

Gilbert, Cathy A. and Gretchen A. Luxenberg. *The Rustic landscape of Rim Village, 1927-1941*. Seattle: National Park Service Pacific West Region, 1990.

Good, Albert H. *Park and Recreation Structures.* Washington D.C.: National Park Service, 1938.

Greene, Linda W. *Historic Resource Study Crater Lake National Park, Oregon.* Branch of Cultural Resources, Alaska/Pacific Northwest/Western Team, Denver Service Center, National Park Service, United States Department of the Interior, Denver, Colorado, June 1984.

Harmon, Rick. *Crater Lake National Park: A History*. Corvallis: Oregon State University Press, 2002.

Hewes, L.I. *American Highway Practice.* New York: Wiley, 1942.

Historic American Engineering Record, "Addendum to Crater Lake National Park Road." HAER No. OR-107, 2003.

Kritzer, Kelly N. "Report on the Archeological Survey of the Proposed Garfield Peak Trail Improvements." United States Department of the Interior, Crater Lake National Park, Oregon, December 19, 2003.

Mark, Stephen R. *Trails: Administrative History of Crater Lake National Park.* Seattle: National Park Service, 2013.

Mark, Stephen R. and Jerry Watson. *Rim Drive Cultural Landscape Report.* Seattle: National Park Service, 2009.

McClelland, Linda. *Building the National Parks.* Baltimore: John Hopkins University Press, 1998.

National Park Service. *Civilian Conservation Corps Haleakala Crater Trails District Cultural Landscape Inventory.* National Park Service, 2009.

National Park Service. "Crater Lake National Park Weather." n.d. http://www.nps.gov/crla/planyourvisit/weather.htm (accessed June 2015).

National Park Service. *Munson Valley Cultural Landscape Inventory.* National Park Service, 2013.

National Park Service. *Park Structures and Facilities.* National Park Service, Branch of Planning, 1935.

National Park Service. *High Peaks Trail System Cultural Landscape Inventory.* National Park Service, 2009.

National Park Service. *Rehabilitate Rim Village Structures.* Design Analysis Package 274-06, National Park Service, 1999.

National Park Service. *Rim Village Cultural Landscape Inventory.* National Park Service, 2004.

National Park Service. *Westside Road Cultural Landscape Inventory.* National Park Service, 2006.

Oregon.com. "Garfield Peak." n.d. http://www.oregon.com/recreation/garfield-peak (accessed June 2015).

"Park Gets Small Sum," Klamath Falls *Evening Herald,* April 28, 1908.

Project Management Information System (PMIS), Crater Lake National Park, Component Completion Reports.

Robertson, W.E. *Crater lake National Park Report on 1931 Construction Activities.* San Francisco: National Park Service, 1931.

Steel, William G. "Annual Report." Letter to Secretary of the Interior. December 2, 1913

Unrau, Harlan D. *Administration History, Crater Lake National Park, Oregon*. United States Department of the Interior, National Park Service, 1987.

U.S. Department of the Interior. "Roads and Trails Map Sheet 3 of 3." Part of the *Master Plan, Crater Lake National Park*. National Park Service, Branch of Landscape Architecture, Western Office Division of Design and Construction, September 1955.

U.S. Department of the Interior. "Mission 66 for Crater Lake National Park." National Park Service, Crater Lake National Park, December 1956.

U.S. Department of the Interior. "Master Plan Narrative for Crater Lake National Park." National Park Service, April 1963.

USGS, Volcanoes Hazard Program. "Bathymetry and the Floor of Crater Lake." n.d. http://volcanoes.usgs.gov/volcanoes/crater_lake/crater_lake_geo_hist_137.html (accessed June 2015).

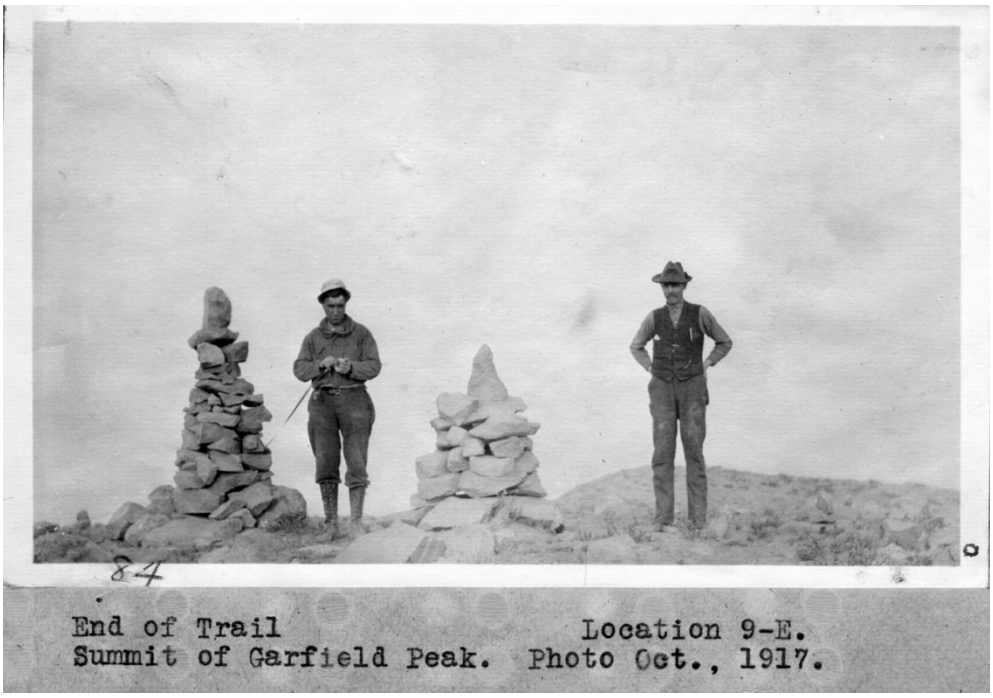
**Supplemental Information**
**Repeat Photographs**



Garfield Peak Trail, 1932 (Crater Lake National Park archives).



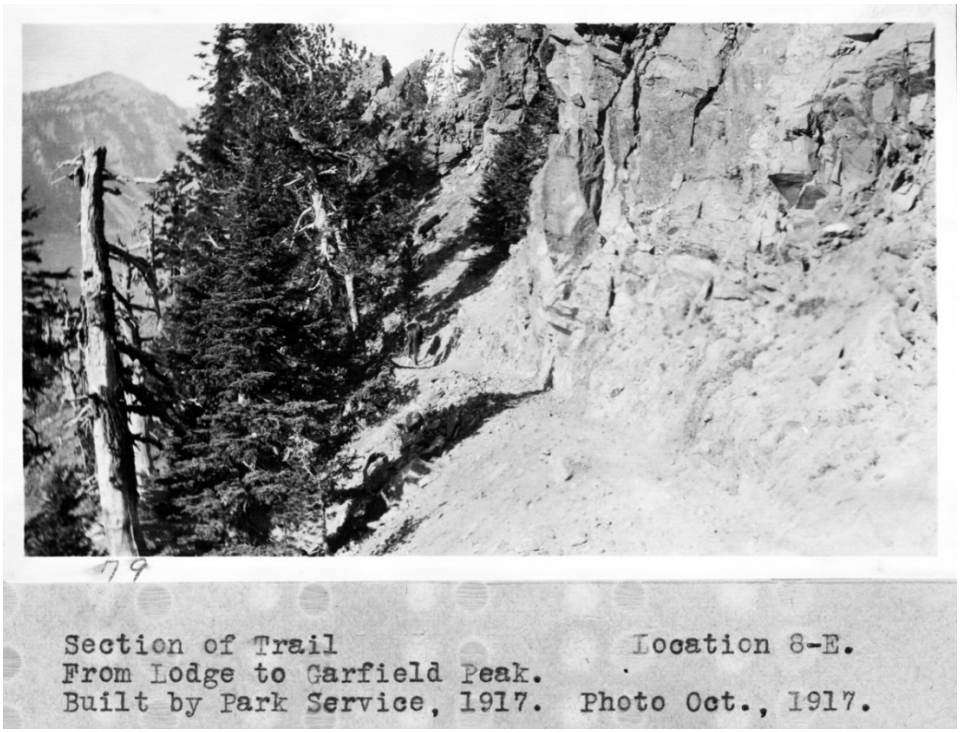
Garfield Peak Trail (PWR, June 2015).




Garfield Peak Trail and associated rock cairns, 1917 (Crater Lake National Park archives).



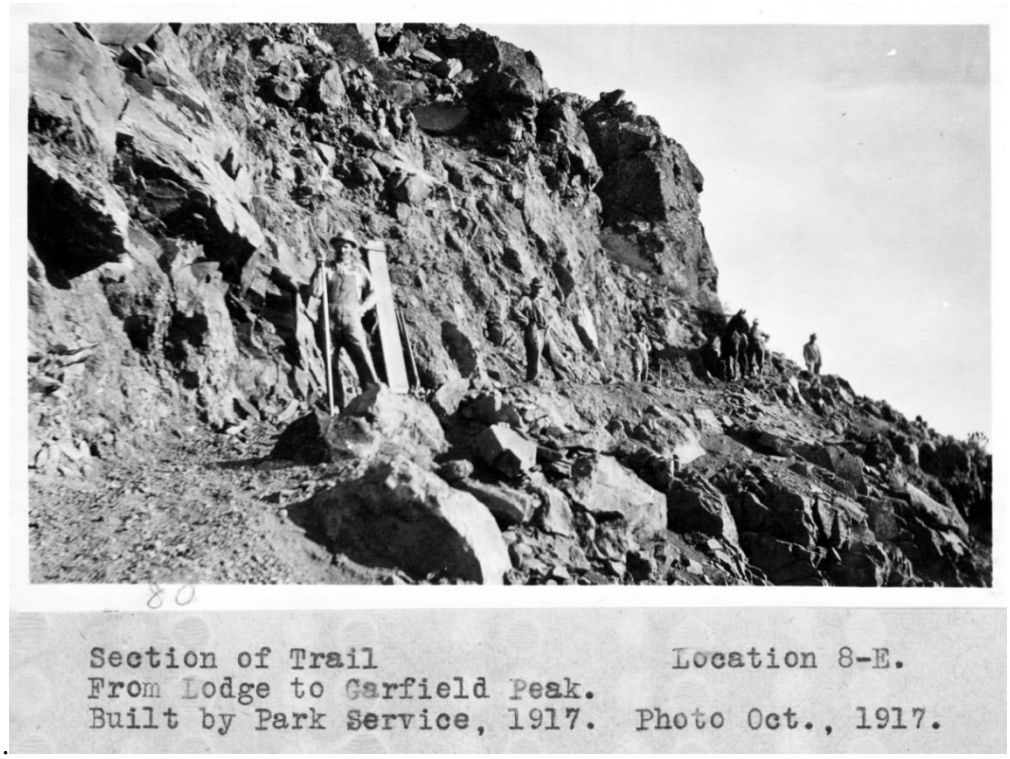
Garfield Peak Trail (PWR, June 2015).




Garfield Peak Trail, 1917 (Crater Lake National Park archives).



Garfield Peak Trail (PWR, June 2015).




Garfield Peak Trail, 1917 (Crater Lake National Park archives).



Garfield Peak Trail (PWR, June 2015)

# Crater Lake National Park, Oregon

Garfield Peak Trail

Cultural Landscapes Inventory
Pacific West Region
October 2016

Source: 2014 1-meter NAIP imagery

## Legend

- Crater Lake
- (3) benches (NC)
- roads
- trail
- paved path (outside of CL boundary)
- (2) handrails (NC)
- cultural landscape boundary
- Rim Village Historic District boundary
- A-N UTM points

Crater Lake Lodge
caldera
K
J
M
N
L
1st switchback
reservoir (C)
2nd switchback
3rd switchback
5th switchback
G
F
I
H
4th switchback
E
D
6th switchback
Garfield Peak
A
B
C
Rim Drive

N
0 250 500 Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

| Trail Name: | Garfield Peak Trail | | | | | | Date: | August 26, 2008 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Location #: | 64257 | | | | | | Inspector: | E. Thomas | | |
| User Type: | Hiker | Stock | ADA | Pets | Bicylces | Camping | Trail Length: | 8,108LF | Class: | 3 |
| YES or NO | YES | NO | NO | NO | NO | NO | Tread Width: | 3FT | Type: | One-Way |
| Trailhead & Features: | | Parking | ADA | Restrooms | Picnic | Road Signs | Interpretive | Cultural Landscape | | Water |
| YES or NO | | YES | YES | YES | YES | NO | YES | YES | | NO |
| Additional Notes: | Trailhead is located at Rim Village, east of the lodge at the end of the paved sidewalk. | | | | | | | | | |

| Distance | | Feature | Size / Qty. | | | Units | Asset # | Description / Condition | Total |
|---|---|---|---|---|---|---|---|---|---|
| Begin | End | | L | H | W | | | | |
| 0 | 8,108 | TR | 8,108 | 1 | 3 | SF | 581451 | Native soil tread. Trail starts where pavement ends. | 24,324 |
| 5 | 6 | S | 1 | 1 | 1 | EA | 1322877 | New interpretive panel (2013). | 1 |
| 8 | 9 | S | 1 | 1 | 1 | EA | n/a | Wood roof-top style sign "Restoring the Land" and small regulatory signs (No pets, No bikes). | 1 |
| 109 | 110 | WB | 1 | 1 | 1 | EA | 581414 | Soil. | 1 |
| 188 | 189 | WB | 1 | 1 | 1 | EA | 581414 | Wood. | 1 |
| 320 | 321 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 334 | 335 | WB | 1 | 1 | 1 | EA | 581414 | Wood. | 1 |
| 436 | 437 | WB | 1 | 1 | 1 | EA | 581414 | Soil. | 1 |
| 503 | 504 | WB | 1 | 1 | 1 | EA | 581414 | Soil. | 1 |
| 616 | 617 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 620 | 621 | FEAT | 1 | 1 | 1 | EA | n/a | NPS utilities water access point on left side of trail. | 1 |
| 645 | 646 | WB | 1 | 1 | 1 | EA | 581414 | Wood. | 1 |
| 717 | 718 | WB | 1 | 1 | 1 | EA | 581414 | Soil. | 1 |
| 780 | 781 | WB | 1 | 1 | 1 | EA | 581414 | Soil. | 1 |
| 875 | 922 | RE | 47 | 1 | 1 | LF | 1322875 | RT - Stone (dry). | 47 |
| 879 | 909 | HR | 30 | 4 | 1 | SF | 581461 | LT - Stone (wet) masonry with 5-8"dia. log beams painted brown. | 120 |
| 887 | 901 | CR | 14 | 5 | 1 | SF | 1322876 | Wood cribbing on outside edge of handrail, mostly burried. | 70 |
| 976 | 977 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 1,038 | 1,039 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 1,050 | 1,153 | RE | 103 | 1 | 1 | LF | 1322875 | Stone (dry). | 103 |
| 1,107 | 1,108 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 1,168 | 1,169 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |

| Distance | | Feature | Size / Qty. | | | Units | Asset # | Description / Condition | Total |
|---|---|---|---|---|---|---|---|---|---|
| Begin | End | | L | H | W | | | | |
| 1,207 | 1,208 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 1,311 | 1,312 | WB | 1 | 1 | 1 | EA | 581414 | Soil. | 1 |
| 1,361 | 1,362 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 1,365 | 1,377 | RW | 12 | 2 | 1 | SF | 1322878 | LT - Stone (dry). | 24 |
| 1,384 | 1,385 | WB | 1 | 1 | 1 | EA | 581414 | Soil. | 1 |
| 1,443 | 1,507 | RW | 64 | 2 | 1 | SF | 1322880 | RT - Stone (dry). | 128 |
| 1,456 | 1,486 | RW | 30 | 2 | 1 | SF | 1322882 | LT - Stone (dry). | 60 |
| 1,471 | 1,472 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 1,478 | 1,479 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 1,479 | 1,557 | RW | 78 | 2 | 1 | SF | 1322884 | RT - Stone (dry). | 156 |
| 1,515 | 1,695 | RW | 180 | 2 | 1 | SF | 1322885 | LT - Stone (dry). | 360 |
| 1,569 | 1,570 | S | 1 | 1 | 1 | EA | 581426 | Wood sign on treated wood post; "Shortcutting Causes Erosion / Stay on Trail". | 1 |
| 1,604 | 1,605 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 1,605 | 1,631 | HR | 26 | 4 | 1 | SF | 1322874 | LT - Stone (wet) masonry with 4-8"dia. log beams painted brown. | 104 |
| 1,614 | 1,664 | RW | 50 | 2 | 1 | SF | 1322894 | RT - Stone (dry). | 100 |
| 1,655 | 1,664 | RE | 9 | 1 | 1 | LF | 1322875 | LT - Stone (dry). | 9 |
| 1,700 | 2,200 | RW | 500 | 3 | 1 | SF | 1322896 | RT - Stone (dry). | 1,500 |
| 1,751 | 2,192 | RW | 441 | 3 | 1 | SF | 1322897 | RT - Stone (dry). | 1,323 |
| 1,999 | 2,000 | FEAT | 1 | 1 | 1 | EA | n/a | Stone stairs to the left side of the trail for the NPS utilities access to water reservoir. | 1 |
| 2,160 | 2,190 | RW | 30 | 2 | 1 | SF | 1322898 | RT - Stone (dry). | 60 |
| 2,172 | 2,173 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 2,186 | 2,187 | BE | 1 | 1 | 1 | EA | 581452 | Stone w/ 4sf sitting area. | 1 |
| 2,186 | 2,187 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 2,192 | 2,435 | RW | 243 | 3 | 1 | SF | 1322899 | LT - Stone (dry). | 729 |
| 2,273 | 2,274 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 2,279 | 2,465 | RW | 186 | 2 | 1 | SF | 1322902 | RT - Stone (dry). | 372 |
| 2,372 | 2,373 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 2,381 | 2,446 | RW | 65 | 2 | 1 | SF | 1322904 | RT - Stone (dry). | 130 |
| 2,495 | 2,496 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 2,548 | 2,549 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 2,607 | 2,608 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |

| Distance | | Feature | Size / Qty. | | | Units | Asset # | Description / Condition | Total |
|---|---|---|---|---|---|---|---|---|---|
| Begin | End | | L | H | W | | | | |
| 2,630 | 2,631 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 2,683 | 2,713 | RW | 30 | 2 | 1 | SF | 1322905 | RT - Stone (dry). | 60 |
| 2,714 | 2,847 | RW | 133 | 4 | 1 | SF | 1322906 | RT - Stone (dry). | 532 |
| 2,888 | 2,929 | RW | 41 | 2 | 1 | SF | 1322908 | RT - Stone (dry). | 82 |
| 2,932 | 2,933 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 2,958 | 2,959 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 2,962 | 3,311 | RW | 349 | 5 | 1 | SF | 1322910 | LT - Stone (dry). | 1,745 |
| 3,020 | 3,021 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 3,023 | 3,307 | RW | 284 | 5 | 1 | SF | 1322911 | RT - Stone (dry). | 1,420 |
| 3,053 | 3,063 | RW | 10 | 2 | 1 | SF | 1322912 | LT - Stone (dry). | 20 |
| 3,274 | 3,275 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,295 | 3,552 | RW | 257 | 3 | 1 | SF | 1322916 | LT - Stone (dry). | 771 |
| 3,352 | 3,353 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,374 | 3,375 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,396 | 3,397 | CD | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,417 | 3,418 | CD | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,445 | 3,446 | CD | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,475 | 3,476 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,509 | 3,510 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,527 | 3,528 | CD | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,562 | 3,582 | RW | 20 | 2 | 1 | SF | 1322918 | LT - Stone (dry). | 40 |
| 3,606 | 3,607 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,636 | 3,637 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,720 | 3,721 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,754 | 3,755 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,775 | 3,776 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,795 | 3,796 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,815 | 3,816 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,839 | 3,840 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,855 | 3,856 | CD | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 3,877 | 3,902 | RW | 25 | 2 | 1 | SF | 1322920 | RT - Stone (dry). | 50 |
| 3,952 | 3,971 | RW | 19 | 2 | 1 | SF | 1322924 | RT - Stone (dry). | 38 |
| 4,087 | 4,121 | RW | 34 | 2 | 1 | SF | 1322927 | RT - Stone (dry). | 68 |
| 4,211 | 4,257 | RW | 46 | 2 | 1 | SF | 1322928 | RT - Stone (dry). | 92 |

| Distance | | Feature | Size / Qty. | | | Units | Asset # | Description / Condition | Total |
|---|---|---|---|---|---|---|---|---|---|
| Begin | End | | L | H | W | | | | |
| 4,257 | 4,297 | RE | 40 | 1 | 1 | LF | 1322875 | RT - Stone (dry). | 40 |
| 4,297 | 4,393 | RW | 96 | 2 | 1 | SF | 1322931 | RT - Stone (dry). | 192 |
| 4,370 | 4,371 | S | 1 | 1 | 1 | EA | 581426 | Treaded wood sign post with missing sign. | 1 |
| 4,472 | 4,533 | RW | 61 | 3 | 1 | SF | 1322932 | RT - Stone (dry). | 183 |
| 4,474 | 4,492 | RW | 18 | 2 | 1 | SF | 1322934 | LT - Stone (dry). | 36 |
| 4,557 | 4,558 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 4,561 | 4,581 | RW | 20 | 2 | 1 | SF | 1322936 | LT - Stone (dry). | 40 |
| 4,754 | 4,755 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 4,931 | 4,932 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 5,077 | 5,134 | RE | 57 | 1 | 1 | LF | 1322875 | LT - Stone (dry). | 57 |
| 5,187 | 5,256 | RW | 69 | 3 | 1 | SF | 1322937 | LT - Stone (dry). | 207 |
| 5,272 | 5,273 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 5,353 | 5,387 | RE | 34 | 1 | 1 | LF | 1322875 | LT - Stone (dry). | 34 |
| 5,416 | 5,432 | RE | 16 | 1 | 1 | LF | 1322875 | RT - Stone (dry). | 16 |
| 5,445 | 5,492 | RE | 47 | 1 | 1 | LF | 1322875 | LT - Stone (dry). | 47 |
| 5,505 | 5,630 | RW | 125 | 2 | 1 | SF | 1322938 | RT - Stone (dry). | 250 |
| 5,722 | 5,742 | RW | 20 | 2 | 1 | SF | 1322940 | RT - Stone (dry). | 40 |
| 5,756 | 5,783 | RE | 27 | 1 | 1 | LF | 1322875 | RT - Stone (dry). | 27 |
| 5,788 | 5,798 | RE | 10 | 1 | 1 | LF | 1322875 | LT - Stone (dry). | 10 |
| 5,994 | 6,018 | RE | 24 | 1 | 1 | LF | 1322875 | LT - Stone (dry). | 24 |
| 6,046 | 6,126 | RW | 80 | 2 | 1 | SF | 1322942 | RT - Stone (dry). | 160 |
| 6,056 | 6,122 | RW | 66 | 3 | 1 | SF | 1322944 | LT - Stone (dry). | 198 |
| 6,196 | 6,197 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 6,241 | 6,242 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 6,278 | 6,279 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 6,278 | 6,314 | RE | 36 | 1 | 1 | LF | 1322875 | RT - Stone (dry). | 36 |
| 6,307 | 6,308 | WB | 1 | 1 | 1 | EA | 581414 | Soil. | 1 |
| 6,308 | 6,437 | RE | 129 | 1 | 1 | LF | 1322875 | LT - Stone (dry). | 129 |
| 6,331 | 6,332 | CD | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 6,431 | 6,432 | WB | 1 | 1 | 1 | EA | 581414 | Soil. | 1 |
| 6,436 | 6,437 | S | 1 | 1 | 1 | EA | 581426 | Wood sign on treated wood post; "Shortcutting Causes Erosion / Stay on Trail". | 1 |
| 6,436 | 6,629 | RE | 193 | 1 | 1 | LF | 1322875 | RT - Stone (dry). | 193 |
| 6,629 | 6,630 | BE | 1 | 1 | 1 | EA | 581452 | Stone. | 1 |

| Distance | | Feature | Size / Qty. | | | Units | Asset # | Description / Condition | Total |
|---|---|---|---|---|---|---|---|---|---|
| Begin | End | | L | H | W | | | | |
| 6,661 | 6,662 | BE | 1 | 1 | 1 | EA | 581452 | Stone. | 1 |
| 6,687 | 6,688 | BE | 1 | 1 | 1 | EA | 581452 | Stone. | 1 |
| 6,698 | 6,948 | RW | 250 | 2 | 1 | SF | 1322946 | RT - Stone (dry). | 500 |
| 6,981 | 6,982 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 7,015 | 7,016 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 7,101 | 7,102 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 7,152 | 7,170 | RW | 18 | 2 | 1 | SF | 1322948 | LT - Stone (dry). | 36 |
| 7,183 | 7,184 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 7,222 | 7,256 | RW | 34 | 2 | 1 | SF | 1322949 | LT - Stone (dry). | 68 |
| 7,278 | 7,378 | RW | 100 | 2 | 1 | SF | 1322952 | LT - Stone (dry). | 200 |
| 7,357 | 7,358 | SWB | 1 | 1 | 1 | EA | 581451 | | 1 |
| 7,362 | 7,449 | RW | 87 | 3 | 1 | SF | 1322953 | LT - Stone (dry). | 261 |
| 7,493 | 7,516 | RE | 23 | 1 | 1 | LF | 1322875 | RT - Stone (dry). | 23 |
| 7,519 | 7,532 | RW | 13 | 2 | 1 | SF | 1322954 | RT - Stone (dry). | 26 |
| 7,609 | 7,687 | RW | 78 | 3 | 1 | SF | 1322955 | RT - Stone (dry). | 234 |
| 7,735 | 7,795 | RW | 60 | 2 | 1 | SF | 132957 | RT - Stone (dry). | 120 |
| 7,835 | 8,106 | RE | 271 | 1 | 1 | LF | 1322875 | RT - Stone (dry). | 271 |
| 7,872 | 7,873 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 7,910 | 7,911 | WB | 1 | 1 | 1 | EA | 581414 | Rock. | 1 |
| 8,108 | 8,108 | END | 0 | | | | | End of trail where rock edge on right side of trail end | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |
| | | | 0 | | | | | | 0 |