

---

National Park Service  
Cultural Landscapes Inventory  
2001



Castle Crest Wildflower Trail  
Crater Lake National Park

---

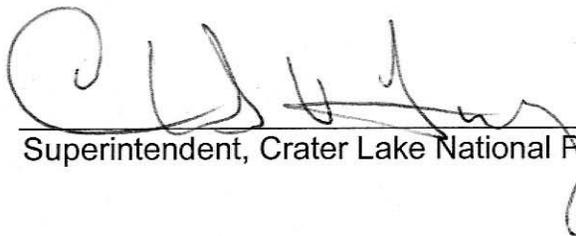
**National Park Service  
Cultural Landscape Inventory  
2001**

**Castle Crest Wildflower Trail  
Crater Lake National Park**

Crater Lake National Park concurs with the management category and condition assessment identified by this CLI Level II report, as given below:

MANAGEMENT CATEGORY C:           **May be preserved and maintained**

CONDITION ASSESSMENT:           **Fair**

  
\_\_\_\_\_  
Superintendent, Crater Lake National Park

5/10/02  
\_\_\_\_\_  
Date

Please return to:

Susan Dolan  
Historical Landscape Architect  
National Park Service  
Columbia Cascades Support Office  
909 First Avenue  
Seattle, WA 98104-1060

**CASTLE CREST WILDFLOWER TRAIL**  
**CRATER LAKE NATIONAL PARK**

---

**Oregon SHPO Eligibility Determination**

**Section 110 Actions Requested:**

- 1) SHPO concurrence with determination of eligibility of the proposed Castle Crest Wildflower Garden Trail for listing on the National Register,
- 2) SHPO concurrence with the Setting description, and
- 3) SHPO concurrence with the addition of structures to the List of Classified Structures (LCS). (See chart below)

**Eligibility:**

**I concur**, \_\_\_\_\_ **I do not concur** with the proposed Manzanita Lake Naturalist's Services Historic District's eligibility for listing on the National Register of Historic Places.

**Setting:**

**I concur**, \_\_\_\_\_ **I do not concur** that the setting as described in the Cultural Landscape Inventory (CLI) contributes to the Castle Crest Wildflower Trail (See the following landscape characteristics in the Analysis and Evaluation: land use, vegetation, natural systems and features, spatial organization, and circulation patterns.)

**Contributing Resources:**

Based on the information provided in the CLI, the following previously unevaluated structures have been identified as contributing to the Castle Crest Wildflower Trail. (See the following landscape characteristics in the Analysis and Evaluation: buildings and structures, and small-scale features.):

LCS number	Structure Name	Concur	Do Not Concur
(No number)	Castle Crest Wildflower Trail	✓	
(No number)	Masonry Stone Steps	✓	
(No number)	Stepping Stones	✓	

**Non-contributing Resources:**

Based on the information provided in the CLI, the following structures have been identified as not contributing to the Castle Crest Wildflower Trail. (See the following landscape characteristics in the Analysis and Evaluation: buildings and structures, and small-scale features.):

LCS number	Structure Name	Concur	Do Not Concur
N/A	Eight wooden interpretive posts	✓	
N/A	Three rustic bridges, reconstructed from historic designs.	✓	
N/A	Two rustic benches	✓	
N/A	Trailhead sign	✓	

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

*James Hamrick*

Oregon State Historic Preservation Officer

*12 Aug 2004*

Date

Please return forms to the attention of:

*Erica Owens*

*CLI Co-coordinator*

*National Park Service*

*Pacific West Regional Office-Seattle*

*909 1<sup>st</sup> Ave, Floor 5*

*Seattle, WA 98104*

*(206) 220-4128*

*erica\_owens@nps.gov*

---

## Table of Contents

	Part 1
Executive Summary .....	1
Park Information.....	3
Property Level and CLI Number .....	3
Inventory Summary.....	3
Landscape Description .....	4
CLI Hierarchy Description .....	5
Location Map .....	6
Boundary Description.....	7
Regional Context .....	7
Site Plan.....	8
Chronology.....	9
Statement of Significance .....	11
History .....	Part 2a
Pre-1929 .....	1
1929 .....	1
	Part 2b
1930s .....	1
1940s – present .....	2
Analysis and Evaluation .....	Part 3a
Summary .....	1
Land Use.....	1
Vegetation.....	3
Natural Systems and Features.....	7
	Part 3b
Spatial Organization.....	1
Circulation .....	3
Small Scale Features .....	7
Management Information .....	Part 4
Descriptive and Geographic Information .....	1
Boundary UTM.....	1
National Register Information.....	1
National Historic Landmark Information .....	2
Cultural Landscape Type and Use .....	2
Ethnographic Information .....	2
General Management Information .....	4
Condition Assessment and Impacts.....	4
Stabilization Measures .....	5
Agreements, Legal Interest, and Access .....	6
Treatment.....	7
Approved Treatment Cost .....	7
Stabilization Costs.....	7
Documentation Assessment and Checklist.....	9

---

---

Appendix

Bibliography .....	11
Supplemental Information .....	17

## Executive Summary

### General Introduction to the CLI

The Cultural Landscapes Inventory (CLI) is a comprehensive inventory of all historically significant landscapes within the National Park System. This evaluated inventory identifies and documents each landscape's location, physical development, significance, National Register of Historic Places eligibility, condition, as well as other valuable information for park management. Inventoried landscapes are listed on, or eligible for, the National Register of Historic Places, or otherwise treated as cultural resources. To automate the inventory, the Cultural Landscapes Automated Inventory Management System (CLAIMS) database was created in 1996. CLAIMS provides an analytical tool for querying information associated with the CLI.

The CLI, like the List of Classified Structures (LCS), assists the National Park Service (NPS) in its efforts to fulfill the identification and management requirements associated with Section 110(a) of the National Historic Preservation Act, NPS Management Policies (2001), and Director's Order #28: Cultural Resource Management (1998). Since launching the CLI nationwide, the NPS, in response to the Government Performance and Results Act (GPRA), is required to report on an annual performance plan that is tied to 6-year strategic plan. The NPS strategic plan has two goals related to cultural landscapes: condition (1a7) and progress on the CLI (1b2b). Because the CLI is the baseline of cultural landscapes in the National Park System, it serves as the vehicle for tracking these goals.

For these reasons, the Park Cultural Landscapes Program considers the completion of the CLI to be a servicewide priority. The information in the CLI is useful at all levels of the park service. At the national and regional levels it is used to inform planning efforts and budget decisions. At the park level, the CLI assists managers to plan, program, and prioritize funds. It is a record of cultural landscape treatment and management decisions and the physical narrative may be used to enhance interpretation programs.

Implementation of the CLI is coordinated on the Region/Support Office level. Each Region/Support Office creates a priority list for CLI work based on park planning needs, proposed development projects, lack of landscape documentation (which adversely affects the preservation or management of the resource), baseline information needs and Region/Support office priorities. This list is updated annually to respond to changing needs and priorities. Completed CLI records are uploaded at the end of the fiscal year to the National Center for Cultural Resources, Park Cultural Landscapes Program in Washington, DC. Only data officially entered into the National Center's CLI database is considered "certified data" for GPRA reporting.

The CLI is completed in a multi-level process with each level corresponding to a specific degree of effort and detail. From Level 0: Park Reconnaissance Survey through Level II: Landscape Analysis and Evaluation, additional information is collected, prior information is refined, and decisions are made regarding if and how to proceed. The relationship between Level 0, I, and II is direct and the CLI for a landscape or component landscape inventory unit is not considered finished until Level II is complete.

A number of steps are involved in completing a Level II inventory record. The process begins when the CLI team meets with park management and staff to clarify the purpose of the CLI and is followed by historical research, documentation, and fieldwork. Information is derived from two efforts: secondary sources that are usually available in the park's or regions' files, libraries, and archives and on-site landscape investigation(s). This information is entered into CLI database as text or graphics. A park report is generated from the database and becomes the vehicle for consultation with the park and the

## SHPO/TPO.

Level III: Feature Inventory and Assessment is a distinct inventory level in the CLI and is optional. This level provides an opportunity to inventory and evaluate important landscape features identified at Level II as contributing to the significance of a landscape or component landscape, not listed on the LCS. This level allows for an individual landscape feature to be assessed and the costs associated with treatment recorded.

The ultimate goal of the Park Cultural Landscapes Program is a complete inventory of landscapes, component landscapes, and where appropriate, associated landscape features in the National Park System. The end result, when combined with the LCS, will be an inventory of all physical aspects of any given property.

## Relationship between the CLI and a CLR

While there are some similarities, the CLI Level II is not the same as a Cultural Landscape Report (CLR). Using secondary sources, the CLI Level II provides information to establish historic significance by determining whether there are sufficient extant features to convey the property's historic appearance and function. The CLI includes the preliminary identification and analysis to define contributing features, but does not provide the more definitive detail contained within a CLR, which involves more in-depth research, using primary rather than secondary source material.

The CLR is a treatment document and presents recommendations on how to preserve, restore, or rehabilitate the significant landscape and its contributing features based on historical documentation, analysis of existing conditions, and the Secretary of the Interior's standards and guidelines as they apply to the treatment of historic landscapes. The CLI, on the other hand, records impacts to the landscape and condition (good, fair, poor) in consultation with park management. Stabilization costs associated with mitigating impacts may be recorded in the CLI and therefore the CLI may advise on simple and appropriate stabilization measures associated with these costs if that information is not provided elsewhere.

When the park decides to manage and treat an identified cultural landscape, a CLR may be necessary to work through the treatment options and set priorities. A historical landscape architect can assist the park in deciding the appropriate scope of work and an approach for accomplishing the CLR. When minor actions are necessary, a CLI Level II park report may provide sufficient documentation to support the Section 106 compliance process.

## Park Information

**Park Name:** Crater Lake National Park  
**Administrative Unit:** Crater Lake National Park  
**Park Organization Code:** 9319  
**Park Alpha Code:** CRLA

## Property Level And CLI Number

**Property Level:** Landscape  
**Name:** Castle Crest Wildflower Trail  
**CLI Identification Number:** 400189  
**Parent Landscape CLI ID Number:** 400189

## Inventory Summary

**Inventory Level:** Level II

### Completion Status:

#### Level 0

Date Data Collected - Level 0: 1/1/1992  
Level 0 Recorder: CCSO  
Date Level 0 Entered: 1/1/1992  
Level 0 Data Entry Recorder: CCSO  
Level 0 Site Visit: Yes

#### Level I

Date Level I Data Collected: 10/18/2001  
Level I Data Collection: Erica Owens  
Date Level I Entered: 12/14/2001  
Level I Data Entry Recorder: Erica Owens  
Level I Site Visit: Yes

#### Level II

Date Level II Data Collected: 10/18/2001  
Level II Data Collection: Erica Owens  
Date Level II Entered: 12/14/2001  
Level II Data Entry Recorder: Erica Owens  
Level II Site Visit: Yes  
Date of Concurrence: 5/10/2002

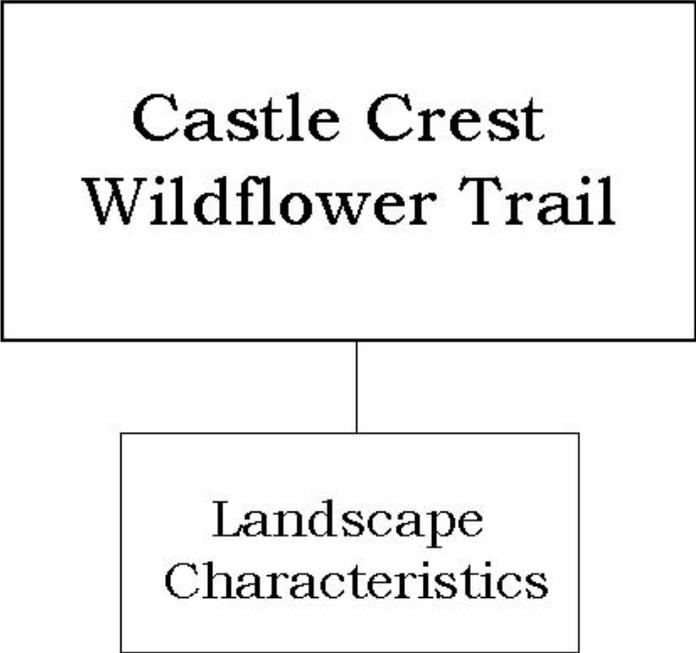
## Landscape Description

Castle Crest Wildflower Trail is a landscape that includes a meadow below Castle Crest Ridge and a 0.41 mile interpretive trail that loops around the clearing. The site is located a 0.25 mile east of Park Headquarters at Munson Valley. Originally built in 1929, the trail was meant to provide visitor access to and interpretation of one of the most abundant wildflower displays within close proximity to the Park Headquarters. The wildflower meadow or “garden,” as it was referred to historically, is bowl-shaped – enclosed on the north and east by Castle Crest Ridge towering 2,000’ above, and on the south and west by low moraines. Five springs create moist conditions within the meadow that support a prolific wildflower community. These springs converge into a stream (a tributary of Munson Creek), that is traversed by the trail at three points via footbridges. The Castle Crest Wildflower Trail can be reached by walking a ¼-mile access trail from Park Headquarters or by parking at the trailhead.

The period of significance of Castle Crest Wildflower Trail is 1929-1938, beginning with the date the trail was designed and constructed, ending at the date the last major documented changes were made to its alignment. Several landscape characteristics are still intact from the period of significance and thus contribute to the historic integrity of the trail. These characteristics are land use, natural systems and features, spatial organization, circulation, vegetation, and small-scale features.

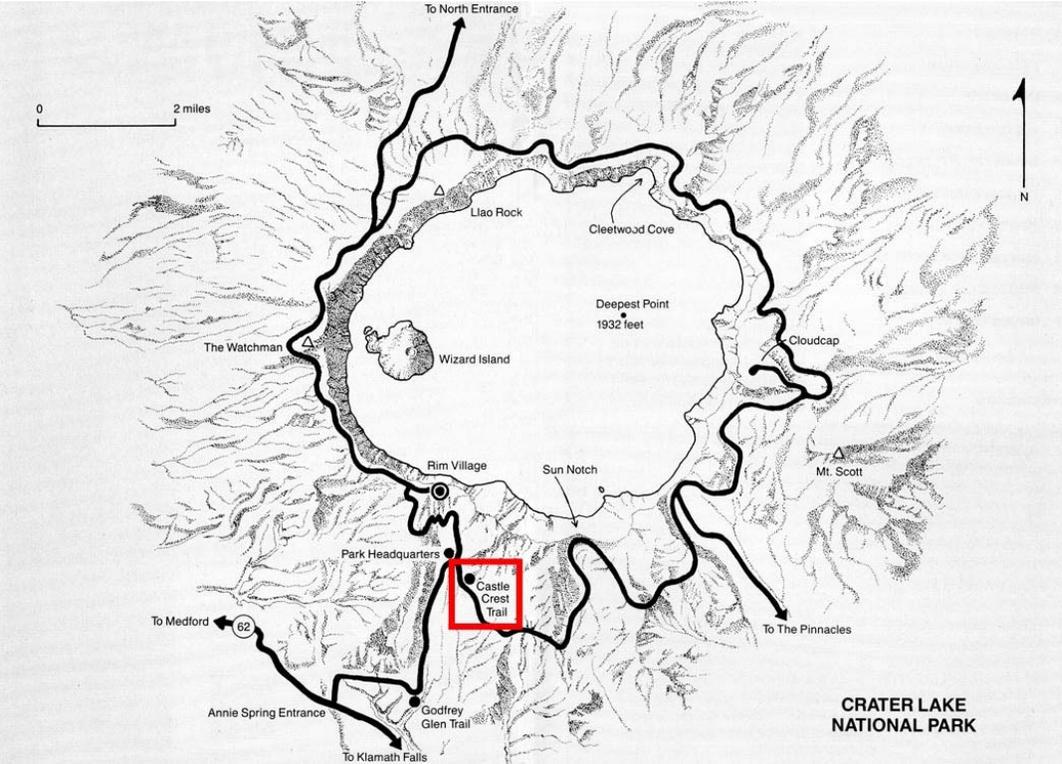
## Cultural Landscapes Inventory Hierarchy Description

Castle Crest Wildflower Trail is a cultural landscape within Crater Lake National Park. The site is composed of six landscape characteristics that contribute to its historic integrity. These characteristics are land use, vegetation, natural systems and features, spatial organization, circulation, and small-scale features.



*CLI hierarchy diagram showing the Castle Crest Wildflower Trail, a cultural landscape composed of landscape characteristics, which contribute to its historic integrity. (CCSO 2001)*

## Location Map



The Castle Crest Wildflower Trail is located within the boundaries of Crater Lake National Park, Oregon. (Adapted from Decker and Hazlet, 1988)

## Boundary Description

The boundary of Castle Crest Wildflower Trail is determined by the historical importance of the wildflower meadow or “garden” itself as the primary purpose of the trail and a specific interpretive technique used during the period of significance. This landscape includes the meadows and forested areas contained within the looped Castle Crest Trail and is bounded by a line that extends five feet from the centerline beyond the outer edge of the trail.

## Regional Context

### Physiographic Context

At an elevation of 6300', the Castle Crest Trail is located within the transition belt of two physiographic zones: the Canadian zone and the Hudsonian zone (USGS 1988; “Nature Notes” August 1929). The Canadian zone extends from approximately 5,500' to 6,250', and consists of a forest composed mainly of Lodgepole pine and Western white pine. The Hudsonian zone extends from approximately 6,250' up to the park's highest elevations. This zone is defined by Mountain hemlock in the lower elevations and Whitebark pine in the higher elevations (Sharpe 1959, 3).

The Castle Crest Wildflower Trail loops through a moist, spring-fed meadow that supports over 200 species of wildflowers (“Nature Notes” August 1929). Some of these flowers include: Gorman buttercup (*Ranunculus gormanii*), Shooting star (*Dodecatheon alpinum*), American bistort (*Polygonum bistortoides*), Scarlet paintbrush (*Castilleja miniata*), Columbia monkshood (*Aconitum columbianum*), Pacific bleedingheart (*Dicentra formosa*), Arrowleaf groundsel (*Senecio triangularis*), Lewis monkeyflower (*Mimulus lewisii*), Mountain violet (*Viola purpurea* var. *venosa*), Blue stickseed (*Hackelia micrantha*), Common pearly-everlasting (*Anaphalis margaritacea*), Spreading phlox (*Phlox diffusa*), and Sulfur eriogonum (*Eriogonum umbellatum*) (“A Trail Guide to Castle Crest” c. 1983). Shrubs such as Eastwood willow (*Salix eastwoodiae*) and Pacific red elder (*Sambucus racemosa* var. *microbotrys*) are grouped among the flowers. Trees representative of both the Canadian and Hudsonian zones surround the edges of the meadow.

### Political Context

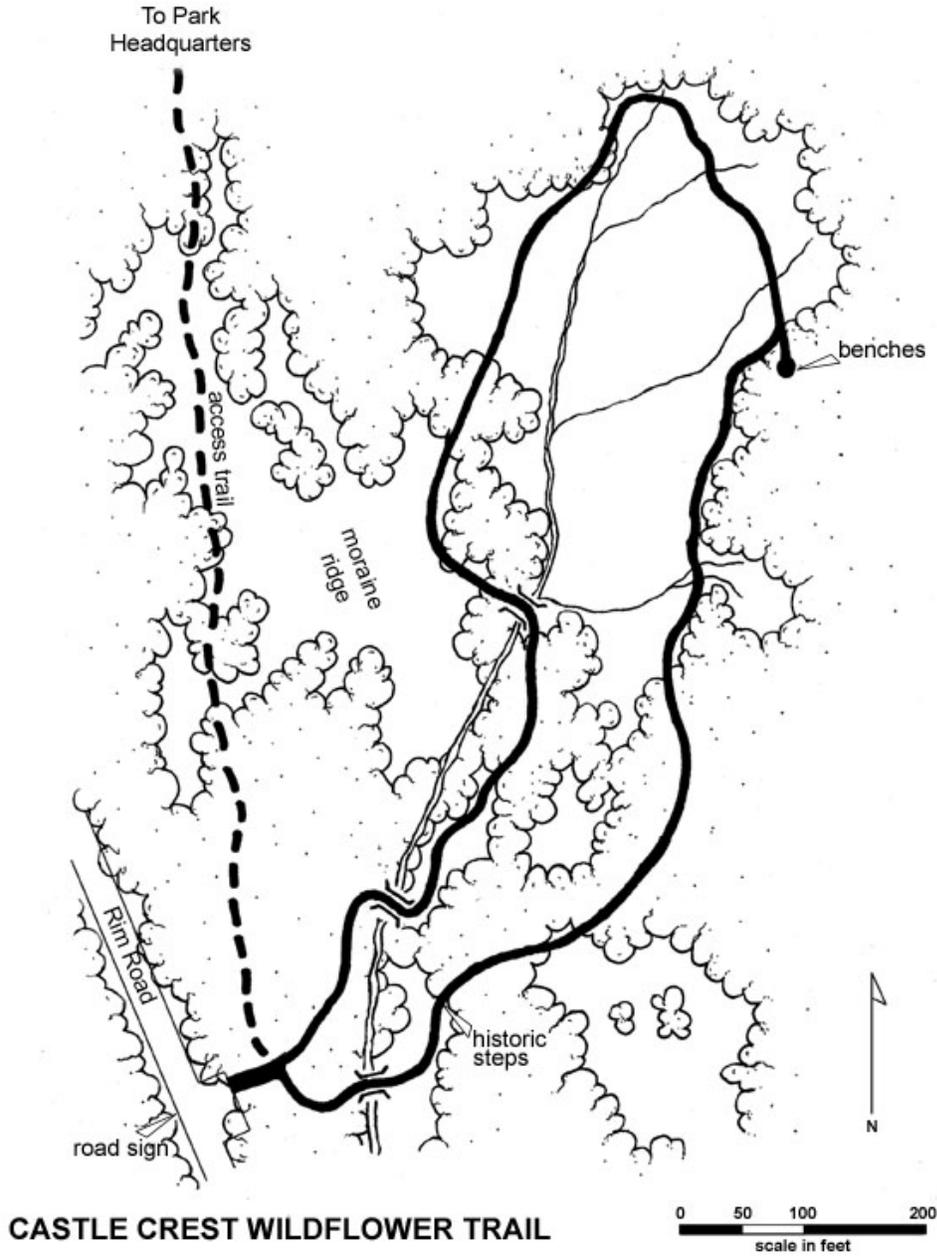
Castle Crest Wildflower Trail is located within the boundaries of Crater Lake National Park, which is bordered by Umpqua National Forest, Winema National Forest, and Rogue River National Forest lands.

### Cultural Context

Castle Crest Wildflower Trail is located approximately 0.25 miles east of Park Headquarters and the Steele Visitor Information Center. The information center provides amenities for park visitors such as a gift shop, small auditorium, post office, information desk, and restrooms. The Castle Crest Wildflower Trail can be reached by walking along the 0.25 mile access trail that begins across the Munson Valley Road (Route 4) from the information center. Visitors can also park their vehicles in a designated parking area at the head of Castle Crest Wildflower Trail, just off Rim Drive.

# Site Plan

2001 site diagram showing the alignment of the Castle Crest Trail. (CCSO, 2001)



## Chronology

Year	Event	Description
1917 AD	Established	Superintendent Sparrow observed that wildflower populations continued to be low in the park as a result of sheep grazing prior to 1902 (Unrau 1988, 413).
1920 - 1925 AD	Established	By early 1920s, Superintendent Thomson observed that wildflower populations had increased dramatically due to park restrictions on sheep grazing (Unrau 1988, 414).
1929 AD	Designed	Plans for the development of a “Wildflower Garden and Nature Trail” were completed (Homuth, Park Naturalist Report 1929).
1929 AD	Built	Trail was constructed through a meadow below Castle Crest, complete with five log bridges, six rustic benches, and three dozen aluminum labels (Superintendent’s Annual Report 1929).
1930 AD	Altered	Trail was repaired and rebuilt in several places (Wynd, Park Naturalist Report 1930).
1938 AD	Altered	Trail improvements by the CCC included: rebuilding trail through the garden, establishment of trail entrance along new road, removal of cross trails and telephone line, repair of bridges, replacement of flagstones (Doerr, Park Naturalist Report 1938).
1949 AD	Altered	Educational staff planned to redesign trail signs and rewrite interpretive materials for Castle Crest Trail following Lassen Volcanic National Park’s successful example (Ruhle, Park Naturalist Report 1949).
1959 AD	Altered	New plastic plant labels were used to identify plants on all self-guided trails and a new mimeographed guide for Castle Crest Garden Trail was introduced (Unrau 1988, 660).

1962 AD	Altered	Castle Crest Nature Trail guidebook told the story of “The Life of a Forest”. Twenty-nine numbered posts corresponded to the booklet (“Castle Crest Nature Trail”; Unrau 1988, 662).
1983 AD	Altered	A new trail guidebook was produced, which is still used in 2002. Eight numbered posts correspond to descriptions in the booklet that focus on interpretation of plant communities and processes. (“A Trail Guide to Castle Crest” 1983)
1985 AD	Altered	A new trailhead exhibit was designed for Castle Crest Trail. Name was changed from “Castle Crest Wildflower Garden” to “Castle Crest Wildflower Trail”, since “garden” suggested that flowers were cultivated in meadow (“Parkwide Wayside Exhibit Plan” 1985).

## Statement Of Significance

The Castle Crest Wildflower Trail at Crater Lake National Park is a landscape that is significant at a state level. It includes a 0.41-mile interpretive trail that loops through a wildflower meadow just below Castle Crest Ridge. Built in 1929, this landscape is associated with the events of early National Park Service (NPS) educational program development of the 1920s and 1930s (Criterion A). It is an example of popular techniques used to interpret a park's natural resources during this period, incorporating both a self-guided nature trail and a wildflower garden. The Castle Crest Wildflower Trail is significant as the first trail and wildflower garden planned, constructed, and used specifically for interpretational purposes as part of Crater Lake National Park's educational program.

The period of significance for Castle Crest Wildflower Trail is 1929-1938, beginning from the date the trail was designed and constructed and ending in the year the last major documented changes were made to its alignment. After construction in 1929, the trail was maintained and sections were rebuilt or realigned as needed (Wynd, Park Naturalist Report 1930). The Civilian Conservation Corps (CCC), an Emergency Conservation Work program of the New Deal Era, completed the last major documented changes to the trail in 1938 (Doerr, Park Naturalist Report 1938; "Record of Improvements" 1945).

The Castle Crest Wildflower Trail was built as part of the educational program at Crater Lake. The early development of this program was highly influenced by Dr. John C. Merriam, who was appointed in 1928 by the Secretary of the Interior to a committee to study educational possibilities of the national parks (Bryant and Atwood 1932, 51). From 1928 to 1945, Merriam developed the educational program at Crater Lake, using the park as experimental grounds for program development. Merriam intended Crater Lake's educational program to become an example for all parks to follow (Bryant and Atwood 1932, 30-31; Mark, letter 1993). Merriam established the interpretational foundations of the education program by determining the park's interpretive theme: the processes of volcanism and its influence in the creation of the Crater Lake landscape (Mark, letter 1993). During this time, eleven nature trails were built specifically for interpretation purposes. These trails were differentiated from bridle trails and fire access trails in the park master plans (Mark, letter 1993). The Castle Crest Wildflower Trail, built in 1929 to access and interpret the Castle Crest meadow or "garden," was the first of these interpretative trails to be completed by the naturalist staff. Nine of the original eleven trails are still maintained and continue to be used to interpret various natural resources of Crater Lake presently.

The Castle Crest Wildflower Trail was not only connected to the early development of Crater Lake's education program, it was also a local manifestation of a greater NPS educational movement. Since the National Park Service's inception, interpretation played a strong role in park planning and management goals. Education was considered by many park managers to be the "highest use of national parks" (Bryant and Atwood 1932, 3). Merriam supported this view when he wrote:

"While the national parks serve in an important sense as recreation areas, their primary uses extend far into that fundamental education which concerns real appreciation of nature. Here beauty in its truest sense receives expression and exerts its influence along with recreation and formal education. To me the parks are not merely places to rest and exercise and learn. They are regions where one looks through the veil to meet the realities of nature and the unfathomable power behind it" (Bryant and Atwood 1932, 3).

With the developing role of education in early NPS history, a National Educational Committee was established for the National Parks in 1918. The actions of this committee, combined with privately funded lectures and fieldtrips conducted in Yosemite National Park, sparked the establishment of NPS funded education and interpretational programs within the parks (Bryant and Atwood 1932, 47). Between

1923 and 1925, Glacier, Grand Canyon, Mount Rainier, Rocky Mountain, Sequoia, and Zion National Parks established their educational programs (Bryant and Atwood 1932, 49). Crater Lake's program began officially in 1926 with the appointment of acting park naturalist Dr. Loye Miller, a naturalist from the University of California at Los Angeles (Unrau 1988, 635). As these educational services were placed on a permanent basis in the early 1930s, the educational staffs of each park incorporated a variety of interpretive tools into their programs. Some of these methods included: guided hikes and auto caravans, nature trails, historic trails, wildlife displays, lectures/campfire talks, museums/observation stations, and wildflower displays (Bryant and Atwood 1932, 8-18).

Castle Crest Wildflower Trail, originally called the "Castle Crest Garden," is one example of the wild flower displays that were created in several national parks in the 1920s and 1930s. Wildflowers were typically displayed at the parks using two main techniques: 1) a cut flower display, labeled and maintained at the park's museum, naturalist's office, or lodge, or 2) a labeled wildflower garden (Bryant and Atwood 1932, 14). Wildflower gardens were praised by Director Horace Albright in his annual report for enabling visitors to "see and enjoy as many varieties as possible of the exquisite wild flowers that abound[ed] in out-of-the-way places" (McClelland 1998, 271). These wildflower gardens were usually created by either transplanting native flowers to a designed garden site or into an existing meadow to increase the density and variety of blooming plants (Bryant and Atwood 1932, 14). Alternatively, some wildflower gardens made use of existing meadows by simply adding paths. In all cases, the flora was labeled to facilitate plant identification by visitors (Bryant and Atwood 1932, 14). Crater Lake's Castle Crest Wildflower Trail was one of the first wildflower gardens created in the national park service. Other early wildflower gardens were also created at Yosemite, Yellowstone, Sequoia, Grand Canyon, and Glacier National Parks – all constructed by 1932 (Bryant and Atwood 1932, 14). Many of these early gardens, such as the ones at Yosemite, Grand Canyon, Sequoia, and Glacier National Parks, no longer exist.

The Castle Crest Wildflower Trail still remains today and has historic integrity. The landscape characteristics that contribute to its historic integrity are land use, vegetation, natural systems and features, spatial organization, circulation, and small-scale features. This site is one of the few remaining gardens representative of the early period of national park development and an early interpretive form by the NPS. Therefore, Castle Crest Wildflower Trail is a significant landscape at a state level. A further context study could determine national significance.

## Physical History

### Pre-1929

The Castle Crest Wildflower Trail is an educational landscape created in 1929 to showcase the prolific wildflower displays at Crater Lake National Park. However, before the park's creation in 1902, the area within the current park boundaries was used for sheep grazing by "tramp" (itinerant) sheepmen who were often based some distance away, which negatively impacted wildflower population levels. In 1917 Superintendent Sparrow commented upon the low levels of wildflowers in the park stating, "...the sheep that ranged over this region before the creation of the park hav[e] utterly destroyed the wild-flower growth" (Unrau 1988, 413). Wildflower populations rebounded by the 1920s, however, due to grazing restrictions imposed by the National Park Service after its creation in 1916 (Unrau 1988, 414).

In 1926, the education program at Crater Lake was formed as part of a greater educational movement of the National Park Service. By 1928, wildflower populations had significantly increased within the park and botanical research became one of the emphases of the newly established program. In this year, Park Naturalist Earl U. Homuth noted that the flora of Crater Lake needed to be more thoroughly studied, and F. Lyle Wynd, then a student from the University of Oregon, began working on plant collection within the park that summer (Homuth, "Nature Notes" July 1928). Botanical research continued from 1933-1939 with the work of Elmer I. Applegate, the part-time curator of the Dudley Herbarium at Stanford University.

### 1929

In response to the growth of both scientific and public interest to learn about natural resources in National Parks, Crater Lake took advantage of the increasing abundance of wildflowers as an educational tool. Crater Lake's educational program built its first interpretive trail and wildflower garden in 1929 below the steep slopes of Castle Crest. This site was chosen for its exceptional, naturally occurring wildflower display and close proximity to Park Headquarters (Constance 1931; "Nature Notes" September 1929). Through its proximity to Headquarters and to Rim Road, the Castle Crest Wildflower Trail was closely associated with the visitor's arrival experience and a relationship was maintained between the trail and the interpretive programs occurring at Munson Valley.

In 1929, two articles were written by the naturalist staff in Crater Lake National Park's seasonal publication, "Nature Notes". In these articles, the meadow was described as enclosed by the towering slopes of Castle Crest on the north and east, and by a "series of moraines" on the south and western sides. The meadow was also fed by several springs. Flora was limited along Rim due to erosion and compaction, but comparatively profuse in the lower, moist valleys and meadows. By 1929, over 200 species of wildflowers had been identified in the Castle Crest meadow, with the Lewis monkey flower (*Mimulus lewisii*) being the most spectacular. The meadow's elevation at approximately 6300' placed it between the Canadian and Hudsonian vegetative zones, thus representatives of both forest types were present around the meadow. The meadow also supported a variety of wildlife. Some of the animals observed in 1929 included marmots, bears, birds, butterflies, and other insects ("Nature Notes" August

1929 and September 1929).

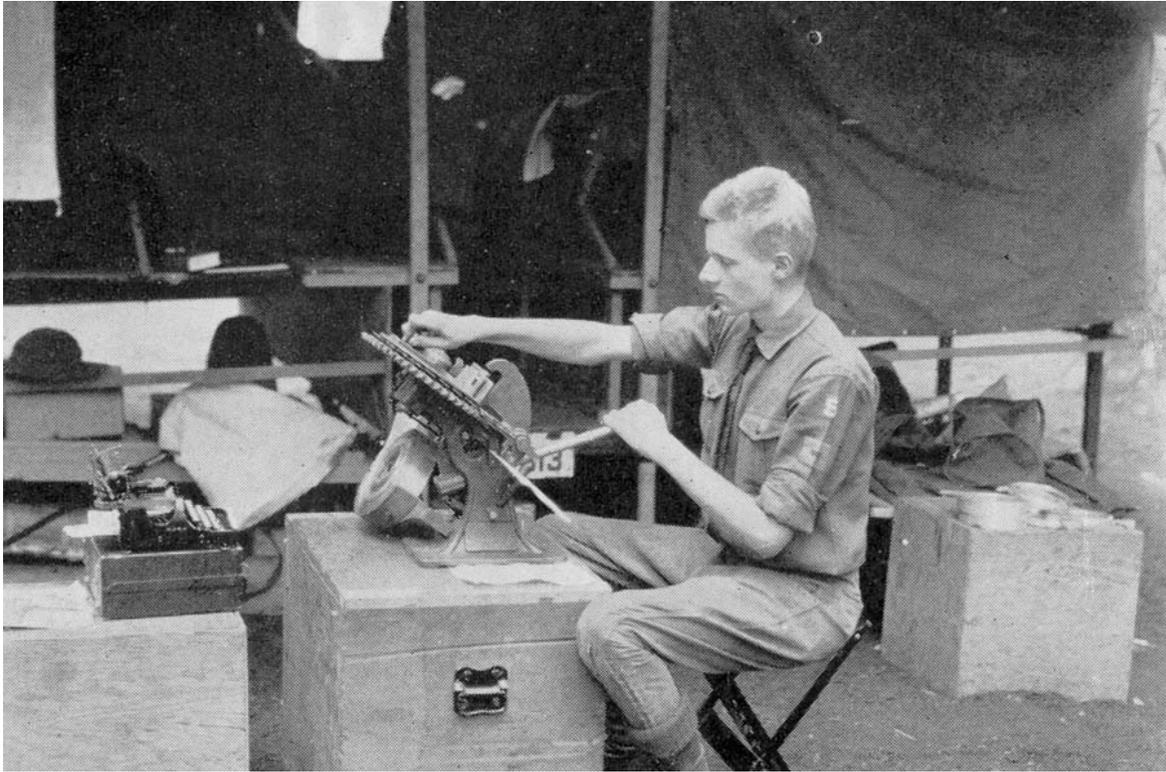
The plans for the garden and trail were designed and implemented in a short time span. The project was first mentioned in a 1929 report entitled, "Plan of Administration of the Educational Activities of Crater Lake National Park". According to Park Naturalist Homuth in July 1929, "Complete plans for the development of a Wildflower Garden and Nature Trail have been made" (Homuth, Report of Education Division 1929). By August, he described the completed project in a memorandum to Chief Naturalist Ansel F. Hall: "A trail was constructed through a natural flower garden, near Headquarters, at a cost of approximately \$140. A variety of habitats are represented, and more than 200 species of flowers have been listed" (Homuth, Park Naturalist Report August 23, 1929).

The trail was aligned to capture the best views of the wildflowers. Described in educational staff's seasonal publication, "Nature Notes", the Castle Crest Wild Flower Garden was "developed with a path displaying to best advantage the various habitats in which the variety of wild flowers grow in particular profusion" ("Nature Notes" September 1929). The trail passed through "a variety of habitats including talus slopes, dry pumice slopes, moist cliffs, forest and swamps" ("Nature Notes" August 1929).

The completed trail included five log bridges, six rustic benches, and three-dozen aluminum labels (Homuth, Park Naturalist Report August 23, 1929; Homuth, Park Naturalist Report August 28, 1929). The original locations of these bridges and benches are currently unknown, but one article from a 1929 issue of "Nature Notes" states that several benches were placed beside the stream ("Nature Notes" September 1929). The text for the labels was researched and written by Dr. Harvey E. Stork, chairman of the Botany Department at Carlton College in Northfield, Minnesota (Chick, interview 2001). Each label included the plant's common name, scientific name, and a 2-3 line description of the plant. The labels were placed by the naturalist staff with the help three boy scouts from the San Francisco Bay area who had won a competition to be Ansel F. Hall's assistants for the summer. They spent 2-3 days labeling the Castle Crest Wildflower Trail (Chick, interview 2001).

Wildflower gardens built previously at other national parks, such as at Yosemite National Park, had transplanted wildflowers. In a 1929 "Nature Notes" article the naturalist staff wrote that: "Species not occurring now will be transplanted and it is hoped that Castle Crest Garden which has been named for the towering cliff which rises two thousand feet above, may in time become recognized as a distinct feature of Crater Lake National Park" ("Nature Notes" August 1929).

Crater Lake educational staff had high aspirations for the success of the trail. In its first year the trail had "been visited daily by a large number of tourists". One staff member noted that, "When this new feature becomes more generally known it will undoubtedly attract considerable attention" ("Nature Notes" September 1929). Plants were labeled with aluminum tags and benches were placed along the trail to encourage use of the trail by visitors for self-guided walks (Superintendent's Annual Report 1929). Guided tours were also documented as early as the 1930 (Libbey, Park Naturalist Report 1932).



*Historic photograph of a boy scout stamping metal labels for a nature trail at Grand Canyon National Park in 1929. The scouts used the same method to make labels for the Castle Crest Wildflower Trail at Crater Lake National Park in 1929. (Kelley, 1931)*



*Historic photograph of two scout naturalists collecting plants for the wildflower garden at the Giant Forest Museum in 1929. Transplanting flowers was a common practice in developing wildflower gardens in the parks. (Kelley, 1931)*



*Historic photograph of a completed wildflower garden at the Giant Forest Museum in 1929. The original labels in the Castle Crest Wildflower Trail would have looked similar. (Kelley, 1931)*



*Historic photograph of a naturalist guiding a tour through a wildflower garden at Mount Rainier National Park, circa 1930. Similar tours were given at the Castle Crest wildflower garden during the period of significance. (Bryant, 1932)*

## 1930s

Crater Lake's educational program expanded in the 1930s with the completion of Rim Road, a circuit going around the caldera rim. A new tour was introduced in 1931 called the Rim Caravan, a one-way guided automobile tour around the lake ("Nature Notes" August 1931). Castle Crest Wildflower Trail was incorporated into the Rim Caravan tour in 1932, indicating the importance of the garden to the park's education program (Superintendent's Annual Report 1932). In this year, guided tours were scheduled for Sunday afternoons. Park Naturalist D.S. Libbey felt that "Sunday afternoon visitors lend themselves to a short guide tour such as the Castle Crest Flower Garden walk rather than to the more strenuous guide trips in the Lake and to the climbs up the Park trails" (Libbey, Park Naturalist Report 1932). This quote emphasized the intent of the wildflower garden as a program aimed at visitors who would not have otherwise had the time or ability to see flowers where they occur around the park.

A historic photograph of the original entrance to the trail taken in the early 1930s provides a picture of the trail's historic appearance. The trail was approximately 3' wide and lined with large rocks at the entrance. Beyond the entrance, the trail edge was not well defined, lacking clean edges or a definite delineation. The trail tread consisted of bare soil stripped of vegetation. As reported in a 1938 naturalist note, local flagstone was used for stepping stones through the wet areas of the meadow (Doerr, Park Naturalist Note 1938). The five footbridges, originally built in 1929 to cross the stream, may have been replaced in 1938. They were described as "log bridges" made of native trees in a 1938 naturalist report (Superintendent's Annual Report 1929; Doerr, Park Naturalist Report 1938). The six benches placed along the stream were described as rustic-style and were also made of native trees (Superintendent's Annual Report 1929; "Nature Notes" September 1929). A set of stone steps were built in the 1930s in the rustic style adopted by the National Park Service during the early years of park development. Four risers were constructed, consistent with rustic-style methods, of cut and mortared native stone from a nearby slope.

Throughout the 1930s, continued use of the trail necessitated maintenance and repairs. In 1930, Park Naturalist F. Lyle Wynd noted that "the Castle Crest Flower Trail was completely repaired, and rebuilt in several places" (Wynd, Park Naturalist Report Aug 5, 1930). In 1936, a proposal was written and submitted by the educational staff for improvements to the Castle Crest Wildflower Trail. In 1938, Park Naturalist Doerr described major work performed at the site by the CCC crews in the park at that time: "During the month, the Park Naturalist [Doerr] supervised the rebuilding of the trail through the garden. The entrance to the garden was made at a point on the new road coming into the park headquarters from the east entrance. Confusing cross trails were eliminated, log bridges repaired and larger flagstones placed where the trail crosses wet ground. The telephone line which formerly crossed the garden was relocated around the area, and a copy for new labels prepared" (Doerr, August 1938). This report clearly indicates that the trailhead was relocated in 1938. The change in trailhead location coincided with the building of the Castle Crest Wildflower Trail parking area in 1938-1941, which was part of the Rim Drive reconstruction.

Not all park employees supported the new entrance to the Castle Crest meadow. Park Naturalist Ruhle wrote: "My personal opinion is that the appreciation of Castle Crest Garden has been cut by 95% due to the relocation of the head of the trail to its present location" (Ruhle, "Comments Concerning the 1942 Master Plan" 1942).

The Castle Crest Wildflower Trail was still considered important to the educational program in 1937. In this year, the Park Naturalist John E. Doerr Jr. was in the process of developing a museum plan in which he meant to "utilize all or parts of various park resources" including the Castle Crest Wildflower Trail

(Doerr, Park Naturalist Report 1937). Occasional guided hikes were conducted to the Castle Crest Wildflower Trail as well as to the three other self-guided trails (Doerr, Park Naturalist Report 1937). Park naturalists gave lectures to interested parties both in and outside the park about wildflowers within Crater Lake. Two titles of these 1937 lectures included “The Romance of our Wildflowers” and “Wildflowers of Crater Lake National Park” (Doerr, Park Naturalist Report July 22, 1937).



*Historic photograph of a naturalist at the original entrance to “Castle Crest Garden.” (CRLA archives, c. 1930)*

## **1940s – present**

From the 1940s through 2001, the Castle Crest Wildflower Trail continued to be maintained and used as an interpretive landscape as part of the park’s educational program. It has been continually referred to as a “garden” and an “unattended interpretational station” (Walker, Park Naturalist Report 1940) or a “self-guided trail” (Ruhle, Park Naturalist Report 1946; Ruhle, Park Naturalist Report 1950; Interpretive Prospectus 1972; Statement for Interpretation 1982, 13). Over time, however, the themes for interpretation and the style of labeling used to guide the interpretational experience for visitors have been revised several times.

During the early 1940s, Park Naturalist Ruhle admitted the need to upgrade the self-guided trails, including Castle Crest Trail, to better serve visitors. Yet he felt that “even with the few inadequate and poorly displayed plant labels, they play an important part in interpreting the area” (Ruhle, “Comments Concerning the 1942 Master Plan” 1942). The Education Program continued to use aluminum labels along the Castle Crest Wildflower Trail to educate visitors about the flora and fauna of Crater Lake in the 1940s. These markers were staked out in the summer season and gathered for storage during the winter months (Walker, Park Naturalist Report 1940; Ruhle, Park Naturalist Report August, 1946). Due to the park naturalists desire to upgrade the self-guided trails, a 1942 workplan included tasks such as rewriting the labels along the Castle Crest Wildflower Trail (“Work Projects for 1942”). In 1946, seventy labels

were placed along the trail (Ruhle, Park Naturalist Report October 1946).

By 1949, Crater Lake National Park began another plan to improve the Castle Crest Wildflower Trail. This time, the staff planned to follow Lassen Volcanic National Park's "fine example" (Doerr, Park Naturalist Report October 1949). These plans were experimental, using mimeographed interpretive sheets (Doerr, Park Naturalist Report October 1949). They also planned to change the style of signs for the garden to a style similar to the one used at Lassen, which had been very successful (Doerr, Park Naturalist Report November, 1949). By 1950, these changes were still in progress as Park Naturalist Ruhle mentioned in a memorandum to the superintendent that the education program would "strive for better self-guiding trail program for 1951" (Ruhle, Park Naturalist Report October 1950). By 1959, plant identification labels were made of plastic and a mimeographed guide to Castle Crest Garden Wildflower Trail was introduced (Unrau 1988, 660).

In the 1960s, the interpretive theme changed from identifying individual plants and animals to a holistic interpretation of forest and meadow communities. A Castle Crest Nature Trail guidebook from 1962 tells a story of "The Life of a Forest." Twenty-nine numbered posts placed along the trail in the clockwise direction were interpreted by the booklet. This booklet, funded by the Crater Lake Natural History Association, was one of the more popular publications of the 1960s (Unrau 1988, 662).

Two interpretive plans for Crater Lake National Park were developed in 1972 and 1982. Both plans supported the idea of three levels of interpretation: 1) sensory response, 2) understanding of the landscape's creation, and 3) conceptual contemplation – interconnection, evolution, and protection of natural resources ("Interpretive Prospectus" 1980, 8). This interpretive philosophy would continue to influence how the Castle Crest meadows would be interpreted, focusing on larger ecological themes versus plant identification. In 1982, a new booklet was created to supplement plant identification markers with habitat descriptions ("Statement for Interpretation" 1982, 13). Although the trail was still considered a self-guided trail, occasional guided tours were given upon special arrangement ("Statement for Interpretation" 1982, 20).

In 1985, the park developed its Parkwide Wayside Exhibit Plan. This plan redesigned the interpretive exhibits along Rim Road. The planning committee recommended not referring to the Castle Crest meadow as a "garden" because the word implied that the wildflowers were cultivated. The name of the trail officially became the "Castle Crest Wildflower Trail." The exhibit sign designed for the entrance to this trail still exists today.

Today, the Castle Crest Wildflower Trail is still used as an educational landscape within Crater Lake National Park. Changes to the site over time have tended to be influenced by changing interpretational themes or techniques. One example is the change from thirty-six aluminum plant identification labels used in 1929 to the eight numbered wooden posts that currently correspond to an interpretive booklet. This booklet focuses on ecological themes. Today, visitors are directed to follow the trail in the counter-clockwise direction to facilitate the interpretive theme.



*Historic photograph of park visitors using a trail guide along the Castle Crest Wildflower Garden in 1962. (CRLA archives)*



*Contemporary photograph of the Castle Crest meadow enclosed by mature forest. The trail skirts the edge of the meadow. (CCSO, 2001)*



*Contemporary photograph showing the abundance of wildflowers in the Castle Crest Meadow, c.1990. (CRLA archives)*

## Analysis And Evaluation

### Summary

The Castle Crest Wildflower Trail was evaluated as a cultural landscape within Crater Lake National Park. As a result of this evaluation, the site is found to retain the following landscape characteristics and features that contribute to the site's historic integrity. The landscape characteristics are land use, vegetation, natural systems and features, circulation, spatial organization, and small-scale features. These landscape characteristics and associated features retain their historic character and remain relatively unchanged since the period of significance from 1929-1938.

### Landscape Characteristics And Features

#### Land Use

Land use is a landscape characteristic of the site that retains historic integrity. Within the context of growing support for the development of NPS educational resources in the 1920s and 1930s, the Crater Lake National Park educational staff constructed Castle Crest Wildflower Trail in 1929. Two prominent interpretational methods from the period of significance, self-guided nature trails and wildflower gardens, were incorporated into the development and land use of the site.

The Castle Crest meadow's prolific display of wildflowers provided an exceptional opportunity to interpret the flora of Crater Lake National Park, which led to its designation as a "wildflower garden." Visitors accessed the meadow via an access trail from Park Headquarters or by parking at the Castle Crest Wildflower Trailhead. Visitors could follow the trail around the edges of the meadow, crossing a stream at various points. Aluminum labels were placed along the trail to help park visitors learn names and characteristics of plants at their own leisure. Benches were placed along the trail for visitors to sit and enjoy the flowers, the wildlife, and the sounds of the stream. Organized hikes were occasionally led by the naturalist staff as well.

Since the period of significance, the Castle Crest Wildflower Trail continues to be a part of the interpretational program of Crater Lake National Park. It is still managed as a self-guided trail with labels and benches. The trail is still accessed via an access trail from Park Headquarters or by parking at the trailhead. The trail is still labeled in such a way that visitors can guide themselves. As early as the 1960s, the labels have corresponded with a guidebook. Although a guidebook was not used during the period of significance, it was a recommended method of interpreting the Castle Crest Wildflower Trail when the trail was first built. Because the trail is still used in the same manner it was planned for and used during the period of significance, land use is a landscape characteristic that supports the site's historic integrity.

Although land use is a supporting landscape characteristic, threats to the integrity of this landscape characteristic do exist. The 1960s guidebook directed people to walk the trail in a clockwise direction. In contrast, the guidebook used in 2001 directs people to walk in the counterclockwise direction. In the clockwise direction, the visitor has access to views of Castle Crest Ridge to the north and the moraines to the south that are missed in the counter-clockwise direction. These field observations have led to the conclusion that the trail was originally aligned in 1929 with the intent that it would be followed in the clockwise direction. Such a change detracts from the integrity of land use.

In the 1960s, the interpretative theme for Castle Crest Wildflower Trail changed from pure plant identification to a broader description of ecological processes, plant communities, and forest succession. The newer interpretive theme may in the future become a threat to the integrity of the site's land use by

supporting forest succession that will lead to the eventual loss of the meadow or “garden.” This site was specifically chosen to be the first interpretive wildflower garden at Crater Lake National Park because of its meadow characteristics. Loss of the meadow to forest species would negatively effect the historic land use that presently still exists.



*Photograph taken c. 1980 of park visitors using a trail guide to interpret the Castle Crest Wildflower Trail. Trail guides continue to be used in 2001. (CRLA archives)*

## Vegetation

Vegetation is a landscape characteristic of the site that retains historic integrity. During the period of significance, the naturalist staff praised the “Castle Crest Garden” as one of the best wildflower displays in the park. At that time, very few flowers bloomed along Rim Road due to erosion and compaction problems due to road construction (“Nature Notes” August 1929). Therefore, the Castle Crest Wildflower Trail provided visitors with an excellent opportunity to see and learn about the area’s wildflowers. The presence of abundant wildflowers in Castle Crest meadow was one of the main reasons the site was chosen by the educational staff to be designated a wildflower garden and interpretive trail. Over 200 species of flowers had been identified in the meadow by 1929 (“Nature Notes” August 1929). Several articles were written for Crater Lake’s seasonal publication “Nature Notes” in the early 1930s about wildflowers in the Castle Crest meadow. Below is an excerpt from one of these articles:

“The meadow itself is a giant’s paint-pot, with dabs of all hues lavishly scattered over it. At the upper end, the Blue Forget-me-not or Beggar’s Ticks (*Lappula diffusa*), the Mountain Valerian (*Valeriana sitchensis*), and the blue of various Lupines (*Lupinus*) dominate the scene. But as we continue, we note splashes of various shades of red, the scarlet and yellow of the Columbine (*Aquilegia formosa*), the gaudy crimson of the Indian Paintbrushes (*Castilleja*), and the rose-pink of the Lewis’ Monkey-flower (*Mimulus lewisii*), which is just commencing to bloom. On the borders of the brook, itself, the pink spires of the peculiarly-shaped Elephants’ Heads or Butterfly-tongues (*Pedicularis greenlandica*) mingle with the white clusters of the Alpine Smartweed (*Polygonum bistortoides*), while the White Violet (*Viola blanda*) and Alpine Buttercup (*Ranunculus* sp.) stud the green carpet of grass and sedges.

“Several shrubs stand out conspicuously from the herbaceous plant. These include the Mountain Ash (*Sorbus sitchensis*), distinguished by its masses of white flowers borne in flat-topped clusters from the Red berried Elder (*Sambucus racemosa*), which bears its snowy flowers in cones. The Pine Manzanita (*Arcostaphylos nevadensis*) forms a mat in dry places, and is often supplemented by the Blue Huckleberry (*Vaccinium membranaceum*), and occasionally by the Matted Beard-tongue or Penstemon (*Penstemon menziessi* var. *davidsonii*).

“Less conspicuous but attractive flowers are the blue Alpine Speedwell flowers, the Shooting-star (*Dodecatheum alpinum*), and two species of orchids -- the Slender Bog-orchid (*Limnorchis stricta*) and the Boreal Bog-orchid (*Limnorchis dilatata*). The large green leaves of the Green Hellebore (*Veratrum viride*), and the young shoots of the Monkshood (*Aconitum columbianum*) and the Ragweed (*Senecio triangularis*) make up an important element of the herbage, but as yet are contributing few flowers.

“We cross the bridge and again emerge upon the plain, where we are greeted by the Alpine Puss-paws (*Spraguea umbellata*), the False Alpine Dandelion (*Agoseris alpestris*), the Water-leaf or Pygmy Phacelia (*Phacelia heterophylla*), the Newberry’s Knotweed, which form the main cover. Patches of yellow or orange are formed by the Alpine Owl’s Clover (*Orthocarpus*), and the yellow of the Sulfur Flower again makes its appearance” (Constance, “Nature Notes” 1931).

In 2001, the blooming meadow is still an amazing display of flowers. The wildflowers remain one of the strongest features of the Castle Crest Wildflower. Some of the plants identified for visitors in the trail guide include: Gorman buttercup (*Ranunculus gormanii*), Shooting star (*Dodecatheon alpinum*), American bistort (*Polygonum bistortoides*), scarlet paintbrush (*Castilleja miniata*), Columbia monkshood (*Aconitum columbianum*), Pacific bleedingheart (*Dicentra formosa*), Arrowleaf groundsel (*Senecio triangularis*), Lewis monkeyflower (*Mimulus lewisii*), Mountain violet (*Viola purpurea*, var. *venosa*), Blue stickseed (*Hackelia micrantha*), Common pearly-everlasting (*Anaphalis margaritacea*), Spreading phlox (*Phlox diffusa*), and Sulfur eriogonum (*Eriogonum umbellatum*) (“A Trail Guide to Castle Crest”

c. 1983).

Wildflower populations continue to bloom prolifically and are still the major attraction of the Castle Crest Wildflower Trail. Therefore, vegetation is a landscape characteristic that contributes to the historic integrity of the site.

A threat to vegetation as a landscape characteristic does exist. The slow encroachment of trees and other forest species into the meadow is changing the meadow wildflower species to forest species. The wildflower garden and nature trail were sited for the predominance of wildflowers within the Castle Crest meadow. Loss of these meadow wildflowers would effect the historic integrity of the landscape.



*Photograph of the Castle Crest meadow with young green growth in spring, c. 1980. Changing seasons reveal a variety of flowers and colors throughout the year. (CRLA archives)*



*Photograph of the Castle Crest meadow in summer, c. 1980. The Castle Crest Wildflower Trail has been known for its prolific blooms of pink monkeyflower (*Mimulus lewisii*) since the period of significance. (CRLA archives)*



*Photograph of the Castle Crest meadow in summer, c. 1990. The meadow continues to support a large variety of wildflower species. (CRLA archives)*



*Photograph of the Castle Crest meadow in autumn, 2001. Integrity of the meadow is threatened by early forest succession. (CCSO, 2001)*

## Natural Systems And Features

Natural systems and features influenced the siting of the Castle Crest Wildflower Trail during the period of significance. This site was chosen for particular qualities that were created by hydrology, topography, and forest systems.

The main characteristic influencing the decision to site the wildflower garden was the dense population of flower species found in Castle Crest meadow. This flower display was the result of the site's hydrology and topography that created a wet bowl-shaped meadow. The Castle Crest (Garfield) Ridge rises 2,000' on the northern and eastern side of the meadow while low rolling moraines cup the southern and western sides (Homuth, "Nature Notes" 1929). Several springs flow from the slope of the ridge and collect in the bowl-shaped meadow below. This process creates wet conditions perfect for supporting meadow flower species. Another desirable effect of the natural systems in this site is the enclosed feeling created by the topography and the surrounding forest (Homuth, "Nature Notes" 1929). Together, the forest and topography block views and sounds from the nearby Rim Road.

The Crater Lake Park Naturalist Earl U. Homuth described these qualities of the meadow in the park's seasonal publication "Nature Notes":

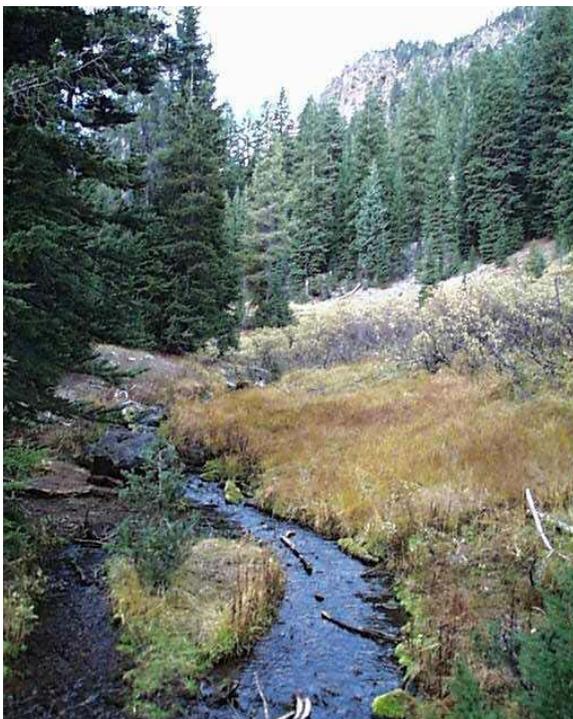
"...the moist meadows and swamps, where the streams are blocked by moraines, and the slopes where countless springs flow from the rocks provide conditions in which typical mountain wild flower gardens are found. A natural wild flower garden of this type lies at the base of Castle Crest, less than two miles from the Rim and a few hundred yards from Headquarters, hidden from the road by a series of moraines" (Homuth, "Nature Notes" 1929).

The Castle Crest Wildflower Trail can still be described in a similar fashion today. Hydrology, topography and forest systems continue to influence the site creating the same character. This character includes the open landscape created by low growing meadow vegetation, the moist conditions that allow wildflowers to grow in such profusion, and the topography and forest that enclose the meadow, shielding it from Rim Road that passes nearby. The existence of these qualities, attributable to the natural systems working within the site, supports the historic integrity of Castle Crest Wildflower Trail.

The integrity of the site is being threatened as trees are beginning to grow and mature within the meadow. Natural systems and features, however, currently do contribute to the integrity of the Castle Crest Wildflower Trail. Ecological and anthropological research in the region of Crater Lake indicate that the Castle Crest meadow was not anthropogenically created or maintained based on its elevation. The meadow was more likely the result of a naturally occurring, wet, spring-fed area with occasional natural fires. Fire suppression policies have been one factor that has encouraged forest succession within meadows throughout the region and likely a cause in this particular landscape (Interviews with Steve Mark and Jeff LaLande 2001).



*Contemporary photograph of the Castle Crest meadow, showing the open expanse of the meadow, bordered by forest. Notice the young trees growing in the middle of the meadow. (CCSO, 2001)*



*Contemporary photograph showing Castle Crest Ridge towering above the meadow. Below the ridge, spring water collects in a stream. (CCSO, 2001)*



*Contemporary photograph of a moraine on the southern edge of the meadow. The moraine directs flow of the stream (hidden behind the row of young trees) through the Castle Crest meadow. (CCSO, 2001)*

## Spatial Organization

Spatial organization of the Castle Crest Wildflower Trail contributes to the site's historic integrity. This landscape characteristic reflects decisions made during the period of significance in regard to land use, vegetation, and natural systems and features. As a result of these decisions, the Castle Crest Wildflower Trail was developed as loop trail along the edge of Castle Crest meadow and within close proximity to Park Headquarters.

In accordance with common techniques used to develop wildflower gardens, the meadow below Castle Crest Ridge was chosen based on its close proximity to Park Headquarters and its existing prolific seasonal flower display. With close proximity to park headquarters, only 0.25 miles away, the meadow was easily accessible by park visitors. Upon completion of the Castle Crest Wildflower Trail, the site was accessible via an access trail or by parking near the trailhead. However, the access trail and trailhead location changed during the period of significance. A 1938 park naturalist report indicated that changes were made that summer: "The entrance to the garden was made at a point on the new road coming into the Park Headquarters from the east entrance" (Doerr, Park Naturalist Report 1938). Parking at the trailhead was an important way to access the site as the main transportation mode through the park was by automobile. In the early 1930s, the Castle Crest Wildflower Trail was even included as a stop along the Rim Caravan tour, an automobile-oriented tour around Crater Lake (Superintendent's Annual Report 1932).

To create the best views of the wildflowers, the trail was built around the edge of the meadow ("Nature Notes" September 1929). Thus a loop trail was created, described as a path that passed "through a variety of habitats including talus slopes, dry pumice slopes, moist cliffs, forest and swamps" ("Nature Notes" August 1929). The Castle Crest Wildflower Trail continues to consist of a loop interpretive trail that circumnavigates the Castle Crest meadow in largely the same alignment.

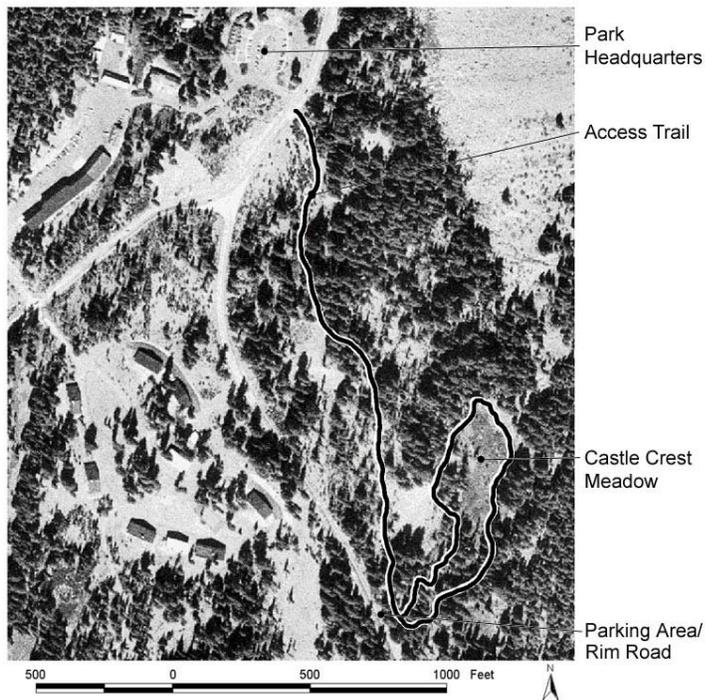
The trail begins at the trailhead in a mature forest with little undergrowth and no view of the meadow. Following the trail in the clockwise direction, as the trail was followed historically, the trail crosses a stream via a rustic-style footbridge. Once across the bridge, a moraine comes into view on the left and a small opening to the meadow to the right. The trail loops back to cross the stream again with a second bridge. Approaching the second bridge, the forest opens up at the stream corridor with a view ahead of Castle Crest Ridge and the meadow below it. At this bridge, two streams converge. After crossing the bridge, the trail reenters forest. The trail meanders along the south side of the stream, sometimes bordered by dense, young trees that block views and at other times bordered by low-growing meadow species that open up views to the meadow on the right, or the moraine on the left.

As the trail approaches the far end of its loop, it emerges from a dense stand of young trees and opens to the wet meadow. The trail tread is made of loosely laid flagstones to allow crossing the springs. At this point, the entire meadow comes into view on the right side of the trail, while the left side is bordered by mature forest. The flagstone trail curves to the right, through a field of boulders and a spring at the base of the steep slope of Castle Crest (Garfield) Ridge. The flagstone trail continues along the base of the slope with springs and meadow species on the slope to the left and the bowl-shaped meadow ahead and to the right. As the trail passes along the slope, the tree line begins to drop toward the level of the trail. At this point, a spur trail branches off to a small clearing in the trees. Within the clearing are two benches providing a resting spot and partial view of the meadow, partially obstructed by young trees.

After the spur trail, the trail slopes downward, keeping the tree line on the left and the meadow on the right. The tree line recedes up the slope and the trail passes another spring, with flagstones to keep the trail dry. As the trail comes to the end of the meadow, it re-enters the mature forest with low-growing

under-story. Small openings here and there in the forest provide views to the meadow behind. After going down a small set of stone steps, the forest opens up to an area with a dense stand of younger trees on the left and a small meadow and the stream on the right. At this point, the trail crosses the stream one last time via a footbridge. The trail reenters the mature forest and ends at the trailhead.

Today, the Castle Crest Trail continues to retain the spatial organization it had during the period of significance. The site is still located in the Castle Crest meadow, 0.25 miles from Park Headquarters, reached by either an access trail or parking area along Rim Road. The trail continues to follow the edge of the meadow and pass through the same habitat types as described by the naturalist staff in 1929. Overall, the spatial organization of the Castle Crest Wildflower Trail is largely unchanged and it contributes to the historic integrity of the site.



*Aerial photograph showing current locations of Park Headquarters, the access trail, and Castle Crest meadow and trail. (CCSO 2001)*

## Circulation

Little detail about how the trail was constructed has been documented. However, in a 1930s photograph, the trail at the original entrance to the meadow is shown as approximately 3' wide and lined with large rocks. Beyond the entrance, the edge of trail was not well defined, lacking clean edges or a definite delineation. The trail tread consisted of bare soil stripped of vegetation. As reported in a 1938 naturalist note, local flagstone was used for stepping stones through the wet areas of the meadow (Doerr, Park Naturalist Report 1938). Descriptions of the trail in early "Nature Note" articles describe a loop around the meadow ("Nature Notes" September 1929).

Today, the trail continues to be approximately 3' wide, varying from 2'-5', with unclear edges. The trail tread consists of the native soils, predominately a mixture of sand, crushed pumice, and a scattering of jagged rocks (1"-8" in diameter). Where the trail passes through forest, the trail tread is composed of forest duff. Local flagstone is still used to pass over the meadow springs. These stones are approximately 18" wide. Field observations reveal that, although the trail has had minor realignments (such as one on the south side of the meadow where an older trail passes closer to the stream), the overall alignment of the trail is relatively unchanged. These aspects of the trail reflect the historic character of the trail and contribute to the Castle Crest Wildflower Trail's historic integrity.

The trail grade currently ranges from 0-7%. The cross-section of the trail slopes inward to the centerline in such a way that causes the trail to convey water during heavy rainfall. Gullies have formed in the trail tread and are a threat to the trail's integrity. The areas of most danger, heading in a counter clockwise direction around the meadow, include: the large open area at the trailhead entrance, 20' between the trailhead and the first bridge, 10' north of the first bridge, 20' on the southern side of the second bridge, and 40' on the north side of the third bridge. These are all areas where the trail slopes down to meet the grade of the stream bank. Between the interpretive posts #3 and #4 is a section of trail where large rocks have tumbled down the slope over time and interfere with the trail tread. The trail tread needs some stabilization to ensure the landscape's integrity. See "Stabilization Measures" for more information.



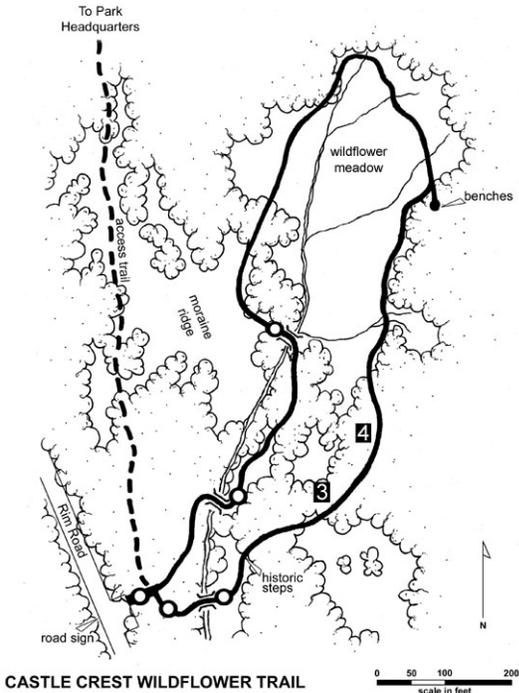
*Contemporary photograph of stepping stones used to traverse wet meadow. (CCSO, 2001)*



*Contemporary photograph of the trail winding through young trees. The trail tread here is mainly crushed pumice mixed with evergreen needles. (CCSO, 2001)*



Photograph showing drainage problems along the access trail to Castle Crest meadow, c. 1990. Similar drainage issues affect the Castle Crest Wildflower Trail as well. (CCSO archives)



2001 site diagram with white-centered dots marking locations of erosion problems on the trail. (CCSO, 2001)



*Contemporary photograph of rocks and tree roots that interfere with a short segment of the trail. (CCSO, 2001)*

<b>Characteristic Feature</b>	<b>Type Of Contribution</b>	<b>LCS Structure Name</b>	<b>IDLCS Number</b>	<b>Structure Number</b>
Castle Crest Wildflower Trail	Contributing			

## Small Scale Features

One small-scale feature along the Castle Crest Wildflower Trail is an original feature built during the period of significance. This feature is a set of stone steps located on the trail north of the #2 interpretive marker. These steps were built in the rustic style adopted by the National Park Service during the early years of park development. The four risers were constructed, consistent with rustic-style methods, of cut and mortared native stone from a nearby slope. These steps still exist, but they are becoming covered by forest duff.

To make the trail passable over the wet meadow, stepping-stones were placed along the trail, also using the native stone available from the surrounding hillside. The use of these stones was documented in a 1938 naturalist report and are still used today on the trail (Doerr, Park Naturalist Report 1938). Use of these stones adds to the historic integrity of the site.

Six rustic-style benches were built along the trail in 1929 (Superintendent's Annual Report 1929). Several were placed near the stream ("Nature Notes" September 1929). Today, two recently constructed benches exist. They are not located close to the stream, but are built in a rustic-style. They are therefore compatible with the historic description of the trail in style, but not in location. These bridges do not contribute to the historic integrity of the site.

Five footbridges were built along the trail in 1929 (Superintendent's Annual Report 1929). These bridges were referred to as "log bridges" in one of the naturalist reports (Doerr, Park Naturalist Report 1938). Today, three recently constructed bridges exist. They were reconstructed in the rustic-style of historic footbridges built in Munson Valley during its early development (photograph of bridge in Munson Valley, c. 1930). Large logs were used for the curbs. Short pylons are placed on each end of the curbs. The tread of the bridges meets the tread of the trail. Located in the same locations as the original bridges, these three rustic bridge reconstructions are compatible features of the site, but non-contributing.

During the period of significance the trail was labeled with aluminum labels identifying plant names and characteristics. Thirty-six labels were placed in the first year the trail was constructed. By 1946, seventy labels were used (Ruhle, Park Naturalist Report 1946). After the period of significance, these metal labels were replaced by plastic labels used until circa 1990. Today they are replaced with eight wooden interpretive posts. Each post is marked with a number that corresponds to a trail guidebook produced in 1983. These markers do not support the historic integrity of the trail in style or material, but still function as a form of interpretation that was used on nature trails at other parks during the period of significance.

One temporary sign at the original entrance to the Castle Crest meadow was documented the 1930s photograph of a naturalist. The sign currently posted at the trailhead was designed and implemented in the mid-1980s as part of the "Parkwide Wayside Exhibit Plan" (1985). Currently, a sign is posted on Rim Road that resembles a sign specification drawn in 1952. These signs do not contribute to the site's historic integrity.



*Contemporary photograph of cut and mortared stone steps on the Castle Crest Wildflower Trail. These steps were built in the rustic style popular during the site's period of significance. (CCSO, 2001)*



*Contemporary photograph of a rustic bridge reconstruction along the Castle Crest Wildflower Trail. (CCSO, 2001)*



*Contemporary photograph of a footbridge reconstruction along the Castle Crest Wildflower Trail. (CCSO, 2001)*



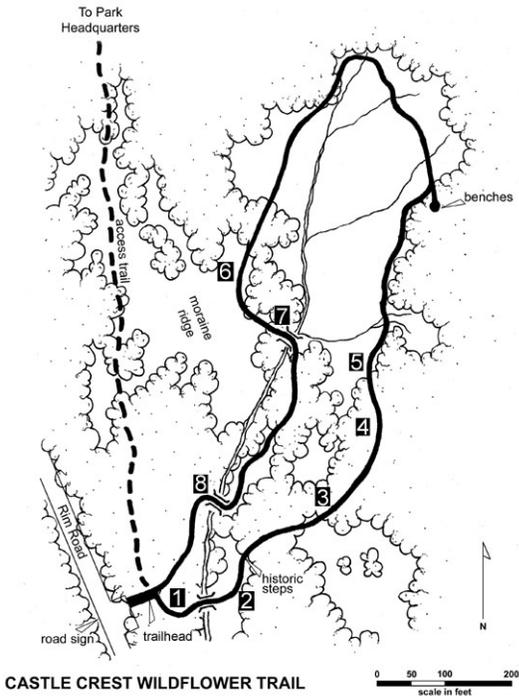
*Contemporary photograph of erosion occurring on the Castle Crest Wildflower Trail. Such erosion threatens all three bridges along the trail. (CCSO, 2001)*



*Contemporary photograph of an interpretive post along the Castle Crest Wildflower Trail. (CCSO, 2001)*



*Contemporary photograph of the sign at the trailhead to the Castle Crest Wildflower Trail. (CCSO, 2001)*



2001 site diagram showing locations of small-scale features along the Castle Crest Wildflower Trail. The numbered squares correspond to interpretive markers. (CCSO, 2001)



Contemporary photograph of the sign along Rim Road marking the parking lot at the trailhead. (CCSO, 2001)

<b>Characteristic Feature</b>	<b>Type Of Contribution</b>	<b>LCS Structure Name</b>	<b>IDLCS Number</b>	<b>Structure Number</b>
Stepping stones along wet portions of the trail.	Contributing			
Stone steps, built in 1930s.	Contributing			
Eight wooden interpretive markers.	Non-Contributing			
Three rustic bridges, reconstructions.	Non-Contributing			
Trailhead sign, built c. 1985.	Non-Contributing			
Two rustic benches, reconstructions.	Non-Contributing			

## Management Information

### Descriptive And Geographic Information

**Historic Name(s):** Castle Crest Wildflower Trail  
Castle Crest Trail  
Castle Crest Garden(s)  
Castle Crest Wildflower Garden(s)  
Castle Crest Garden Trail  
Castle Crest Nature Trail

**Current Name(s):** Castle Crest Wildflower Trail

**Management Unit:**

**Tract Numbers:**

**State and County:** Klamath County, OR

**Size (acres):** 3.20

### Boundary UTM

Boundary UTM(s):	Source	Type	Datum	Zone	Easting	Northing
	USGS Map 1:24,000	Area	NAD 27	10	571047	4749128
	USGS Map 1:24,000	Area	NAD 27	10	571014	4749003
	USGS Map 1:24,000	Area	NAD 27	10	570957	4748887
	USGS Map 1:24,000	Area	NAD 27	10	571053	4748991

**GIS File Name:**

**GIS File Description:**

### National Register Information

**National Register Documentation:** No Documentation

**Explanatory Narrative:**

**National Register Eligibility:** Undetermined

**Explanatory Narrative:**

**Date of Eligibility Determination:**

**National Register Classification:** Site

**Significance Level:** State

**Contributing/Individual:** Individual

**Significance Criteria:** A -- Inventory Unit is associated with events that have made a significant contribution to the broad patterns of our history

**Period Of Significance**

Time Period: 1929 - 1938 AD

Historic Context Theme: Expressing Cultural Values

Historic Context Subtheme: Education

Historic Context Facet: Specialized Education

**Area Of Significance:**

Category: Education

Priority: 1

**National Historic Landmark Information**

**National Historic Landmark Status:** No

**World Heritage Site Information**

**World Heritage Site Status:** No

**Cultural Landscape Type and Use**

**Cultural Landscape Type:** Historic Site

**Current and Historic Use/Function:**

Use/Function Category: Education

Use/Function: Interpretive Landscape

Detailed Use/Function: Interpretive Landscape

Type Of Use/Function: Both Current And Historic

Use/Function Category: Landscape

Use/Function: Natural Area

Detailed Use/Function: Wildflower Meadow

Type Of Use/Function: Both Current And Historic

**Ethnographic Information**

**Ethnographic Survey Conducted:** Yes-Restricted Information

### **Associated Groups**

Name of Peoples:	Klamath
Type of Association:	Both Current And Historic
Name of Peoples:	Takelma
Type of Association:	Both Current And Historic
Name of Peoples:	Upper Umpqua
Type of Association:	Both Current And Historic
Name of Peoples:	Molala
Type of Association:	Both Current And Historic

### **Significance Description:**

Documented in “Archaeological and Ethnological Studies of Southwest Oregon and Crater Lake National Park: An Overview and Assessment” by John Mairs, Kathryn R. Winthrop, Robert H. Winthrop, 1994: "Crater Lake National Park stands at or near the territorial boundaries of four Indian peoples. To the east and southeast lay the lands of the Klamath, to the southwest the lands of the Takelma, to the west the lands of the Upper Umpqua, and to the northwest the lands of the Molala” (Mairs 1994, 29).

Also documented in “Traditional-Use Study of Crater Lake National Park and Lava Beds National Monument” by Doug Deur, draft 2001.

### **Adjacent Lands Information**

**Do Adjacent Lands Contribute?** No

**Adjacent Lands Description:**

## General Management Information

**Management Category:** May Be Preserved Or Maintained  
**Management Category Date:** 12/12/2001  
**Explanatory Narrative:**

## Condition Assessment And Impacts

The criteria for determining the condition of landscapes is consistent with the Resource Management Plan Guideline definitions (1994) and is decided with the concurrence of park management. Cultural landscape conditions are defined as follows:

*Good:* indicates the landscape shows no clear evidence of major negative disturbance and deterioration by natural and/or human forces. The landscape's cultural and natural values are as well preserved as can be expected under the given environmental conditions. No immediate corrective action is required to maintain its current condition.

*Fair:* indicates the landscape shows clear evidence of minor disturbances and deterioration by natural and/or human forces, and some degree of corrective action is needed within 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 character-defining elements will cause the landscape to degrade to a poor condition.

*Poor:* indicates the landscape shows clear evidence of major disturbance and rapid deterioration by natural and/or human forces. Immediate corrective action is required to protect and preserve the remaining historical and natural values.

*Undetermined:* Not enough information available to make an evaluation.

**Condition Assessment:** Fair  
**Assessment Date:** 10/18/2001  
**Date Recorded:** 12/12/2001  
**Park Management Concurrence:** Yes      **Concurrence Date:** 5/10/2002  
**Level Of Impact Severity:** Moderate

**Condition Assessment:** Good  
**Assessment Date:** 09/30/1998  
**Date Recorded:** 09/30/1998  
**Park Management Concurrence:** No  
**Level Of Impact Severity:** Moderate

**Stabilization Measures:**

The following measures are recommended to prevent the further deterioration of the cultural landscape and to improve the landscape's condition from fair to good:

Stabilize meadow by removing approximately 30 small to medium-sized trees within Castle Crest meadow. Trees with a diameter less than 1” can be pulled. Trees with diameters greater than 1” can be flush-cut to ground level with a saw. Those trees that are flush-cut will need to be monitored for resprouting.

Stabilize trail tread by addressing drainage problems near bridges. Currently, the cross-section of the trail slopes down to the centerline in such a way that causes the trail to convey water during heavy rainfall. The areas with greater instability, heading in a counter clockwise direction around the meadow, include: (1) 20’ between the trailhead and the first bridge, (2) 10’ north of the first bridge, (3) 20’ on the southern side of the second bridge, and (4) 40’ on the north side of the third bridge. Add trail tread material (native soil) to sections to fill gullies and to regrade the tread slope to pitch 2% to one side. Dig a side ditch to collect and direct water to stream. Raise silt logs to trail tread grade.

Stabilize trail tread by removing large rocks and tree stump between the interpretive posts #3 and #4. At this section of trail, large rocks have tumbled down the slope over time and interfere with the trail tread. Clear rocks and the tree stump with shovel, picks, and saw.

Stabilize trailhead by addressing drainage issues of access trail and parking area. Add native soils to fill gullies and to grade area with a 2% slope to one side. Create a side ditch along parking lot and end of access trail to direct water away from trailhead area. Delineate foot paths from the parking area to the trailhead with alternating logs and boulders. Allow areas not on designated paths to naturally revegetate.

Stabilize historic stone steps by removing forest duff from with a shovel.

**Impact:**

Type of Impact: Erosion

Internal/External: Internal

Description:

Trail is graded in such a way to collect and convey stormwater. This is causing gullies and erosion.

Type of Impact: Vegetation/Invasive Plants

Internal/External: Internal

Description:

Tree species are growing within the meadow. Forest succession will eventually overtake the meadow.

## **Agreements, Legal Interest, and Access**

**NPS Legal Interest:** Fee Simple

**Explanatory Narrative:**

**Public Access:** Unrestricted

## Treatment

**Approved Treatment:** Undetermined  
**Approved Treatment Document:**  
**Document Date:**  
**Explanatory Narrative:**  
**Approved Treatment Completed:**

## Approved Treatment Cost

**LCS Structure Approved Treatment Cost:** \$0  
**Landscape Approved Treatment Cost:**  
**Cost Date:**  
**Level of Estimate:**  
**Cost Estimator:**  
**Explanatory Description:**

## Stabilization Costs

**LCS Structure Stabilization Cost:** \$0  
**Landscape Stabilization Costs:** \$8,140  
**Cost Date:** December 14, 2001  
**Level Of Estimate:** C - Similar Facilities  
**Cost Estimator:** Support Office  
**Explanatory Description:** The stabilization cost estimate is based on the following labor and materials:  
  
Labor = \$3,840  
Allow 12 days of labor for a 2-person seasonal trails crew at GS-05.  
  
Materials = \$4,300  
Approximately 86 cu. yards of imported sterile/pumice trail tread material @ \$50/cu.yd. Delivered.

For a detailed project description, see "Stabilization Measures".

## Documentation Assessment and Checklist

**Documentation Assessment:** Poor

**Documentation:**

Document: Administrative History

Year Of Document: 1988

Adequate Documentation: No

Explanatory Narrative:

The Administrative History does not describe or analyze the landscape characteristics of the Castle Crest Wildflower Trail.

Document: Historic Resource Study

Year Of Document: 1984

Adequate Documentation: No

Explanatory Narrative:

The Historic Resource Study does not describe or analyze the landscape characteristics of the Castle Crest Wildflower Trail.

Document: General Management Plan

Year Of Document: 1977

Adequate Documentation: No

Explanatory Narrative:

The General Management Plan does not describe or analyze the landscape characteristics of the Castle Crest Wildflower Trail.

Document: Other

Year Of Document: 1987

Amplifying Details: Supplement to the 1984 Environmental Assessment/Development Concept Plan/ Amendment to the General Management Plan

Adequate Documentation: No

Explanatory Narrative:

This document does not describe or analyze the landscape characteristics of the Castle Crest Wildflower Trail.

Document:	Other
Year Of Document:	1995
Amplifying Details:	Development Concept Plan/ Amendment to the General Management Plan/ Environmental Impact Statement
Adequate Documentation:	No
Explanatory Narrative:	
This document does not describe or analyze the landscape characteristics of the Castle Crest Wildflower Trail.	

## Appendix

### Bibliography

#### Citations:

Citation Author:	Brockman, C. Frank
Citation Title:	Evolution of National Park Service Interpretation
Year of Publication:	1977
Source Name:	Other
Citation Type:	Narrative
Citation Location:	CCSO

---

Citation Author:	Bryant, Harold C. and Wallace W. Atwood, Jr
Citation Title:	Research and Education in the National Parks
Year of Publication:	1932
Publisher:	United States Government Printing Office, Washington D.C
Source Name:	Other
Citation Type:	Both Graphic And Narrative
Citation Location:	CCSO

---

Citation Author:	Constance, Lincoln
Citation Title:	Nature Notes. "Flowers, Where the Scene-Shifter – Nature – is Always Busy" vol. 4, n. 1, August
Year of Publication:	1932
Publisher:	Crater Lake National Park
Source Name:	Other
Citation Type:	Narrative
Citation Location:	CRLA microfiche

---

Citation Author: Constance, Lincoln  
Citation Title: Nature Notes. "Monkey Flowers" vol. 5, n. 2, August  
Year of Publication: 1932  
Publisher: Crater Lake National Park  
Source Name: Other  
Citation Type: Narrative  
Citation Location: CRLA microfiche

---

Citation Author: Cultural Resources Staff, CCSO  
Citation Title: Cultural Landscape Recommendations: Park  
Headquarters at Munson Valley, Crater Lake National  
Park  
Year of Publication: 1991  
Source Name: CRBIB  
Citation Number: 017618  
Citation Type: Both Graphic And Narrative  
Citation Location: CCSO, CRLA

---

Citation Author: Decker, Robert, Barbara Decker, and Rick Hazlett  
Citation Title: Road Guide to Crater Lake National Park  
Year of Publication: 1988  
Publisher: Dumant Printing, Fresno, CA.  
Source Name: Other  
Citation Type: Both Graphic And Narrative  
Citation Location: CCSO

---

Citation Author: Greene, Linda W.  
Citation Title: Historic Resource Study, Crater Lake National Park,  
Oregon  
Year of Publication: 1984  
Source Name: CRBIB  
Citation Number: 012800  
Citation Type: Both Graphic And Narrative  
Citation Location: CCSO, CRLA

---

Citation Author: Homuth, Earl U.  
Citation Title: Nature Notes. "About Flowers" vol. 1, n. 1, July  
Year of Publication: 1928  
Publisher: Crater Lake National Park  
Source Name: Other  
Citation Type: Narrative  
Citation Location: CRLA microfiche

---

Citation Author: USDI, NPS, Harper's Ferry  
Citation Title: Interpretive Prospectus: Crater Lake National Park,  
Oregon 1980  
Year of Publication: 1980  
Source Name: Other  
Citation Type: Narrative  
Citation Location: CCSO, CRLA

---

Citation Author: USDI, NPS, Harper's Ferry  
Citation Title: Interpretive Prospectus: Crater Lake National Park,  
Oregon 1972  
Year of Publication: 1972  
Source Name: Other  
Citation Type: Narrative  
Citation Location: CCSO, CRLA

---

Citation Author: Kelley, Donald G., Jack W. Edgemon, and W. Drew  
Chick  
Citation Title: Three Scout Naturalists in the National Parks  
Year of Publication: 1931  
Publisher: Brewer, Warren, and Putnam, New York  
Source Name: Other  
Citation Type: Both Graphic And Narrative  
Citation Location: SEKI

---

Citation Author: Mark, Steve  
Citation Title: "Interpretive Values Expressed by Trails in the Park"  
(Memorandum)  
Year of Publication: 1993  
Source Name: Other  
Citation Type: Narrative  
Citation Location: CRLA

---

Citation Author: USDI, NPS, Denver Service Center  
Citation Title: Master Plan: Crater Lake National Park, Oregon  
Year of Publication: 1973  
Source Name: Other  
Citation Type: Both Graphic And Narrative  
Citation Location: CCSO, CRLA

---

Citation Author: Staff  
Citation Title: Nature Notes. "Castle Crest Garden" vol. 2, n. 2,  
August  
Year of Publication: 1929  
Publisher: Crater Lake National Park  
Source Name: Other  
Citation Type: Narrative  
Citation Location: CRLA microfiche

---

Citation Author: Staff  
Citation Title: Nature Notes. "In Castle Crest Garden" vol. 2, n. 3,  
September  
Year of Publication: 1929  
Publisher: Crater Lake National Park  
Source Name: Other  
Citation Type: Narrative  
Citation Location: CRLA microfiche

---

Citation Author: Staff  
Citation Title: Nature Notes. "The Rim Caravan" vol. 4, n. 2, August  
Year of Publication: 1931  
Publisher: Crater Lake National Park  
Source Name: Other  
Citation Type: Narrative  
Citation Location: CRLA microfiche

---

Citation Author: Ruhle, George R.  
Citation Title: Along Crater Lake Roads: A Guide to Crater Lake National Park, Oregon  
Year of Publication: 1953  
Publisher: Crater Lake Natural History Association, Klamath Falls, OR  
Source Name: Other  
Citation Type: Both Graphic And Narrative  
Citation Location: CCSO

---

Citation Author: Sharpe, Grant and Wenonah Sharpe  
Citation Title: 101 Wildflowers of Crater Lake National Park  
Year of Publication: 1959  
Publisher: University of Washington Press: Seattle, WA  
Source Name: Other  
Citation Type: Both Graphic And Narrative  
Citation Location: University of Washington Special Collections Library

---

Citation Author: Smith, Larry B. and Lloyd C. Smith  
Citation Title: A Chronological History and Important Event Log of Crater Lake National Park, 1832-1982  
Year of Publication: 1982  
Source Name: Other  
Citation Type: Narrative  
Citation Location: CCSO, CRLA

---

Citation Author: Sontag, William H. (editor)  
Citation Title: The First 75 Years: Preserving Our Past For the Future  
Year of Publication: 1990  
Publisher: Eastern National Park & Monument Association  
Source Name: Other  
Citation Type: Both Graphic And Narrative  
Citation Location: CCSO

---

Citation Author: Tilden, Freeman  
Citation Title: Interpreting Our Heritage: Principles and Practices for Visitor Services in Parks, Museums, and Historic Places  
Year of Publication: 1957  
Publisher: University of North Carolina Press: Chapel Hill, NC  
Source Name: Other  
Citation Type: Both Graphic And Narrative  
Citation Location: CCSO

---

Citation Author: Unrau, Harlan D  
Citation Title: Administrative History, Crater Lake National Park, Oregon  
Year of Publication: 1988  
Source Name: CRBIB  
Citation Number: 014501  
Citation Type: Both Graphic And Narrative  
Citation Location: CCSO, CRLA

---

Citation Author: McClelland, Linda Flint  
Citation Title: Building the National Parks: Historic Landscape Design and Construction  
Year of Publication: 1998  
Publisher: Johns Hopkins University Press  
Source Name: Library Of Congress/Dewey Decimal  
Citation Type: Both Graphic And Narrative  
Citation Location: CCSO

---

## Supplemental Information

- Title:** "A Trail Guide to Castle Crest"  
**Description:** Guide book. Crater Lake Natural History Association, no date (c. 2000).
- 
- Title:** "Castle Crest Nature Trail"  
**Description:** Guide book. Crater Lake Natural History Association: no date (c. 1962).
- 
- Title:** "Comments Concerning the 1942 Master Plan"  
**Description:** Ruhle, George C., 1942.
- 
- Title:** "Crater Lake National Park Parkwide Wayside Exhibit Plan"  
**Description:** Interpretive plan, 1985.
- 
- Title:** "Detailed Sign Construction Plan, Castle Crest Wild Flower Trail, Crater Lake National Park"  
**Description:** Blueprint for a Castle Crest Wildflower Garden road sign. Drawing, 1952.
- 
- Title:** "Memorandum Regarding Relation of Aesthetic to Scientific Elements in Study of Crater Lake"  
**Description:** Merriam, John C., October 17, 1931.
- 
- Title:** "Naturalist Program: Crater Lake National Park"  
**Description:** Daily schedule, 1947.
- 
- Title:** "Record of Improvements – Crater Lake National Park"  
**Description:** May 1, 1945.
- 
- Title:** "Reports of John C. Merriam on Studies of Educational Problems in National Parks"  
**Description:** 1929.
- 
- Title:** "Work Projects for 1942, Naturalist Program"  
**Description:** Ruhle, George C., May 18, 1942.
-

- Title:** 1956 USGS map  
**Description:** Topographic map. Crater Lake National Park and Vicinity, Oregon, 1:62,500-scale.
- 
- Title:** 1988 USGS map  
**Description:** Topographic map. Crater Lake National Park and Vicinity, Oregon, 1:62,500-scale.
- 
- Title:** Doerr, John E., Jr. Park Naturalist Reports  
**Description:** October 1936; July 22, 1937; August 1938; August 1939.
- 
- Title:** Homuth, Earl U. Park Naturalist Reports  
**Description:** July 31, 1929; August 7, 1929; August 16, 1929; August 23, 1929; August 28, 1929.
- 
- Title:** Interview with Drew W. Chick  
**Description:** Interview conducted by Erica Owens, November 13, 2001.
- 
- Title:** Interview with Jeff LaLand  
**Description:** Interview conducted by Erica Owens, December 17, 2001.
- 
- Title:** Interview with Steve Mark.  
**Description:** Interview conducted by Erica Owens, December 17, 2001.
- 
- Title:** Libbey, D.S. Park Naturalist Reports.  
**Description:** July 3, 1931; August 15, 1932.
- 
- Title:** Parker, Harry C. Park Naturalist Reports  
**Description:** August 7, 1953; September 8, 1953; October 7, 1953.
- 
- Title:** Ruhle, George C. Park Naturalist Reports  
**Description:** August 1, 1946; October 3, 1946; August 1, 1947; September 3, 1948, October 3, 1949, November 21, 1949, October 4, 1950, October 12, 1950, September 5, 1951.

---

**Title:** Superintendent's Annual Reports  
Narrative

**Description:** August 28, 1929; September 6, 1930; 1932.

---

**Title:** Walker, Mryl V. Park Naturalist Reports

**Description:** June 1940; August 1940.

---

**Title:** Wynd, F. Lyle. Park Naturalist Reports

**Description:** August 5, 1930; September 6, 1930.

---